



Track ID : MHCOGN10219

Self Study Report

for
Third Cycle of Accreditation
By NAAC

*Prepared and Submitted
by*

Progressive Education Society's
**MODERN COLLEGE
OF
ARTS, SCIENCE AND COMMERCE**

Shivajinagar, Pune 411005, Maharashtra

JUNE 2016

**Modern College of Arts, Science and Commerce,
Shivajinagar, Pune 411005**

Steering Committee

Principal (Dr.) R. S. Zunjarrao

Chairman

Prof. S. S. Deshmukh

Co-ordinator

Members

Dr. Y. R. Waghmare

Vice Principal, Faculty of commerce

Prof. S. S. Deshmukh

Vice Principal, Faculty of Science

Prof. P. G. Dixit

Vice Principal, Post Graduate Section

Dr. N. J. Kulkarni

Vice Principal, Faculty of Arts

Prof. S. R. Chaudhari

Vice Principal, Faculty of Science

Prof. M. D. Waghmare

Vice Principal, Faculty of Commerce

Criterion Incharge

Criterion I

Dr. M. M. Satam

Dr. A. S. Oke

Criterion II

Prof. S. R. Chaudhari

Dr. S. S. Mujumdar

Criterion III

Prof. M. N. Naidu

Dr. N. M. Patil

Dr. K. D. Gopale

Criterion IV

Prof. S. S. Deshmukh

Prof. A. S. Sardesai

Criterion V

Prof. P.G. Dixit

Dr. S. K. Ujalambkar

Criterion VI

Dr. Y. R. Waghmare

Prof. M. D. Waghmare

Prof. S. S. Thengadi

Criterion VII

Dr. N.J. Kulkarni

Dr. S. M. Bhagat

Evaluative Reports

Dr. R.B. Barmukh

Prof. A. S. Sardesai



Progressive Education Society's

MODERN COLLEGE OF ARTS, SCIENCE & COMMERCE

Shivajinagar, Pune 411 005.

- NAAC Re-accredited 'A' Grade
- 'College with Potential for Excellence', UGC
- 'Best College Award', SPPU
- 'Star College Status', DBT
- ISO 9001:2006 Certified
- Community College Scheme, UGC

Dr. R. S. Zunjarrao
M.Sc. Ph.D.
PRINCIPAL

- P.U. AFFILIATION No. (Id No. PU/PN/ASC/022/1970)
- U.G.C. RECG. NO. included U/S 2 (F) of the U.G.C. Act 1956, Letter No. F.13-371(CD) dated 1st Sept.71
- Govt. RECG. No. D.E.M.S. Pune Oct.77, Code No. PA/ASC-13
- Jr. College Permission No. HSC/1077/31029/XII-HS dt/4-5-77, HSC College Code No. J-11.11.005

Date: 22 June 2016

Ref. No. : MCASC /

Date :

To,
The Director,
National Assessment and Accreditation Council
P.O. Box. No. 1075, Opp: NLSIU
Nagabhavi, Bangalore-560072

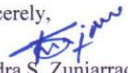
Subject : Submission of 5 copies of Self Study Report.

Respected Sir,

I consider it as a matter of privilege to submit to the NAAC, Bangalore the Self Study Report (SSR), prepared as per the guidelines received from NAAC from time to time. Trust you find it in order.

Thanking you and with Best Regards,

Yours sincerely,


Dr. Rajendra S. Zunjarrao
Principal
Modern College of Arts, Science and Commerce
Shivajinagar, Pune -411005
Mobile : 09922007302
Email : principal@moderncollegepune.com



Preface

Modern College of Arts, Science and Commerce, (MCASC), Shivajinagar, Pune 5, (Estd. in 1970) is a multi-faculty educational institution permanently affiliated to Savitribai Phule Pune University (SPPU, formerly University of Pune). The college is known to be a premier institute of *Progressive Education Society* (Estd. in 1934). MCASC imparts education mainly in the said three streams and is presently offering 23 UG, 16 PG courses and seven approved research centres, in which studies leading to M.Phil. and/or Ph. D. degrees are offered.

In the second cycle of accreditation, the college was assessed by NAAC Bangalore on 28th March 2010, and was awarded 'A' grade with 3.15 CGPA. We are, therefore, now in the third cycle of NAAC accreditation and our efforts are towards achieving excellence. We are enhancing quality of education through various efforts in the areas of curricular, co-curricular and extracurricular activities.

The college is carefully nurturing all round development of over 7500 students through academic and co- and extra-curricular activities, thus enabling them to be 'Proactive Best Citizens', keeping in both, letter and spirit, the Mission Statement of the institution. A separate 'International Students Cell' has also been established for 77 International students to address all issues related to them. Likewise, special attention is also given to the students from North-East India. It helps them to minimize feeling of isolation and to increase the international brotherhood in them.

The college has initiated new academic programmes such as B.Sc. Animation, M.Sc. (Mathematics), M.Sc. (Zoology), M.Sc. (Physics) and courses in Fashion Technology. In order to get placement opportunities for the students and to seek guidance from industrial sector, an '*Industry Academia Collaboration Committee*' is formed. The committee holds periodic meetings of the experts from industry, students and staff of different departments. In addition, 28 add-on skill development courses are run in the college to enhance the employability of the students. Similarly, special centres viz., '*Centre for Promotion of Research*', '*Centre for Teaching, Learning and Evaluation*', '*Competitive Examination Guidance Centre*' are established. Research endeavors have been geared up in the last five years with increased participation of students and teachers with increase in number of major and minor research projects funded by different funding agencies.

The library infrastructure is renovated completely and ambience of library is improved with modern amenities like internet, e-books, staff studies section, library website and library e-bulletin. As in all the departments, the library is also covered under CCTV surveillance.

A Digital Language Laboratory has been set up for enhancing

communication skills. Furthermore, Virtual Classroom, Virtual Laboratory, Digital Classrooms, Digital Library and Digital Record Room are the special facilities made available in the college.

The college has also substantially increased the use of ICT facilities in teaching, learning, evaluation and administration. From the academic year 2015-16, the admissions to various courses are being given online. New 'Vriddhi' software has been implemented for streamlining administrative and academic procedures. Under the *Green Campus Initiative*, the college has completed Green Audit, Biodiversity Audit, Energy Audit and Fire Audit. For enhancing quality of teaching, research and skill development, the college has taken the initiative in organizing one International conference, one National conference and two State level conferences every year. A novel activity, 'Vyapar Mela' (Trade fair) was a grand event of last two academic years.

The college has privilege in receiving the following awards:

- ❖ Best College Award by SPPU (2008)
- ❖ 'A' Grade with 3.15 CGPA by NAAC (2010)
- ❖ CPE status by UGC New Delhi (2011)
- ❖ UGC-BSR (2012)
- ❖ Star College Scheme by DBT, Govt. of India (2013)
- ❖ DST-FIST Schemes (2013)
- ❖ Best College award (NSS) by SPPU (2014)
- ❖ Best Principal award by SPPU (2014)
- ❖ ISO 9001:2008 Certification (2015)
- ❖ Community College Scheme by UGC (2015)
- ❖ Best College award (Sports) by SPPU (2016)

Resource mobilization from various funding agencies was taken up as a major strategy to improve the infrastructure, augment teaching-learning facilities and allocate projects to students to make learning more 'student centric'. The college attained the status of '**College with Potential for Excellence**' (CPE) by the UGC that gave momentum to all its activities. The college was also awarded DST-FIST by Ministry of Science and Technology, which helped in enhancing the infrastructure for research. The DBT-STAR scheme awarded by the Department of Biotechnology, Ministry of Science and Technology has contributed in focusing on additional skill development amongst undergraduate students.

Physical education and NSS units have been adjudged as the best units under SPPU, Pune, for the academic year 2014 and 2016 respectively. Our NCC cadets have made remarkable achievements. One of our student, being the best cadet at all India level, has been awarded the prestigious '*Prime Minister Trophy*'. In the last five years, three cadets participated in Republic Day Parade at New Delhi. Two of our students were also awarded the '*Star of India*' award in the year 2013-14.

The IQAC of the college is active and has successfully taken initiatives in various aspects of quality enhancement. Maximum number of teachers has participated in preparing SSR along with IQAC. The active participation of teachers and their prolonged discussions have helped in preparing this Self Study Report.

I would like to thank authorities of *Progressive Education Society* and each and every individual colleague for his/her valuable contribution in preparing the SSR. I express my deep sense of gratitude to the Chairman, Business Council of *Progressive Education Society*, Prof. Dr. G. R. Ekbote, for his valuable guidance and continuous encouragement. Prof. P. S. Chirputkar and Prof. Mrs. Jyotsna Ekbote (Chairperson, LMC) and members of LMC have always been a source of support and inspiration. I am also thankful to Prof. Shamkant Deshmukh, Secretary, *Progressive Education Society*, for his support and encouragement.

Thanks are also due to the untiring efforts of the IQAC members and In-Charge of each of the seven criteria of SSR, Vice-Principals, Heads of Departments, Members of the Steering Committee and all teachers for their support in our journey towards excellence. The Co-ordinator and the Assistant Co-ordinator of IQAC have played a pivotal role in propagating quality initiatives in the college and rejuvenating IQAC. Registrar, Office Superintendents and the administrative staff have responded very well and worked very efficiently in providing data to the Steering Committee.

I am extremely happy that the entire work of preparation of SSR has helped in defining policies, strategies, and procedures for further growth and development of the college.

Acknowledgement

We have great pleasure in submitting the Self Study Report (SSR) of Pune based *Progressive Education Society's* Modern College of Arts, Science and Commerce, Shivajinagar, Pune-5, to the NAAC, Bangalore. The SSR includes Executive Summary-SWOC Analysis, Preface and Covering Letter, Profile of the Institution, Criterion wise Analytical Report, Evaluative Report of Departments, Post Accreditation Initiatives, Declaration by the Head of the Institution, and Compliance Certificate.

The said SSR is being submitted for the third cycle of accreditation by NAAC. Modern College of Arts, Science and Commerce, (MCASC), Shivajinagar, Pune 5, (Estd. in 1970) is a multi-faculty educational institution permanently affiliated to Savitribai Phule Pune University (SPPU, formerly University of Pune). The college is known to be a premier institute of *Progressive Education Society* (Estd. in 1934). MCASC imparts education mainly in the said three streams and is presently offering 23 UG, 16 PG courses. The seven approved research centres conduct the programmes leading to M.Phil. and/or Ph. D. degrees.

In the second cycle of accreditation, the college was assessed by NAAC Bangalore on 28th March 2010, and was awarded 'A' grade with 3.15 CGPA. We are, therefore, now in the third cycle of NAAC accreditation and our efforts are towards achieving excellence. We are enhancing quality of education through various efforts in the areas of curricular, co-curricular and extracurricular activities.

We consider the third accreditation cycle as an opportunity to showcase detailed efforts and preparations undertaken by us with a view to improving the performance beyond the one accredited by NAAC in its second cycle visit to our college.

We also hereby take the opportunity in thanking and assuring the authorities of NAAC, Bangalore, to try our best in implementing, to the best of our ability, the constructive suggestions and advice that the peer team would be giving us in its ensuing visit.

Dr. Rajendra S. Zunjarrao

Principal

Prof. Shamkant S. Deshmukh

Coordinator

Principal's Message

Modern College of Arts, Science and Commerce, (MCASC) Shivajinagar, Pune- 5 was established in 1970 by **Progressive Education Society, Pune**, in Maharashtra, founded in 1934. Based on the pedestal 'ज्ञानमयो भव' (Dnyanmayo Bhav) meaning 'Be knowledge Incarnate' as envisaged by the visionaries who then established the PES, Pune, the entire functioning of the college rests on two key words, 'Modern' and 'Progressive', in both letter and spirit. It enjoys the status of the first ever college to be instituted by P.E. Society, Pune and has grown from a humble beginning to a glorious destination today in its 46th year of establishment and is aiming to scale greater heights in the fields of education, research, performing arts, sports and social activities.

During its initial phase of development, B.A., B.Com. and B.Sc. degree courses were started in the college. Later during 1994, a major decision to start Post Graduate courses was initiated by the Society and was implemented successfully by the college. The college got NAAC accreditation done in 2003 and then re-accredited with 'A' grade in 2010.

The college is permanently affiliated to Savitribai Phule Pune University (SPPU), Pune (formerly University of Pune). The College has acquired 2(f) and 12(B) status of UGC. The college provides various academic facilities to attain Bachelor's and Master's degrees in the fields of Arts, Science, Commerce, Computer Science, Computer Application, Business Administration, Biotechnology and Computer Animation. It has seven Post Graduate Research Centres approved by SPPU. The college not only ensures academic development of the students but also provides them with opportunities to prove themselves by undertaking research, extra-curricular and co-curricular activities. Moreover, in the field of sports the college has recently made a name for itself.

These efforts of Modern College have produced great International and National Level Players, Defense Officers, Industrialists, Gazetted Officers, Politicians, and Police Officers. In other words, from amongst its alumni, the college has given to the country the great teachers, scientists, researchers, administrators, entrepreneurs, artists, musicians, filmmakers, patriots, writers, film directors and philosophers.

Modern College, Shivajinagar has several achievements to its credit in the form of awards, schemes, status, Grade as listed elsewhere in the SSR (cf. Acknowledgements). Efforts to inculcate discipline amongst students, establishing systematic mechanism of performance assessment of the students and teachers as well, promoting research, initiating consultancy services and patenting, arranging alumni/ industry academia meetings, undertaking

activities to conserve energy, protect environment, increase allegiance to the society at large to achieving better quality of life (QOL) are some of the hallmark features of the college.

In a nut-shell this message could be summed up by taking recourse to the invaluable saying that ‘**nothing is more sacred than the education**’ (cf. **Knowledge**) ‘न हि ज्ञानेन सदृशं पवित्रमिह विद्यते’ is the motto, we all, as a leading education institution, try to live upto at Modern College, Shivajinagar, Pune-5.

I would like to thank authorities of *Progressive Education Society* and each and every individual colleague for his/her valuable contribution in preparing the SSR. I express my deep sense of gratitude to the Chairman, Business Council of *Progressive Education Society*, **Prof. Dr. G. R. Ekbote**, for his valuable guidance and continuous encouragement. Prof. P. S. Chirputkar, Dr. A. K. Pande and Prof. Mrs. Jyotsna Ekbote (Chairperson, LMC) and members of LMC have always been a source of support and inspiration. I am also thankful to Prof. Shamkant Deshmukh, Secretary, *Progressive Education Society*, for his support and encouragement.

Thanks are also due to the untiring efforts of the IQAC members and In-Charge of each of the seven criteria of SSR, Vice-Principals, Heads of Departments, Members of the Steering Committee and all teachers for their support in our journey towards excellence. The Coordinator and the Assistant Coordinators of IQAC have played a pivotal role in propagating quality initiatives in the college and enhancing further the role of IQAC. Registrar, Office Superintendents and the administrative staff have responded very well and worked very efficiently in providing data to the Steering Committee and IQAC.

I am extremely happy that the entire work of preparation of SSR has helped in defining policies, strategies, and procedures for further growth and development of the college.

With utmost modesty, I would like to state that as per the norms, we have made a sincere attempt to critically prepare this SSR and that we wish to welcome and present ourselves for the re-accreditation by NAAC, Bangalore.

Dr. Rajendra S. Zunjarrao

Principal,
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune-5.
Mob: 09922007302
Email: principal@moderncollegepune.com

Academic Programmes

Degree Programmes at Under-Graduate Level		
Arts Faculty	Commerce Faculty	Science Faculty
B.A. (9 subjects)		B.Sc. (11 subjects)
Economics	B.Com. (4 Subjects)	Animation
English	B.B.A.	Biotechnology
Geography	B.B.A.(C.A.)	Botany
German		Chemistry
Hindi		Computer Science
History		Electronic Science
Marathi		Mathematics
Political Science		Microbiology
Psychology		Physics
		Statistics
		Zoology
Degree Programmes at Post-Graduate Level		
Arts Faculty	Commerce Faculty	Science Faculty
M.A. (5 subjects)		M.Sc. (11 subjects)
Economics	M.Com. (5 subjects)	Biotechnology
English		Botany
Geography		Chemistry
Marathi		Computer Science
Psychology		Electronic Science
		Geography
		Mathematics
		Microbiology
		Physics
		Statistics
		Zoology
Special Post-Graduate Programme		
1. P.G.D.B.F. (1 year duration)		
Recognized Research Centres (7 subjects)		
Botany	Marathi	
Commerce	Microbiology	
Economics	Zoology	
Electronic Science		

Add-on Courses		
Sr. No.	Course Name	Name of the Department
1.	Animal Tissue Culture	Biotechnology
2.	PCR Techniques	Biotechnology
3.	Course on Nanotechnology	Biotechnology
4.	Plant Tissue Culture	Botany
5.	Seed Technology	Botany
6.	Ayurvedic Medicines and Herbal Products Preparation	Botany
7.	Flower Arrangement	Botany
8.	Analytical Techniques	Chemistry
9.	Chemical Based Household Products	Chemistry
10.	Computerized Financial Accounting (Tally)	Commerce
11.	Soft Skills	Commerce
12.	Computer Awareness	Computer Science
13.	DOTNET and PHP	Computer Science
14.	Embedded Systems	Electronics
15.	Spoken English	English
16.	Fashion Designing	Fashion Technology
17.	German Level I (Basic)	German
18.	German Level II (Advanced)	German
19.	'Modi' Script	History
20.	Translation	Marathi
21.	Spoken Marathi (Vani Course)	Marathi
22.	Pharmaceutical Techniques	Microbiology
23.	Industrial Electronic Components: Familiarization and Testing	Physics
24.	Flower Remedy	Psychology
25.	Biostatistics	Statistics
26.	Statistical Analysis System (SAS)	Statistics
27.	Integrated Vermi-technology	Zoology
28.	Microscopy	Zoology

Abbreviations

API	Academic Performance Indicator
AQAR	Annual Quality Assurance Report
ARC	Academic Research Co-ordinator
ATR	Action Taken Report/Compliance Report
BC	Business Council
BCUD	Board of College and University Development
BOLM	Board of Life Member
BOLW	Board of Life workers
BOS	Board of Studies
BSI	Botanical Survey of India
BSR	Basic Scientific Research
CAS	Career Advancement Scheme
CBCS	Choice Based Credit System
CCMB	Centre for Cellular and Molecular Biology
CFTRI	Central Food Technological Research Institute
CMFRI	Central Marine Fishery Research Institute
CPE	College with Potential for Excellence
CPR	Centre for Promotion of Research
DAAD	German Academic Exchange Programme
DST	Department of Science and Technology
EDP	Electronic Data Processing
FIST	Funds for Improvement of Science and Technology Infrastructure
GDPI	Group Discussion and Personal Interview
ICCR	International Centre for Cultural Relations
ICRISAT	International Crop Research Institute for the Semi-Arid Tropics
ICSR	Inter-Collegiate Sport Representative
ICSSR	Indian Council of Social Science and Research
ICT	Information and Communication Technology

IISER	Indian Institute of Science Education and Research
INFLIBNET	Information and Library Network Centre
INORA	Institute of Natural Organic Agriculture
IQAC	Internal Quality Assurance Cell
ISI	Indian Statistical Institute
ISO	International Organization for standardization
ISRO	Indian Space Research Organization
IT	Information and Technology
IUCCA	Inter-University Centre for Astronomy and Astrophysics
LIC	Local Inspection Committee
LMC	Local Managing Committee
LOI	Letter of Intent
LR	Ladies Representative
MCASC	Modern College of Arts, Science and Commerce
MEDA	Maharashtra Energy Development Agency
MHRD	Ministry of Human Research Development
MoEF	Ministry of Environment, Forest and Climate Change
MPSC	Maharashtra Public Service Commission
MUHS	Maharashtra University of Health Science
NABARD	National Bank for Agriculture and Rural Development
NAAC	National Assessment and Accreditation Council
NASA	National Academy of Statistical Administration
OPAC	On-Line Public Access Catalogue
PBAS	Performance Based Assessment System
PBI	Performance Based Academic System
PES	Progressive Education Society
PICC	Pune Inter College Consortium
PMC	Pune Municipal Corporation

RBI	Reserve Bank of India
RMC	Research Monitoring Committee
RUSA	Rashtriya Uchchatar Shiksha Abhiyan
SPPU	Savitribai Phule Pune University, Pune
SSR	Self Study Report
UGC	University Grants Commission
UPSC	Union Public Service Commission
UR	University Representative
ZSI	Zoological Survey of India

Contents

<i>Steering Committee</i>	ii
<i>Covering Letter and Preface</i>	iii-vi
<i>Acknowledgement</i>	vii
<i>Principal's Message</i>	viii-ix
<i>Academic Programmes</i>	x
<i>Add-on Courses</i>	xi
<i>Abbreviations</i>	xii
A Executive Summary and SWOC Analysis of the Institute	I-XII
B Profile of the Institution	XIII- XXIII
C Criterion wise Report	
Criterion I: Curricular Aspects.....	1-22
Criterion II: Teaching-Learning and Evaluation.....	23-67
Criterion III: Research, Consultancy and Extension.....	68-116
Criterion IV: Infrastructure and Learning Resources	117-146
Criterion V: Student Support and Progression.....	147-175
Criterion VI: Governance, Leadership and Management	176-212
Criterion VII: Innovations and Best Practices	213-225
D Compliance of Peer Team Recommendations	226-230
E Post-Accreditation Initiatives.....	231
F Department wise Evaluative Reports (ER)	
Department of Biotechnology.....	ER1-9
Department of Botany	ER10-19
Department of Chemistry.....	ER20-27
Department of Commerce.....	ER28-37
Department of Commerce (Self-Financed).....	ER38-57
Department of Computer Science	ER58-72
Department of Economics.....	ER73-79
Department of Electronic Science	ER80-88

Department of English	ER89-94
Department of Fashion Technology.....	ER95-98
Department of Geography.....	ER99-105
Department of German	ER106-111
Department of Hindi	ER112-117
Department of History	ER118-122
Department of Marathi.....	ER123-131
Department of Mathematics.....	ER132-137
Department of Microbiology	ER138-143
Department of Physics	ER144-150
Department of Political Science.....	ER151-154
Department of Psychology.....	ER155-163
Department of Statistics.....	ER164-171
Department of Zoology.....	ER172-183
Declaration by Head of the Institution	
Certificate of Compliance	

Annexures

Annexure I :	Approval of courses by Affiliating University	A-1
Annexure II :	UGC recognition under sections 2(f) and 12(B) Act... A-3	
Annexure III :	ISO 9001-2008 Certificate	A-6
Annexure IV:	List of subjects – syllabus revision	A-7
Annexure V:	List of teachers who have attended Refresher Course and Orientation Programme in the last five years	A-9
Annexure VI:	List of minor and major research projects	A-11
Annexure VII :	Master Plan of the Institution.....	A-13
Annexure VIII:	Affiliation Letter from SPPU	A-14
Annexure IX:	UGC XII plan General Development Grant from UGC....	A-15
Annexure X :	NAAC 2 nd Cycle Assessment and Accreditation Certificate.....	A-17
Annexure XI :	Peer Team Report: 2 nd Cycle of Accreditation	A-19

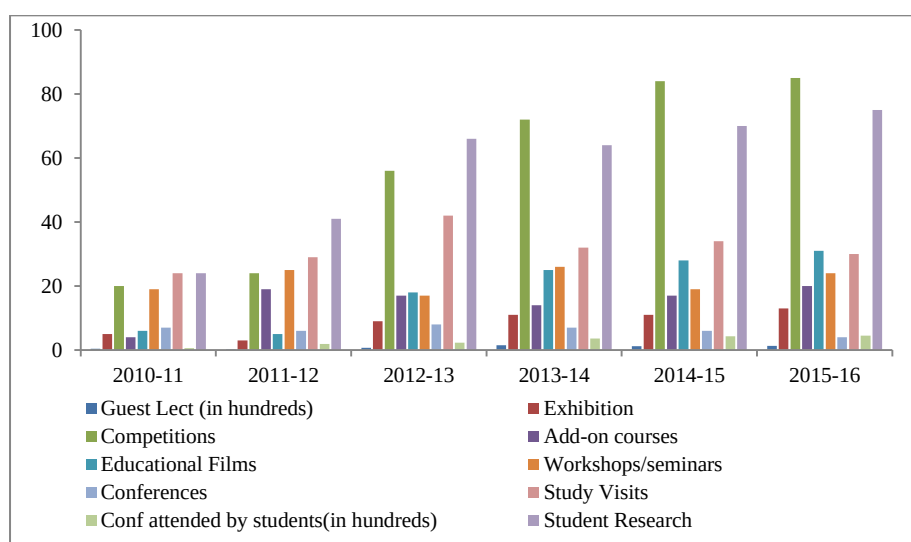
Executive Summary

Criterion I Curricular Aspects

- Modern College of Arts, Science and Commerce, Shivajinagar, Pune -5, is a multi-faculty college affiliated to Savitribai Phule Pune University and has acquired the 2(f) and 12(B) status of UGC. The curriculum, admission process and the evaluation process is followed as per the rules and norms by Government of Maharashtra and the University.
- The college offers wide variety of program options like 23 UG, 16 PG, and has seven approved research centres, wherein one can undertake M.Phil./ Ph.D. programme
- The college also offers a one-year university recognized post-graduate diploma course in Banking and Finance. It also offers 28 add-on self-financed courses. These courses are developed, designed and conducted by the staff members as per the current trends and the employability options. The goals and objectives of these courses are to increase the academic flexibility. The courses such as Tally, German Level I and II, English to Marathi Translation, *Modi* have regional and global relevance in the ever-expanding fields of communication and equip the students to explore avenues beyond the curricular domain.
- The curriculum is implemented in systematic manner through carefully prepared annual timetable. The courses/teaching programmes are assigned to the teachers. The teachers prepare teaching plan for each course at the beginning of the semester/term and make sincere efforts towards effective implementation using modern methods and techniques in addition to the traditional teaching methodology.
- The college has organized six syllabi reframing/restructuring workshops in collaboration with SPPU in the last six years. Nine teachers represent the college on BOS in the University in various capacities such as chairperson/members. As many as eighty-six teachers have actively participated as Session In-charge, resource persons and sub-committee members in the syllabi reframing process.
- The college has received funds from various funding agencies like UGC-CPE, DST-FIST, UGC-BSR, DBT-STAR college scheme. The funds so obtained have helped the college in implementing the curriculum with better instruments, ICT tools and laboratory infrastructure. The DBT-Star scheme is specially sanctioned for promotion of Basic Sciences. Because of funds under this scheme, additional practicals and lectures could be arranged and certificate programmes in Microscopy and PCR Techniques could be conducted.
- The college has introduced courses like ‘Environmental Chemistry’, ‘Computer Interface Experiments in Physics’, ‘Use of Digital Herbarium’, and ‘Digital Animal Dissection’. Such combination of disciplines and use

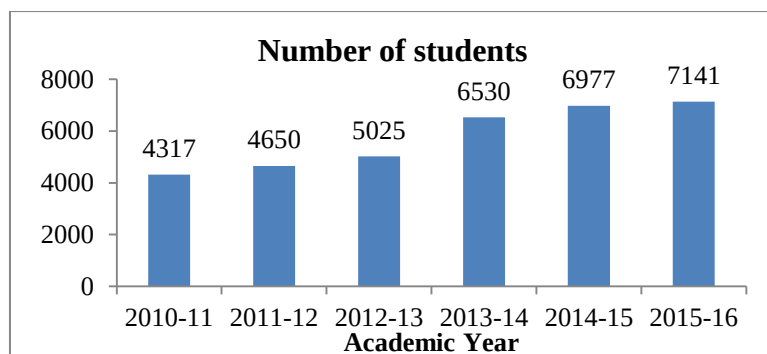
of modern technological tools have resulted in emphasizing a comprehensive understanding of the subjects through the much needed integration in the teaching learning programme as a whole.

- One of our staff members as a BOS member of the University conceived and designed a course on Value Education that has been incorporated in the related syllabus. Various programs are conducted by Value Education Committee to ensure holistic development of students.
- The institution takes all the efforts for achieving goals and objectives by organising co-curricular activities such as educational tours and visits, various workshops and hands-on training, competitions, skill oriented programme, etc. for the benefit of the students. The same has been depicted in the graphic presentation given below.

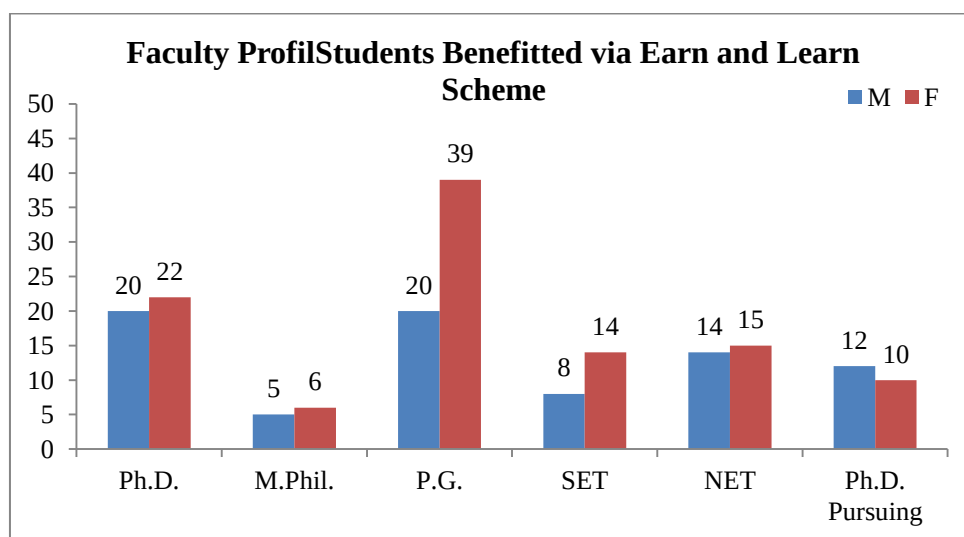


Criterion II Teaching Learning and Evaluation

- The overall policy of the college for admission is based on merit and reservation, as per the norms of SPPU, Pune, and Government of Maharashtra. Admissions for some postgraduate courses are given through entrance examination. The information about the courses offered in the college is available in updated prospectus, both in print and e-copy forms. The admission notices are put up on the college website and notice boards. The admission process is gradually shifted from manual to online basis.
- At present, 77 international students from 18 different countries are admitted to the college. The International Student's Cell is established to cater to the special needs of these students. The admissions of the college very well reflect the diversity and inclusion of the students from different regions of the country thereby contributing to the goal of National Integration. The variety of activities and the efforts that the college undertakes has resulted into increase in the number of yearly admissions as presented in the following graph.



- The college is very keen on faculty development through workshops, conferences, seminars and advanced pedagogic methods. Advanced faculty development training is also conducted for new staff members. Staff members are encouraged to inculcate research culture.
- Many of our staff members have received prestigious awards/recognition at State/National/International level for excellence in teaching and research. The faculty profile is graphically shown below.



- The college authorities are trying to adopt both teacher-centric and student-centric teaching methods. The learning practices are supplemented with the effective use of innovative teaching aids and ICT. Remedial and bridge courses help the academically challenged students to widen their knowledgebase. Advanced learners are encouraged to work by involving themselves in research-oriented activities and even by providing them necessary financial assistance under *Yuva Sanshodhak* Scheme. The learning process is made more interactive and dynamic by greater participation of students. The activities undertaken by subject wise associations, such as group discussions, seminars, guest lectures, study

tours, essay/ poster competition and presentations have proved to be extremely helpful to enrich the learning experience of the students.

- To promote and implement the use of effective teaching and learning, the college has made classrooms and laboratories ICT enabled. Modern amenities like Digital Classrooms, Virtual Classroom, Virtual Laboratory, Digital Language Laboratory and Digital Library are also developed. A centre for Innovations in Teaching Learning and Evaluation is established as an initiative taken by IQAC. Use of Digital Library, e-resources, e-journals augments the teaching-learning process.
- The IQAC prepares academic calendar at the beginning of every academic year for effective planning of annual activities. Teaching plans are prepared and followed scrupulously.

Criterion III Research, Consultancy and Extension

- The college has taken many steps in the promoting research and has therefore established a separate '*Centre for Promotion of Research*', to guide, coordinate and promote all the research activities, to encourage interdisciplinary research projects and to initiate research projects with potential of application and with industrial collaborations. Additionally a separate 'Research Monitoring Committee' is constituted to monitor and address the issues of research in the college. The college has seven Post Graduate Research Centres as detailed below:

Research Centre in	Year of establishment	Affiliation	Number of recognized/ associated guides
Zoology	1979	SPPU	4
Botany	1985	SPPU	7
Commerce	2008	SPPU	6
Economics	2011	SPPU	2
Marathi	2011	SPPU	9
Electronic Science	2011	SPPU	6
Microbiology	2014	SPPU	2
Life Science	2006	Autonomous	

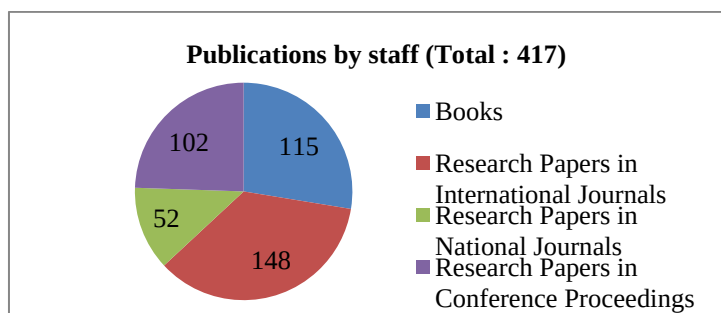
- The above mentioned initiatives since 2010 to date have resulted in staff members receiving funding for major and minor research projects over rupees two crores (Rs. **2,17,34,750/-**). The college has also received funds from different funding agencies like BCUD, UGC,UGC XII plan, NABARD, ISRO, ICSSR, etc. in the last 6 years are to the tune of over six crores (Rs. **6,27,70,275/-**).
- Every year college organizes International, National and State level conferences, workshops and seminars, with the focus on capacity building in research and imbibing research culture among the staff and students. In the last 6 years, the college has organized 6 International Conferences on the important subjects such as Biodiversity and its Conservation, Employment Enhancement, New Technologies of Environmental Conservation, Innovations in Teaching, Learning and Evaluation, etc.,

9 National Conferences on the topics such as Hazardous E-waste management, Environment and Biodiversity of India, Role of Spirituality in Education, Impact of e-publication etc., and 12 State level Conferences on the subjects such as Role of Tourism, Fresh Water Eco-Systems, Statistics and Clinical Trials, Fuzzy logic and related topics, Microbiology in 21st Century, etc.

- Under the ‘Yuva Sanshodhak’ Scheme, along with start-up facilities for research, funding of Rs. 50,000/- is made available every year for students to promote student research.
- Under IPR, the patent details are given below.

Inventors/Teachers	Title	Date of filling and registration No.	Date of Award	Status
Dr. Mrs. Shilpa Mujumdar	Plasmid encoding IAA and a method there of	28 th April 2004 20050070435	6 th January 2007 US Patent No. 834698	Obtained
Dr. Mrs. Rebecca Thombre	Method for synthesis for biostabilized silver nanoparticles using water hyacinth	10 th October, 2014 3223/MUM/2014	-	Filed

- Staff Publication Details: The cumulative Impact factor of the college is 192.48 and h-Index is 85 with 1927 as cumulative citation index. The books written by the staff, research papers published by the faculty in various International, National journals are as in the graph below.



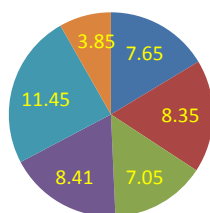
- The cumulative Impact factor of the college is 192.48 and h-Index is 85, with 1927 as cumulative citation index. The books written by the staff, research papers published by the faculty in various International, National journals.
- It is intended to annually publish a research journal of each recognized centre. In this connection, as of now, the Research Centre in Economics has come out with the volume entitled ‘RESECO’ six more research annuals of different centres are at different stages of completion. Few faculty members are on the Editorial Board of the research journal ‘Dnyanamay’ published by the parent society i.e. P.E. Society, Pune.
- The teachers of the college have received many research awards and scholarships from national and international reputed professional bodies and agencies. Some of the awards are: INSA award, Young Scientist Research Award, DST-INSPIRE Scholarships and Best Research Paper Presentation Awards.

- The college has *Institute-Academia* Collaboration Committee for the promotion of consultancy services. The consultancy policy norms and patent policy norms are formed by the institution and approved by the parent body *P. E. Society*, Pune.
- The college makes provision for extension activities to be conducted under NSS, NCC, Sports, Science Association, Commerce Association, Arts Circle, etc. In the academic year, the amount spent towards extension activities is more than Rs. 13 lakhs.
- The Parent body, College, teachers and students have received number of awards like CSR award by *P. E. Society*, Pune, Best NSS Unit, Best Programme officer, Best Principal, NCC Outstanding Performance award, Participation in Republic day Parade New Delhi, Best Cadet award etc., from various government and non-government agencies,
- The college has entered into agreements with 25 institutions at International, National, State and Inter-Collegiate level.

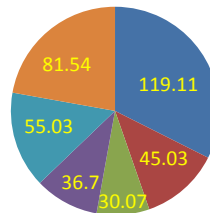
Criterion IV Infrastructure and Learning Resources

- The college provides various amenities on the campus for students and staff viz. Auditorium, Assembly Hall, Seminar Halls, Virtual Classroom, Virtual Laboratory, 5 Digital Classrooms, Digital Laboratories, Digital Library, Digital Record Room, Botanical Garden, Herbarium and Digital Herbarium, well equipped Gymkhana, well equipped Examination Control Room, etc.
- The college has some special purpose centres like Centre for Promotion of Research, Centre for Innovations in Teaching, Learning and evaluation and Competitive Examinations Guidance Centre, etc. for the overall development of the teachers.
- The details of budgets and expenditure on various heads in last 6 years is :

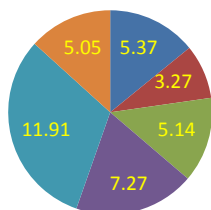
Budget(Maintenance, Upgradation)
Total Rs. 46.76 Lakh.



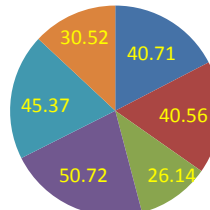
Expenditure Students Benefitted via Earn and Learn Scheme (Equipments)
Total Rs. 267.48 Lakh



Expenditure (Gymhana)
Total Rs. 32.29 Lakh

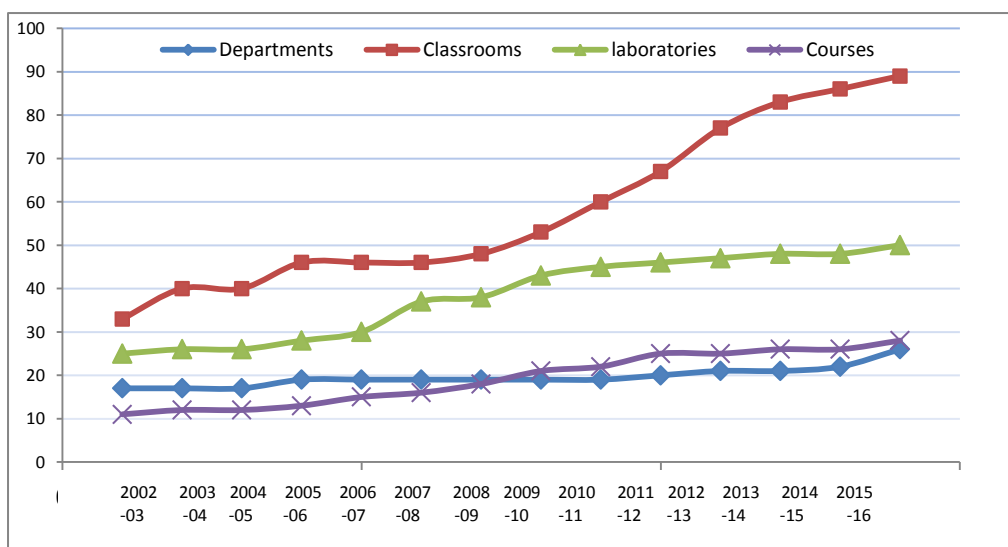


Expenditure (Repairs and
Maintenance)
Total Rs. 234.02 Lakh



■ 2010-11 ■ 2011-12 ■ 2012-13 ■ 2013-14 ■ 2014-15 ■ 2015-16

- There is a substantial growth in the number of departments, classrooms, laboratories and courses:

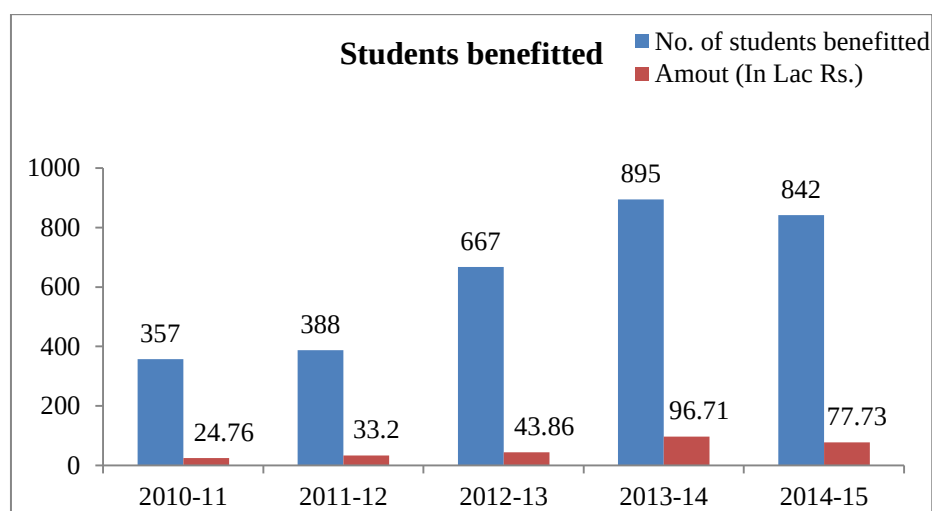


- The College has adequate amount of computing facility for the staff and students. The details are:
 - Desktops : 574
 - Multi-facility Printers :16
 - Laser Printers :46
 - Scanners :04
 - Total licensed software : 30
 - The entire college premises are under the surveillance of CCTV cameras
 - Laptops : 54
 - Color Printers :7
 - Dot Matrix printers : 36
 - LCD Projectors : 53
 - Servers : 12
- The college has a library with total area 6825.05 sq. ft. with modern infrastructure providing congenial working environment. The library is equipped with facilities like Digital Library with reprography, OPAC, Web-OPAC, Wi-Fi enabled library campus, reading hall with mobile

jammer and Library Automation. The library has memberships of various reputed institutions enabling the college to avail the facilities of these institutes. The library has a separate website through which Web-OPAC and Students online certification are made available. The library monthly publishes its e-bulletins on the library website. There are more than one lakh books in print format, more than 22000 e-journals and around five lakhs e-books can be accessed in the library.

Criterion V Student Support and Progression

- The college publishes updated prospectus in print and e-copy form. Course wise separate prospectus for few courses is also made available. With the help of educational portals like *shiksha.com* (until academic year 2015-2016) and *epraves.com* (from academic year 2016-2017), the information about courses, support and promotion for pre and post admission process is also provided.
- The college has made sufficient provision for the welfare of students by offering number of facilities and financial assistance. Financial aid in the form of scholarships and freeships is made available to the students every year as shown in the graph to follow.

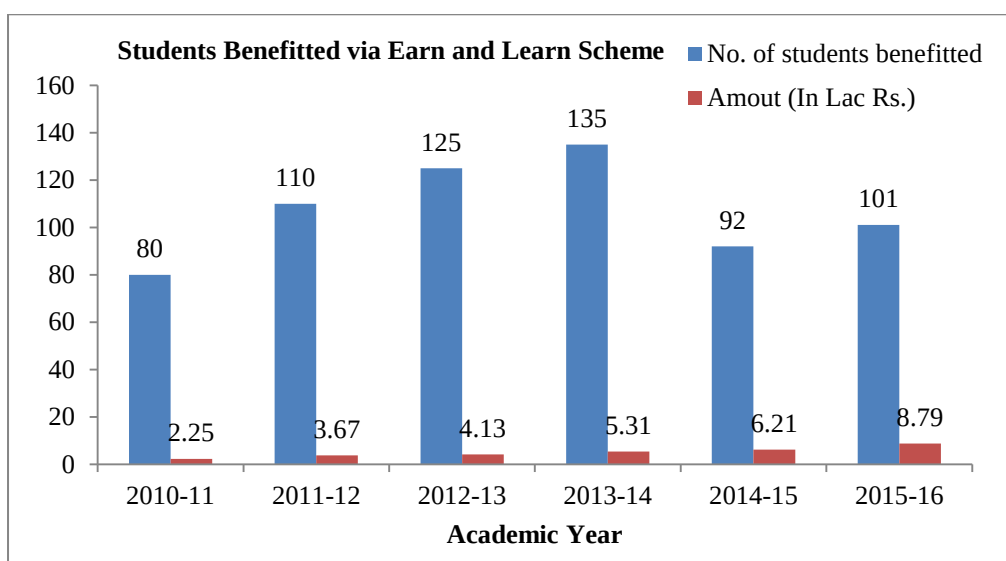


- The focus in the teaching, learning process is student centric under which the college provides many facilities to students to nurture their overall development.
- Special efforts are also made by the institution to develop entrepreneurial skills among the students and to provide counseling services and career guidance to them. The college has developed 'Centre for Promotion of Research', Centre for Innovations in Teaching, Learning and Evaluation' and 'Competitive Examination Guidance Centre' to promote student research, to strengthen teaching-learning process and to guide the students to prepare for competitive examinations respectively.

- The college has a very active Central Placement Cell. Number of reputed organizations visit the campus for the placement of students. The details of placement for the professional courses like M.Sc. (Computer Science) are as shown below :

	M.Sc. (CS)
2014-15	99%
2013-14	92%
2012-13	94%
2011-12	91%
2010-11	92%

- There are many welfare schemes like Insurance, Canteen, Installments or wavier in fees, endowment prizes, counseling, student aid fund and earn and learn scheme made available to the students by the college. The earn and learn scheme is helpful for economically weak and needy students. The operative details about this scheme are as follows:



- The college has received the Best College Award for Sports, Best College Award for NSS and NSS Best Programme Officer Award by SPPU Pune. The college NCC unit has also won 'Best Division Trophy'.
- In the last six years, six of our students have been awarded the prestigious State Level '*Shiv-Chatrapati*' award totalling the number of awardees in this category to 36. One of our students is '*Arjun*' Awardee and one is '*Star of India*' awardee. One student has been awarded the prestigious 'Prime Minister Trophy' being the best NCC cadet at all India level.
- NCC cadets participate in Republic Day Parade, New Delhi. Till date, five cadets have participated and many students have won gold medals in different activities held at various National Camps.
- The college organizes various cultural programmes every year to promote the cultural activities. Various workshops are organized by the college to

nurture the talent in the areas of Performing Arts such as acting, drama, dance and music. The effect of these workshops is seen in the increase in prizes won in different competitions like *Purashottam Karandak*, *Firodiya Karandak*, *Bharat Karandak*, *Raj Karandak* etc. College Musical Band is formed by students. The college also has developed a ladies 'Dhol-Tasha Pathak'.

- The college publishes Annual Magazine and that are also archived in digital form.
- The college promotes research amongst undergraduate and postgraduate students under 'Yuva Sanshodhak' scheme by funding the projects of the students under the guidance of faculty members.
- Special efforts are taken for needy and economically poor students to enroll in *earn and learn* scheme and also for remedial coaching.
- The college has formed Industry Academia Collaboration Committee. Industry academia meet facilitates the effective dialog with entrepreneurs.
- Placement cell provides guidance with reference to career building. Alumni also help in this regard. The college also provides counseling for various competitive examinations including GRE/TOEFL.

Criterion VI Governance, Leadership and Management

- The college governed by the parent body *Progressive Education Society*, Pune, is a very well-known and reputed educational institution, which is founded and run by teachers.
- The college has well defined system, which ensures that the adequate information is available for management to review policy statements and action plans of the institution. The Information flowchart is: Heads of the Departments (HODs) → concerned Vice Principal → Principal → Local Managing Committee (LMC) → Board of Life Members (BOLM) → Business Council (BC).
- The college has active IQAC cell, which takes care of teaching learning processes, Research and Development, Industry Interaction, Sports, Examinations Reforms, Evaluation System and updated Admission System. The IQAC with continuous improvement and monitoring system ensures best performance in all academic and administrative activities. It encourages teachers, students and administrative staff to achieve higher and greater targets every year.
- In addition to IQAC, various committees are formed in the college for smooth conduct of academic and administrative process. The college has also been certified by BSI as ISO 9001:2008 institute.
- Staff Welfare Scheme, Credit Cooperative Society, recreational activities, festival advances are provided to teaching as well as non-teaching staff. Health Check-up facility for staff and their family members and Group Insurance Scheme are extended to all staff members. Workshops on spirituality are held.

Criterion VII Innovations and Best Practices

- Environmental consciousness:
 - The college has constituted Green Campus Initiative (GCI) committee to make campus eco-friendly.
 - Some of the initiatives undertaken by GCI Committee are: Energy Conservation, Use of Renewable Energy, Water Harvesting, Tree Plantation, Hazardous Waste including e-waste Management, etc.
 - The college conducts Green Audit, Energy Audit, Fire Audit, Safety Audit and Biodiversity Audit of its campus.
- Innovations: The College has introduced various innovative programmes that are successfully implemented, viz. use of e-governance in the college administration, development of Digital Record Room, Digital Library, etc. Use of ICT in academics viz. development of Virtual Classroom, Virtual Laboratory, Digital Classrooms, Digital Language laboratory, Digital Herbarium, Digital Animal Dissection, etc. Special Schemes like *Yuva Sanshodhak* and *Sports Scholarships* are launched for students' research grants and sports students respectively. The college has its *Dhol-Tasha Pathak* for girls. Self-defense training is provided for girl students.
- The Best Practices followed by the college are (i) Use of Advanced Technology in Academics and Administration (ii) Green Campus Initiative
 - (i) **Use of Advanced Technology in Academics and Administration:** The Information and communication technology provides a basic infrastructure for teaching and learning. One of the main objectives of use of ICT to teachers and students is to effectively create, store, retrieve, analyze and present information related to teaching, learning as well as research in their respective fields. The ICT facility enables improvement in competencies in advanced teaching and research work.
 - (ii) **Green Campus Initiative:** Clean environment is the basic necessity of human being for maintenance of good health and efficiency. Limited availability of public transport has resulted into increased use of personal vehicles, which is one of the causes of increase in air pollution. Due to extensive urbanization, water is increasingly becoming a scarce natural resource in metropolitan cities like Pune. Therefore, efforts to recycle water and water harvesting are undertaken. Similarly, efforts are being undertaken to replace conventional energy in the form of electricity by solar energy wherever possible. In order to keep the college campus '*clean and green*', the college has undertaken 'Green Campus Initiative'

SWOC Analysis

Strengths	Opportunities
1. Quality Education 2. Young, well equipped, Dynamic and Devoted Faculty 3. Use of Advanced technology in teaching 4. Cordial atmosphere in the college 5. Well-equipped Library, digital library, ICT based laboratories, digital classroom, virtual classroom 6. Availability of funds from national funding agencies 7. Central Location 8. Excellent Team Work, Supportive Management 9. Effective administrative policies 10. Greater student participation in all departmental activities 11. Internet enabled departments, Technosavvy staff 12. Well organized Placement facility 13. Plenty of co-curricular and extra-curricular activities 14. Association of retired faculty members for guidance and advice 15. Interdepartmental exchanges especially in Science Faculty which has potential in promoting research	1. Mega city exposure 2. Betterment of students' communication skill and technical skill 3. Opportunities to offer additional courses for enhancing employability 4. Participation in interdisciplinary education 5. To conduct more hands on training programme 6. To organize industry academia meet on a larger scale 7. Designing activities for enriching student skill development 8. Scope for growth of basic science education 9. Establishment of private university [conversion into deemed / private university]
Weaknesses	Challenges
1. Large number of students from vernacular medium 2. Space is a constraint in research laboratories 3. Constraints in timely recruitment of teachers On account of the present government policy 4. Campus placement for general graduates	1. Entry of average students 2. Challenges of developing entrepreneurs among student through self-employment 3. To inculcate research culture among students 4. To develop global competencies among the students 5. Challenge with academically weak students 6. Overcrowded campus 7. Safety and security of over 7000 students due to growing socio-political pressures

Profile of the Affiliated/Constituent College

1. Name and address of the college:

Name:	<i>Progressive Education Society's</i> Modern College of Arts, Science and Commerce.		
Address:	Modern College Road, off J. M. Road, Shivajinagar.		
City:	Pune.	Pin: 411 005.	State: Maharashtra
Website:	http://www.moderncollegepune.com		

2. For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	<i>Dr. R. S. Zunjarrao</i>	O: 020-25535927	9922007302	020-25536075	<i>principal@moderncollegepune.com</i>
Vice Principal	1. <i>Dr. Y. R. Waghmare</i>	O: 020-25535927	9850509428	020-25536075	<i>waghmareyr@gmail.com</i>
	2. <i>Dr. N. J. Kulkarni</i>	O: 020-25535927	8055756041	020-25536075	<i>naynajkulkarni@yahoo.co.in</i>
	3. <i>Prof. S. S. Deshmukh</i>	O: 020-25535927	9922007315	020-25536075	<i>ssd0703@gmail.com</i>
	4. <i>Prof. P. G. Dixit</i>	O: 020-25535927	9922007307	0-25536075	<i>moderndixit@gmail.com</i>
	4. <i>Prof. S. R. Chaudhari</i>	O: 020-25535927	9822682812	020-25536075	<i>srcy2k@gmail.com</i>
	5. <i>Prof. M. D. Waghmare</i>	O: 020-25535927	8308802322	020-25536075	<i>milind1301@gmail.com</i>
Steering Committee Coordinator	<i>Prof. S. S. Deshmukh</i>	O: 020-25535468	9922007315	020-25536075	<i>ssd0703@gmail.com</i>
IQAC Coordinator	<i>Prof. S. R. Chaudhari</i>	O: 020-25535927	9822682812	020-25536075	<i>srcy2k@gmail.com</i>

3. Status of the institution

Affiliated College	✓
Constituent College	
Any Other (specify)	

4. Type of institution

a. By Gender

i. For Men	
ii. For Women	
iii. Co-education	✓

b. By shift

i. Regular	✓
ii. Day	
iii. Evening	

5. Is it a recognized minority institution?

Yes	
No	✓

If yes, specify the minority status (Religious/linguistic/any other) and provide documentary evidence. : **NA**

6. Sources of funding

Government	
Grant-in-aid	✓
Self-financing	✓
Any other	

7. a. Date of establishment of the college:

15-06-1970

b. University to which the college is affiliated / or which governs the college (If it is a constituent college).

Permanently affiliated to Savitribai Phule Pune University, (Formerly University of Pune), Pune, Maharashtra

c. Details of UGC recognition:

Under Section	Date, Month and Year	Remarks (if any)
i. 2(f)	01-09-1971	-
ii. 12(B)	01-09-1971	-

(The certificates of recognition by UGC as 2(f) and 12 (B) are enclosed)

d. Details of recognition /approval by statutory/regulatory bodies other than UGC (AICTE, CNTE, MCI, DCI, PCI, RCI etc.): **NA**

8. Does the affiliating university act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes ☒ No ☐

If yes, has the College applied for availing the autonomous status?

Yes ☐ No ☒

9. Is the college recognized

a. By UGC as a College with Potential for Excellence (CPE)?

Yes ☒ No ☐

If yes, date of recognition: 16th September 2011

b. For its performance by any other government agency?

Yes

☒

No

☐

DST-FIST Funds, DBT-STAR College Scheme, UGC Community College Scheme

If yes, date of recognition:

DST-FIST Funds: 5th January 2012

DBT-STAR College Scheme: 25th March 2013

UGC Community College Scheme: 11th June 2016

10. Location of the campus and area in sq/mts.

Location	Urban
Campus area in sq. mts.	20,234 sq.mts.
Built up area in sq. mts.	5,329 sq.mts.

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

I. Auditorium/seminar complex with infrastructural facilities

- Well equipped, air conditioned, spacious auditorium with state of the art acoustics available on the campus: Capacity 517 seats
- In addition, an 'Assembly Hall' is available with seating capacity of 400.

II. Sports facilities

- Playground: Very well prepared and well maintained playground with pavilion.
- A basketball court that meets International norms
- Badminton facility of International standard
- Very well equipped gymnasium that provides all the available facilities free of cost
- All the equipment required for carrying out physical exercises are available
- Sport facilities for different sports are available
- The college has tie-ups with Pune Municipal Corporation, Pimpri Chinchwad Municipal Corporation for Swimming Pool, as and when required

III. Hostel

- **Boys' hostel:** One Boys Hostel is recently started for the students who have taken admission in colleges run by the *Progressive Education*

Society. At present, 10 boys are availing this facility.

- **Girls' hostel:** One Girl Hostel is available from last 25 years. More than 50 students are availing this facility.

In both these hostels, facilities like television, internet, newspapers, and library are available. Warm water and filtered drinking water available

- **Working women's hostel:** Not available

IV. Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise): Not available

V. Cafeteria

A decent canteen facility is available on the college campus.

VI. Health centre:

- In the premises of the apex body, the *Progressive Education Society*, one OPD facility is available.
- First aid facility is made available in every department.
- Stretchers are available at four places in the college building.
- The college has tie ups with nearby hospitals through which the health services are made available to the students.
- Every year, in the beginning of academic year, medical checkup camp on the campus is arranged for newly admitted students.
- The college has not appointed full time doctors as such. However, the college has tie ups with the nearby hospitals for health services.

VII. Facilities like banking, post office, book shops

- Bank of Maharashtra, Modern College Road Branch is located in the college building on the ground floor below the Department of Computer Science.
- Post office is available within 500 meters from the college campus.
- Bookshops are available in the Deccan Gymkhana area, approximately 1-2 km from the college campus.

VIII. Transport facilities to cater to the needs of students and staff

The college is located in the heart of the city and is very close to Shivajinagar ST stand, bus stand as well as railway station. Therefore, the college is very well connected to not only the city area but also to the adjoining rural areas.

IX. Animal house

The college has signed an MOU with the Modern College of Pharmacy, Nigadi, Pune, for sharing the facility of Animal House on their campus. The facility is made available to the students and teachers whenever required.

X. Biological waste disposal

The college has established a system for biomedical waste disposal by making an agreement with a local agency.

XI. Generator or other facility for management/regulation of electricity and voltage

- The college has its own HT transformer.
- The college has installed two power backup diesel Gensets
- The college has installed solar power plants on its terrace.
- In some sections of the building, solar energy generated electricity is used for lighting.
- Solar energy powered water distillation unit is installed. The college is trying to expand the generation and utilization of solar energy based electricity more effectively.

XII. Solid waste management facility

The college has its own vermi-compost facility. The Department of Zoology conducts vermi-culture training programmes, through which the students are trained about solid waste management.

XIII. Waste water management

The college has launched an innovative programme in collaboration with Modern College of Engineering. The college has invested 50% of the total expenditure on a sewage treatment plant (STP) worth Rs. 18,00,000/- (Rs. Eighteen lac). The plant can treat 20,000 liters of water each day. Our initial water required which was 40,000 liters is now reduced by 50%. The recycled water is used to water the plants in the Botanical Garden of the college, for watering the college ground and for flushing the toilet blocks.

XIV. Water harvesting

- The college has installed a rainwater harvesting plant and the Department of Geography looks after it. The runoff water from the rooftops is collected in an underground tank.
- The college has launched one more system in which the runoff water collected from the rooftops is used to charge the bore-wells.

12. Details of programs offered by the college (Give data for current academic year)

Sr. No.	Programme Level	Name of the Programme/ Course	Duration (Years)	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
1	Under-Graduate	B.A.	3	H.S.C.	English Marathi	1080	761
		B.Sc.	3	H.S.C.	English	1785	1537

		B.Com	3	H.S.C.	English	2520	2549*
		B.B.A.(C.A.)	3	H.S.C.	English	720	595
		B.B.A.	3	H.S.C.	English	720	538
2	Post-Graduate	M.A.	2	B.A.	Marathi	504	283
		M.Com.	2	B.Com.	English	480	171
		M.Sc.	3	B.Sc.	English	912	584
3	Integrated Programmes PG	-	-	-	-	-	-
4	Ph.D.	Marathi	2-5 Yrs.	M.A.	Marathi	14	14
		Economics	2-5 Yrs	M.A.	English	10	10
		Botany	2-5 Yrs.	M.Sc.	English	5	5
		Zoology	2-5 Yrs.	M.Sc.	English	4	4
		Electronic Science	2-5 Yrs	M.Sc.	English	5	5
		Commerce	2-5 Yrs	M.Com.	English	8	8
5	M.Phil.	-	-	-	-	-	-
6	Certificate courses	-	-	-	-	-	-
7	UG Diploma	Diploma in Dress Designing and Tailoring	1 year	H.S.C.	English	50	50
8	PG Diploma	P.G.D.B.F.	1	Any Graduate	English	40	27
9	Any Other (specify and provide details)	-	-	-	-	-	-

(*In the ac.yr. 2015-16, SPPU awarded 20% increase in intake capacity)

13. Does the college offer self-financed programmes?

Yes



No

☐

If yes, how many?

25

14. New programmes introduced in the college during the last five years if any?

Yes



No

☐

Number

9

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the

departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments	UG	PG	Research
Science	1. Biotechnology	✓	✓	-
	2. Botany	✓	✓	✓
	3. Chemistry	✓	✓	-
	4. Computer Science	✓	✓	-
	5. Electronic Science	✓	✓	✓
	6. Mathematics	✓	✓	-
	7. Microbiology	✓	✓	✓
	8. Physics	✓	✓	-
	9. Statistics	✓	✓	-
	10. Zoology	✓	✓	✓
Arts	1. Economics	✓	✓	✓
	2. English	✓	✓	-
	3. Geography	✓	✓	-
	4. German	✓	-	-
	5. Hindi	✓	-	-
	6. History	✓	-	-
	7. Marathi	✓	✓	✓
	8. Political Science	✓	-	-
	9. Psychology	✓	✓	-
Commerce	Commerce	✓	✓	✓

16. Number of programmes offered under (programme means a degree course like BA, BSc, MA, MCom....)

a. Annual System

03: B.A., B.Com., and First Year of B.Sc.

b. Semester System

Second and Third year of B.Sc. and 16 P.G. Courses

c. Trimester System

Nil

17. Number of programmes with

a. Choice Based Credit System

16 (All PG Courses)

b. Inter/Multidisciplinary Approach

02: B.Sc. and M.Sc. Biotechnology

c. Any other (Specify and provide details)

-

18. Does the college offer UG and/or PG programmes in Teacher Education?

Yes ☐ No ☒

If yes,

a. Year of introduction of the programme(s) (dd/mm/yyyy) and number of batches that completed the programme. NA

b. NCTE recognition details (if applicable)
Notification No.
Date: (dd/mm/yyyy)
Validity: NA

c. Is the institution opting for assessment and accreditation of Teacher Education programme separately? NA

Yes ☐ No ☐

19. Does the college offer UG/PG programme in Physical Education?

Yes ☐ No ☒

20. Number of teaching and non-teaching positions in the institution.

Position	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	M	F	M	F	M	F	M	F	M	F
Sanctioned by the UGC/ University/State Government	2	2	20	8	37	16	40	18	35	15
Recruited	0	0	20	8	24	15	45	7	39	4
Yet to be recruit	2	2	-	-	9	5	4	2	5	2
Sanctioned by the Management	-	-	-	-	78	51	38	16	15	6
Recruited	-	-	-	-	28	90	31	16	10	5
Yet to be recruit	-	-	-	-	-	-	-	-	-	-

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	-	-	7	5	15	15	42
M.Phil.	-	-	6	2	3	9	19
PG	-	-	6	0	37	70	84
Temporary teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	-	-	-	-	5	6	11

M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	13	37	50
Part-time teachers							
Ph.D.	-	-	-	-	1	1	2
M.Phil.	-	-	-	-	0	1	1
PG	-	-	-	-	1	0	2

22. Number of Visiting Faculty/ Guest Faculty engaged with the college.

67

23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	Year 1 (2012-2013)		Year 2 (2013-2014)		Year 3 (2014-2015)		Year 4 (2015-2016)	
	M	F	M	F	M	F	M	F
SC	287	320	419	365	381	387	487	515
ST	79	55	92	74	70	85	88	70
OBC	366	424	431	499	474	534	508	586
General	1461	1784	1927	2158	1259	1581	918	1250
Others	225	24	308	257	1137	1069	1329	1390

24. Details on students enrolled in the college during the current academic year.(2015-2016)

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same state where the college is located	5586	1358	-	46	6990
Students from other states of India	43	31	-	-	74
NRI students	-	-	-	-	-
Foreign students	68	9	-	-	77
Total	5697	1398	-	46	7141

25. Dropout rate in UG and PG (average of the last two batches)

UG

< 1%

PG

< 1%

26. Unit cost of education

(Unit Cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

a. Including the salary component

Rs.30,781/-

b. Excluding the salary component

Rs.6,315/-

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes

☐

No

☒

28. Provide teacher student ratio for each of the programme/course offered.

Sr. No.	Name of the Programme	Teacher: Student ratio
1	B.A.	1:20
2	B.Com.	1:20
3	B.Sc.,	1:15
4	M.A.	1:14
5	M.Com.	1:15
6	M.Sc.	1:8

29. Is the college applying for

Accreditation:

Cycle 1 ☐ Cycle 2 ☐ Cycle 3 ☒ Cycle 4 ☐

Re-Assessment: ☐

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

30. Date of accreditation (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 2: 28/03/2010 Accreditation outcome/Result: 'A' Grade with CGPA 3.15

* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as annexure.

31. Number of working days during the last academic year

32. Number of teaching days during the last academic year (Teaching days means days on which lectures were engaged excluding the examination days).

33. Date of establishment of Internal Quality Assurance Cell (IQAC).

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC

AQAR submitted on:

- 27/08/2011
- 29/09/2012
- 20/08/2013
- 28/01/2016
- 13/02/2016

35. Any Other relevant data (not covered above) the college would like to include. (Do not include explanatory /descriptive information)

- ❖ Best College Award by SPPU (2008)
- ❖ NAAC accreditation 2nd Cycle 'A' grade with CGPA 3.15 (2010)
- ❖ College with Potential for Excellence (CPE) Status of UGC (2011)
- ❖ DST-FIST Scheme (2012)
- ❖ UGC-BSR scheme (2013)
- ❖ STAR College Scheme from DBT (2013)
- ❖ Best College Award (NSS) by SPPU (2014)
- ❖ Best Principal Award by SPPU (2014)
- ❖ ISO 9001:2008 Certification (2015)
- ❖ Community College Scheme from UGC (2015)
- ❖ Best College Award (Sports) by SPPU (2016)

C. Criterion wise Reports

Criterion I – Curricular Aspects

1.1 Curricular Planning and Implementation

Synoptic View:

- Curriculum design is aligned with the institutional goals and objectives.
- Curriculum design and development is done through a well-defined process.
- Curricula developed/adopted have relevance to the local/national/regional/global developmental needs.
- Employability and entrepreneurship, pursuit of higher knowledge, overall development of students are major considerations in the design and development of the curriculum.
- Developing global competencies are envisaged in the curriculum design.
- Consultation with experts academic, industry/ employment sector /alumni / other stakeholders in and outside the institution is effectively undertaken for developing the curricula.
- Leadership is provided to affiliated colleges (if applicable) for enriching the curriculum by encouraging skill development, need based programmes, etc.

1.1.1 State the vision, mission and objectives of the institution and describe how these are communicated to the students, teachers, staff and other stakeholders.

Vision Statement:

The Vision statement of the institute is ‘ज्ञानमयो भव’, (Dnyanmayo Bhav) meaning ‘**Be Knowledge Incarnate**’. It is inscribed at the top of the logo of the Institute as shown below:



- The initials of the name of the parent institute P.E.S. (Progressive Education Society) are inscribed at the centre of the logo. The name of the parent institute aptly spells out the way to realize its vision by remaining **progressive** in attitude and adopting **modern** means of knowledge.
- The word ‘EXCELSIOR’ at the bottom of the logo is an expression of incessant aspirations of higher attainment.

Mission Statement:

“To create multidisciplinary best citizens to suit the local, national and international needs, having scientific temperament, moral, ethical values and multifaceted proactive personality, by providing excellent education”

Objectives:

- Use of Information and Communication Technology (ICT) and other advanced technologies for enhancing the quality of education.
- Supplement formal education with skill development courses.
- Inculcate research culture among teachers and students.
- Bring about infrastructural improvement for enhancing academic ambience in view of global competency and quest for excellence.
- Promote Co-curricular and Extra-curricular activities.
- Inculcate ethical and moral values among the youth.
- Initiate need based courses considering local, national and international needs.

The vision and mission of the institution are communicated to the students, staff members and the other stakeholders in all possible ways:

- A mural indicating the mission statement has been displayed at the main entrance of college building.
- The vision statement is displayed in all the classrooms and laboratories.
- Continuous electronic display is arranged at the entrance. The boards bearing ‘Mission Statement’ are displayed at prominent places in the college premises and also on college website.
- Vision and Mission statements are also displayed on important documents of the college such as Practical Journals of students, Teachers’ Diaries, Conference proceedings and Invitation Cards of various programmes.
- Relevant components of the mission statement are also referred informally during classroom teaching and staff meetings.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific examples.

- In the term end meetings of the departments, distribution of the courses to be taught in the next term is discussed and teachers’ personal timetables are prepared.
- Effective implementation of the curriculum begins from the very first day of the academic year through preparation of Lecture Plans by every teacher.
- Academic calendar is prepared annually by the institution and by all the departments in the college to plan the academic and co-curricular activities. This ensures that the teaching hours are not disturbed by

co-curricular activities in the college.

- In all the departments, it is ensured that the available teaching days are fully utilized in classroom teaching as per the Lecture Plan.
- Hard copies as well as soft copies of syllabi are made available to the students. In periodic meetings of the departments, discussions are held regarding the teaching plans and timely completion of the syllabus.
- Teachers' Diaries and weekly worksheets are maintained for effective academic planning, implementation and review of the curriculum.
- Teachers conduct activities like class tests, group discussion, student seminars, power-point presentations, project presentations, problem solving sessions for students, oral questions-answer method, etc., to check whether the students have acquired knowledge as outlined in the objectives of the curriculum.
- Effective teaching skills are developed by organizing soft-skill programmes for teachers and by using innovative pedagogic methods in classroom teaching.
- Teachers are encouraged to participate in various activities like orientation programs, refresher courses, lecture series, workshops, conferences and training programmes conducted by University and other institutions.
- Use of digital classroom, virtual classroom, virtual laboratories, digital library, etc. help in providing better learning experiences to students.
- College provides financial support to teachers for participating in conferences, seminars, workshops, etc. to enhance their subject knowledge, which they share with others.
- Students are given exposure to experience-based learning through Research projects, Industrial training, Exhibitions, Field visits, Trade fairs, etc.

1.1.3 What type of support (procedural and practical) do the teachers receive (from University and / or institution) for effectively translating the curriculum and improving teaching practices?

- College has developed adequate infrastructure to facilitate the effective delivery of curriculum and to improve teaching practices using various means such as Library, Digital Library, Classrooms and laboratories with ICT facilities, Digital classrooms, Virtual Classroom, Virtual Laboratory and Language Laboratory.
- All the departments are well equipped with facilities like desktops, laptops, printers, LCD Projectors and internet connectivity to enhance teaching and learning practices.
- The college also encourages teachers to participate in orientation programs, refresher courses, lecture series, workshops, conferences and training programmes conducted by University and other institutions. Guidance is also provided through IQAC. Workshops on effective use of ICT are arranged for newly appointed staff members.

- The College organizes workshops for curriculum design, its restructuring and implementation in collaboration with SPPU (Savitribai Phule Pune University, formerly called University of Pune). The college teachers are also encouraged to participate in such workshops.
- The college has developed a research culture in all the departments. This results in broadening of discipline specific knowledge and improving teaching practices. The teachers are also motivated to participate in State level research project competitions such as 'Avishkar', 'Innovation' etc.
- Teachers are encouraged to know the current developments in their subjects through research workshops, seminars and conferences at various levels.
- A study group of teachers is formed in the college for use of innovative pedagogic methods of UG teaching. A regional workshop on cooperative learning conducted by an internationally acclaimed Israeli Pedagogy Expert Dr. Yael Sharan was organized in the college in February 2012. The college has recently established a Centre for Innovations in Teaching-Learning and Evaluation. The centre has so far organized workshops on Pedagogy and has also organized an International Conference on "Innovations in Teaching, Learning and Evaluation in Higher Education" on 29th and 30th January 2016.

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the curriculum provided by the affiliating university or other statutory agency.

- The College organizes workshops on restructuring, framing and implementation of syllabi in collaboration with SPPU. The college teachers participate in such workshops organized by our college and other institutions. The details of workshops organized are as follows:

Table 1.1 Syllabi reframing workshops

Sr. No.	Subject	Syllabus / Course	Duration
1	Economics	T.Y. B.A.	March 2015
2	Statistics	M.Sc. I	March 2013
3	Psychology	S. Y. B.A.	February 2013
4	Commerce	T.Y.B.Com.	October 2010
5	Statistics	M.Sc. II	April 2014
6	Statistics	T.Y. B.Com.	March 2015

Many teachers of our college have attended such workshops organized by other institutions as session In-charge/ Chairperson/resource persons / participant.

Table 1.2 Participation at BOS level

Sr. No.	Department	Participated as				
		BOS Members	Session In-charge/ Chairperson	Resource Persons	Sub-committee Members	Participant
1	Computer Science	1	2	5	3	11
2	Botany	1	-	-	1	-
3	Commerce	2	-	-	2	-
4	Economics	1	-	-	1	-
5	Marathi	2	1	-	1	-
6	Microbiology	-	-	-	1	3
7	Psychology	-	-	1	-	6
8	Statistics	-	1	2	-	11
9	German	1	1	-	-	1
10	B.C.A.	-	-	-	-	5
11	B.B.A.	-	1	-	4	1
12	Mathematics	-	-	-	-	2
13	Physics	-	-	-	-	9
14	Electronics	-	-	-	3	5
15	English	-	-	-	-	-
16	Hindi	1	-	-	-	-
17	Zoology	-	-	-	-	1
18	Geography	1	1	-	-	-

Many teachers of our college have active participation on BOS of SPPU and other institutes as shown in Table 1.3.

- Life Science departments have obtained financial assistance of Rs. 46,97,200/- from Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India, New Delhi, under Star College Scheme. This scheme has helped to enhance the quality of Life Science education. Under this scheme, syllabus for additional lectures and practicals is designed by staff members of life sciences departments of the college.
- The college applied to various funding agencies under schemes such as UGC-CPE, DST- FIST, UGC-BSR and DBT-Star College. The funds received have enabled the college in delivering the curriculum with better instruments, ICT tools, and laboratory infrastructure.

Table 1.3 Teachers at University Board of Studies

Sr. No.	Department	Name of Teacher	BOS Chairperson/ BOS member	University
1	Botany	Dr. R.S. Zunjarrao	BOS Member August 2010 to August 2015	SPPU
2	Commerce	Dr. Y. R. Waghmare	BOS Member October 2010 to 31-8-2015	SPPU
3	Commerce	Dr. A. V. Kamble	BOS Member October 2010 to 31-8-2015	SPPU
4	Computer Science	Prof. Anjali Sardesai	BOS Member 21/04/2014 to 20/04/2016	SPPU
5	Economics	Dr. Mrs. M.M. Satam	BOS Member	SPPU
6	Marathi	Dr. Mrs. Snehal Taware	Chairman	SPPU
			BOS Member	Swami Ramanand Tirth University, Nanded
			BOS Member	St. Mira's College ,Pune

Sr. No.	Department	Name of Teacher	BOS Chairperson/ BOS member	University
7	German	Prof. Sanjeevani Kuvalekar	Convener BOS	Maharashtra State Board of Secondary and Higher Secondary Education
8	Geography	Dr. A. E. Sonawane	BOS Member 8 June 2014 to 7 June 2019	Bharati Vidyapeeth
9	Hindi	Prof. S. D. Purohit	BOS Member June 2015 to June 2020	St. Mira's College, Pune
10	Mathematics	Dr. Nivedita Mahajan	BOS Member F.Y. B.Sc. (CS) : 2015-2020 S.Y. B.Sc. (CS) : 2016-2021	St. Mira's College, Pune

- The syllabi are made available to students through University website and College library website.
- The lecture plans prepared by staff members facilitate effective and time bound transaction of the curriculum. Monitoring of the plans is done regularly.
- Workshops were organized for restructuring and implementation of the new syllabi.
- Remedial lectures are held for academically weak students and bridge courses are arranged beginners.
- Planning of co-curricular and extracurricular activities is done for further supporting the curriculum.

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

- The institution invites experts from industry, research institutions and universities for interacting with students and delivering guest lectures. Deans, Chairpersons of BOS, and other authorities are also invited to the college to guide the faculty.
- Some staff members have worked as Chairpersons of Board of Studies, Members of Board of Studies and as Members of sub-committees of BOS, of SPPU and other universities. These members have actively contributed in framing and implementation of syllabi.
- A special committee has been formed to conduct Industry-Academia Meet every year. Syllabus is provided to the delegates from various industries and their suggestions are obtained regarding improvement and additions to be made in the syllabus to enhance the skills and the employability of the students.
- Some departments have also conducted Quality Enhancement Workshops in which the Heads of the University Departments, teachers of our college and eminent experts on the subject are invited to guide the teachers and students. This has helped in the effective operationalisation of the curriculum in teaching and learning.
- Some of the Departments have linkages with industries, university departments, research institutes, etc. for research activities, projects,

internships, etc.

- Few departments arrange visits to different industries to make students aware of the current scenarios in those industries.
- The Department of Microbiology offers an add-on course for which the personnel from relevant industries conduct the sessions.

1.1.6 What are the contributions of the institution and/ or its staff members to the development of the curriculum by the university? (No. of staff members / departments represented on the BOS, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions, etc.)

- Teachers from eleven departments of the college (Marathi, Botany, Accountancy, Marketing, Business Administration, Statistics, Psychology, Economics, Animation, Biotechnology and Electronics) were associated with Board of Studies (BOS) in various capacities such as Chairpersons, members, co-opted members, sub-committee members, etc. Teachers have worked as members of the sub-committees constituted by SPPU for revision of syllabi. Some faculty members are also the members of BOS of other universities. These members contribute to the development of curriculum by the SPPU, Pune and other Universities. Many of the staff members have worked as resource persons in syllabi restructuring, framing and implementation workshops. Members of many of the departments have actively participated in preparing study material, practical lab-books and booklets etc.
- Principal Dr. R. S. Zunjarrao, as a member of BOS in Botany took initiative to introduce course on 'Industrial Botany' in B.Sc. Curriculum. This course has been introduced w.e.f. academic year 2012-13 by the University.
- For M.A. Economics, a separate elective subject on 'World Economy' was suggested by BOS member in Economics Dr. M. M. Satam, Head, Department of Economics of our college. SPPU accepted this suggestion and introduced the course w.e.f. academic year 2013-14.
- Similarly BOS member of B.Sc. Animation Prof. Anjali Sardesai, Department of Computer Science of our college, took initiative to introduce courses on : Value Education (Skill Development, Personality Development, Mind Mapping), and on Creative Writing and New Media. SPPU has accepted this suggestion and introduced the courses w.e.f. academic year 2015-16.
- Chairperson BOS in Marathi Dr. Mrs Snehal Taware, Head, Department of Marathi from our College has introduced a Translation Course for the students of SPPU.
- A system of analysing feedback received from different stakeholders has been established. Thus, feedback on curriculum workshops revision and syllabi are received from teachers, students, alumni and employers. The

suggestions received are communicated to the university through the concerned BOS. The suggestions received from invitee employers attending seminars, workshops and industry academia meet are also communicated to the concerned BOS for necessary action in the matter.

- Faculty members also prepare and publish useful literature in the form of handbooks, brochures, study materials and books, which help in implementation of the syllabus. Such attempts have been made in the subjects such as Environment Awareness (for S.Y.B.A./B.Sc./B.Com.), Company Law, Human Rights, Cyber Security, Statistics question bank, Lab manuals for Computer Science, Physics, Zoology, Botany, Electronic Science, Biotechnology etc. are some of the examples of this activity.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

The College has designed 28 skill development / add-on courses to supplement the curriculum provided by university. During the period under consideration, the following courses have been conducted.

Table 1.4 List of Add-on courses

Sr. No.	Department	Course Name	Coordinator
1	Biotechnology	Animal Tissue Culture	Dr. Mrs. S. S. Puranik
2	Biotechnology	PCR Techniques	Prof. Mrs. R. M. Phadke
3	Biotechnology	Course on Nanotechnology	Dr. Mrs. R. S. Thombre
4	Botany	Plant Tissue Culture I	Dr. K. D. Gopale
5	Botany	Seed Technology	Prof. A. R. Goggi
6	Botany	Ayurvedic medicines and Herbal products preparation	Prof. R.N. Ingole
7	Botany	Flower Arrangement	Prof. Manisha Mandhare
8	Chemistry	Analytical Techniques	Dr. S. Pokharkar
9	Chemistry	Chemical Based Household Products	Dr. S. K. Ujlambkar
10	Commerce	Computerized financial accounting (Tally)	Prof. Rahul D. Jadhav
11	Commerce	Soft Skills	Dr. V. N. Gaikwad
12	Computer Science	Computer awareness	Prof. S. S. Deshmukh
13	Electronics	Embedded Systems	Prof. D. B. Gaikwad
14	English	Spoken English	Prof. Mrs. A. A. Kamble
15	Fashion Technology	Fashion Designing	Dr. Mrs. N. J. Kulkarni/ Prof. Manasi Thakur
16	German	German level I (Basic)	Prof. Sanjeevani Kuwalekar
17	German	German Level II (Advanced)	Prof. Sanjeevani Kuwalekar
18	History	'Modi' Script	Dr. R. Y. Kulkarni
20	Marathi	Translation	Dr. Snehal Taware
21	Marathi	Spoken Marathi (Vani Course)	Dr. Snehal Taware
22	Microbiology	Pharmaceutical Techniques	Dr. Mrs. S. S. Mujumdar
23	Physics	Industrial Electronic Components: Familiarization and Testing	Prof. S. S. Thengadi
24	Psychology	Flower Remedy	Prof. Vijaya Jagtap
25	Statistics	Biostatistics	Dr. M. M. Sane
26	Statistics	Statistical Analysis System (SAS)	Prof. P. G. Dixit
27	Zoology	Integrated Vermi-technology	Prof. N. M. Naidu
28	Zoology	Microscopy	Prof. N. M. Naidu

- Teachers of our college design syllabi of these courses. For example, the students of BSc Microbiology are expected to know the pharmaceutical techniques for better placement in the pharmaceutical industries. Hence, after consulting the experts from the concerned industry, the Department of Microbiology has started a skill development course on pharmaceutical techniques.
- Teachers from Life Sciences Departments have designed the syllabus for additional practicals and lectures under the Star College Scheme sanctioned by the Department of Biotechnology, Ministry of Science and Technology, Government of India.

1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

- Regular internal assessment tests are conducted by using different methods like presentation by students, assignments, projects, open book tests, etc. to ensure that the stated objectives of curriculum are achieved.
- Results are analysed regularly to evaluate students' progress. The analysis enables the concerned teachers to understand the deficiencies in the course implementation and to identify the areas that need further attention. The necessary improvements are brought about and it is ensured that the objectives of curriculum are achieved to the maximum extent.
- Sessions based on new pedagogic methods such as cooperative learning are conducted by some teachers in class to get feedback on the fulfilment of the objectives of the curriculum.
- During campus interviews, employers give feedback on areas that need to be exemplified and emphasized. The feedback is considered to make necessary changes for improving learning and understanding of concepts by the students.

1.2 Academic Flexibility

Synoptic View:

- The vision, mission and objectives of the institution, are communicated to the students, teachers, supporting staff and other stakeholders.
- The institution develops and deploys action plans for effective implementation of the curriculum
- Teachers receive support (procedural and practical) for effectively translating the curriculum and improving teaching practices.
- The institution ensures effective curriculum delivery and transaction.
- The institution interacts with beneficiaries such as industry, research bodies and the university for effective operationalization of the curriculum.
- Staff members contribute to the development of the curriculum by the University.
- Institution has mechanisms to analyze /ensure that the stated objectives of curriculum are achieved in the course of implementation.

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc. offered by the institution.

Presently 28 skill development courses are being conducted by various departments of the college. These courses are offered as Add-on-courses. The common goal of these courses is to broaden the horizons of knowledge of the students. Main objective of these courses is to enhance the employability of the students, because all these courses incorporate practical aspects. Apart from this main objective, there are other course specific objectives, which are stated below.

Add-on-courses and their objectives:

Table 1.5 List of Add-on courses and their objectives

Sr. No.	Department	Course Name	Objectives
1	Biotechnology	Animal Tissue Culture	To give training in handling animal cells in the laboratory.
2	Biotechnology	PCR Techniques	To help students in understanding important applied techniques like PCR from practical aspects.
3	Biotechnology	Course on Nanotechnology	To get exposure to the applications of nanotechnology
4	Botany	Plant Tissue Culture	To make students aware of basic techniques of plant tissue culture
5	Botany	Seed Technology	To learn basic techniques required for Seed Testing, Seed biochemistry
6	Botany	Ayurvedic medicines and Herbal products preparation	To prepare products at home on small scale without using machinery.
7	Botany	Flower Arrangement	To increase the employability
8	Chemistry	Analytical Techniques	To give hands on experience in advanced analytical techniques like GC, HPLC etc.
9	Chemistry	Chemical Based Household Products	To develop self-employment.
10	Commerce	Computerized financial accounting (Tally)	To cope with recent trends in financial accounting.
11	Commerce	Soft Skills	For overall personality development
12	Computer Science	Computer awareness	To get basic knowledge of computers.
13	Electronics	Embedded Systems	To give opportunity to students to handle robot based microcontroller.
14	English	Spoken English	To gain fluency in English speaking.
15	Fashion Technology	Fashion Designing	To Create Self employment
16	German	German level I (Basic)	To gain basic knowledge of a foreign language.
17	German	German Level II (Advanced)	To facilitate future career abroad and enhance prospects of employment
18	History	'Modi' Script	To get the knowledge of historic script to read ancient documents.
20	Marathi	Translation	To increase the employability
21	Marathi	Spoken Marathi (Vani Course)	To enhance the spoken Marathi skills.
22	Microbiology	Pharmaceutical Techniques	To get hands-on experience in pharmaceutical techniques.
23	Physics	Industrial Electronic Components: Familiarization and Testing	Application of electronic components in industry.
24	Psychology	Flower Remedy	To increase the employability
25	Statistics	Biostatistics	To increase the employability in the field of life sciences.
26	Statistics	Statistical Analysis System (SAS)	To increase the employability in the field of clinical research.
27	Zoology	Integrated Vermi-technology	To learn eco-friendly method of waste management.
28	Zoology	Microscopy	To make students conversant with optical instruments for effective use regularly

1.2.2 Does the institution offer programs that facilitate twining/dual degree? If 'yes', give details.

The process to start Blended B.Sc. course in collaboration with Melbourne University, Australia has been initiated. The representatives of foreign Universities like Melbourne University, National Tsing Hua University, Taiwan, Penn-State University, USA, Deakin University, Australia, CORK Institute of Technology, Ireland, New Castle University Ireland, Mahatma Gandhi Institution, Mauritius, etc. have visited our college to explore the possibility of introducing such collaborative programmes.

SPPU has approved and permitted the college to conduct Post Graduate Diploma in Banking and Finance (PGDBF) programme.

The students can simultaneously opt for this diploma along with any other postgraduate programme that they have offered.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skill development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond: • Range of Core/ Elective options offered by the University and those opted by the college • Choice Based Credit System and range of subject options • Courses offered in modular form • Credit transfer and accumulation facility • Lateral and vertical mobility within and across programmes and courses • Enrichment courses

• Range of Core/ Elective options offered by the University and those opted by the college

The college is a multi-disciplinary institution. Arts, Science and Commerce (including Computer Science and Biotechnology) courses are available in the college. Substantial numbers of optional and special subjects are available at undergraduate and postgraduate levels.

Table 1.6 Courses offered by the college

Faculty	Course Name	Subjects Offered
Arts	B.A. (9 Specializations)	English, Marathi, Hindi, History, Geography, Political Science, Economics, Psychology and German
	M.A. (5 Specializations)	English, Marathi, Geography, Economics and Psychology
	Research Centre (2)	Economics and Marathi
Commerce	B.Com., B.B.A., B.B.A.-C.A. (B.C.A.)	Accounting, Costing, Corporate Law, Business Administration, Law and Taxation, HR, Finance, Marketing
	M.Com.	Advanced Cost Accounting, Advanced Accounting and Auditing, Law and Taxation
	Research Centre (1)	Commerce
	Diploma Courses (1)	PGDBF
Science	B.Sc. (11 Specializations)	Physics, Chemistry, Botany, Zoology, Mathematics, Statistics, Electronic Science, Computer Science, Microbiology, Biotechnology, Animation.
	M.Sc. (11 Subjects)	Botany, Electronic Science, Computer Science, Biotechnology, Microbiology, Chemistry (Analytical Chemistry), Statistics, Mathematics, Geography, Physics and Zoology
	Research Centres (4)	Zoology, Botany, Electronic Science and Microbiology.

Choice based Credit System and range of subject options in the college:

The college has implemented the Choice Based Credit System (CBCS) for all P.G. courses with effect from academic year 2013-14. The System allows the students to opt for certain elective subjects in the second year of the course. Additional Ten credit points are compulsory along with the main subject courses. They are: Human Rights (2 Credits), Introduction to cyber security and Information security (4 Credits) and Skill Development (4 Credits).

- **Courses offered in modular form:**

All 28 certificate courses are modular courses.

- **Credit transfer and accumulation facility:**

Credit transfer and accumulation is available within the framework of credit-system as per University norms.

- **Lateral and vertical mobility within and across programs and courses:**

Students can take admission to various certificate courses while pursuing their graduation or post-graduation and take admission to P.G. Diploma while pursuing P.G. courses.

- **Enrichment courses:**

To enhance the curriculum by amplifying and supplementing some parts of it, college reviewed a few courses run by different departments.

- In MA Psychology syllabus there was no provision for practical experience in the fast growing field of HIV/AIDS counselling. Psychology Department introduced two days “Trainers Training Workshop” to facilitate students and thereby opening new avenues in applied fields such as counselling psychology.
- Under the DBT-Star college scheme, additional practicals, lectures are encouraged in the college. In addition, Certificate Programmes (Microscopy, PCR Techniques and Nanotechnology) are conducted.
- The students of PGDBF are sent to the Banks for practical training on the topics that are part of the syllabus.

1.2.4 Does the institution offer self- financed programs? If ‘yes’ list them and indicate how they differ from other programs, with reference to admission, curriculum, fee structure, teacher qualification, salary, etc.

Yes. The College offers 13 UG and 16 PG level self-financed Courses:

Table 1.7 Self-financed Courses offered by the college

Faculty	UG	PG
Arts	German, Economics, Psychology, Geography, English; DFT(Diploma in Fashion Technology)	English, Marathi, Geography, Economics and Psychology.
Science	Computer Science, Microbiology, Animation and Biotechnology.	Chemistry, Botany, Electronics, Computer Science, Microbiology, Biotechnology, Mathematics and Statistics, Physics, Zoology,
Commerce	B.B.A., B.B.A.-C.A., (B.C.A.), B.Com.	M.Com. PGDBF

The self-financed courses mentioned above are run more or less in the same manner as other grantable courses. However, the differences are as under:

- **Admissions :**
In the case of some self-financed courses, like M.Sc. Computer Science and B.Sc. Biotechnology, admissions are given on the basis of entrance examination.
- **Curriculum guidelines:**
The curriculum of some of the self-financed courses such as B.Sc. (Animation), Fashion Designing, B.Sc. (Biotechnology) is specially designed to suit the needs of industry.
- **Fees :**
Fees charged are as prescribed by SPPU, Pune. These fees are slightly higher than the fees charged for grantable courses.
- **Teacher Qualifications and Salary:**
As far as the qualifications of the teachers and salary payable to them, there is no difference.

1.2.5 Does the college provide additional skill oriented programs, relevant to regional and global employment markets? If 'yes' provide details of such programs and the beneficiaries.

- Yes. The college has been conducting add-on courses since 1990. Presently, college is offering 28 such courses. The details of the courses having regional and global relevance are as follows:
 - In order to cope up with modern business world, Commerce Department designed certificate course in 'Computerized Financial Accounting' (Tally ERP 9).
 - Department of German has started German Level I (Basic) and German Level II (Advanced) courses for enhancing their prospects at global level opportunities.
 - Marathi department introduced 'English into Marathi translation' certificate course so that students can translate literature and knowledge in English into Marathi.
 - The course on Fashion Technology is started through which the self-employment options are made available for the students.
- Students from all the faculties are provided additional knowledge and skills necessary to get placement in multinational companies.

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice? If 'yes', how does the institution take advantage of such provision for the benefit of students?

The University presently does not provide for such flexibility.

1.3 Curricular Enrichment

Synoptic View:

• The institution offers a number of program options leading to different degrees, diplomas and certificates. • The curriculum offers a number of elective options / Choice Based Credit System (CBCS). • A number of new programs and program combinations are available to meet the needs of the students and the society. • Options are available to students for acquiring additional skills and supplementary / enrichment courses along with their regular curricula. • The institution provides for inter-institutional credit transfers. • The institution follows a semester system.

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

- The University curriculum is enriched by supplementing the co-curricular activities of the departments and associations in the college. In these programmes, students are given exposure to the broader perspectives and application oriented intricacies of the subjects of their study. The institution takes all the efforts for achieving goals and objectives by organising co-curricular activities such as educational tours and visits, various workshops and hands-on training, competitions, skill oriented programmes, etc. for the benefit of the students.
- On an average fifty guest lectures of various subject experts and practitioners are organized for students in the college every year.
- Every year about forty study tours and field visits are organized for students to give them exposure to real life applications of the principles included in the curricula. Students are also given opportunity to explore various aspects of curricula by organizing over thirty co-curricular competitions every year.
- Workshops are organized for students on specialized themes in the curricula. Laboratory manuals are prepared for subjects for which handbooks are not available in the market. Film shows relevant to the curricula are screened. Add-on courses are conducted so that students get opportunity to enhance their subject knowledge through hands-on experience.

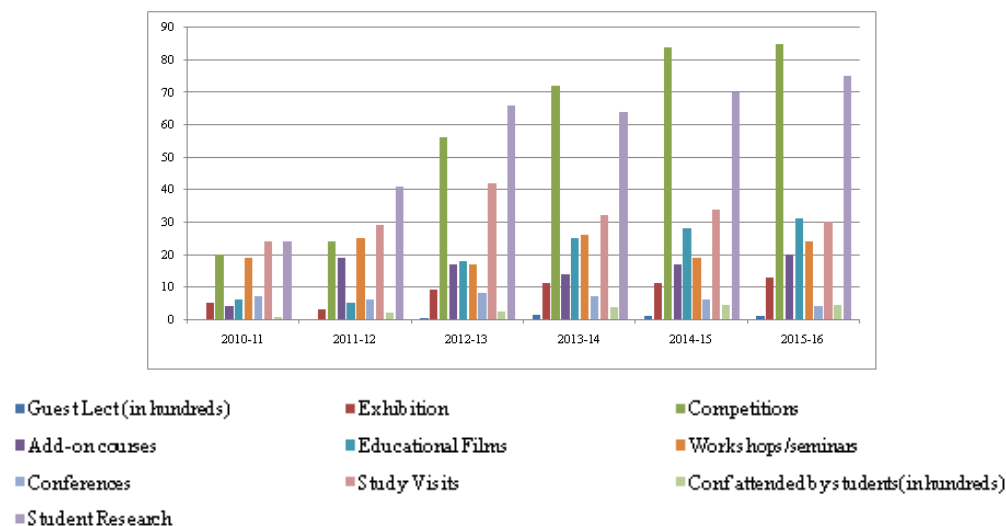
Curriculum Enrichment Programmes

Table 1.8 Curriculum Enrichment Programmes

Number of Activities/events	2010-11	2011-12	2012-13	2013-14	2014-15	2014-15
Guest lectures organized	43	27	74	154	125	130
Exhibitions etc. organized (career exhibition, Vyapar Mela, awareness exhibition, hobby, project)	5	3	9	11	11	13
Competitions organized (poster, elocution, quiz, debate, essay, PowerPoint presentation competition, project, advertisement, treasure hunt,	20	24	56	72	84	85

Number of Activities/events	2010-11	2011-12	2012-13	2013-14	2014-15	2014-15
Number of batches of Add-on courses conducted	4	19	17	14	17	20
Educational films screened	6	5	18	25	28	31
Workshops/Seminars organized	19	25	17	26	19	24
Conferences organized	7	6	8	7	6	4
Study Visits organized	24	29	42	32	34	30
Conferences/ workshops attended by students	68	192	236	364	437	450
Students participation in Research (research papers published/ presented, projects, Yuva Sanshodhak, BCUD projects, Avishkar, Innovation, etc.)	24	41	66	64	70	75

- The following graph indicates that there is generally an increasing trend in the Curriculum enrichment programmes which helps achieving the objectives of the college and the goals of academic programmes.



1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with needs of the dynamic employment market?

- The college has a placement cell and industry-academia collaboration committee. The placement cell and Industry-academia collaboration committee organize industry-academia meets, campus placement, mock interviews, career exhibitions, etc. They publish placement brochure in print form as well as in digital form.
- The college has designed 28 employability enhancement / skill development/ add-on, self-financed courses. They are conducted as per the demand, requirement and convenience of the students.
- The college makes following efforts to enrich and organize the curriculum:

ICT, Teaching Plans, Teachers Diaries, Use of Digital Resources, Digital library, internet facility (10 mbps leased line), Guest Lectures, Aptitude Tests, GDPI Training, Alumni guidance to the students, Soft Skill

Programmes, Project work in Industry, Visits to Industries, Study Tours, *Vyapar Mela* (Trade fair), Teachers Training (advanced Technology), Competitive Examination Guidance, EDP, MoUs and Linkages with industries, etc.

- Life science departments have made efforts to enrich the curriculum by designing additional practicals through the funds received from DBT under Star College Scheme.
- Teachers' Workshops were organized in the college for syllabus restructuring of some subjects. Teachers were also deputed to participate in similar workshops in other colleges. Recommendations were made to the Boards of Studies regarding modifications in the curricula.

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

- **Climate Change:** Recognizing the importance of the issues such as "Climate Change" and "Environmental Education" the college has introduced the elective course "Environmental Chemistry" for students of T.Y. B.Sc. (Chemistry).
- **Use of ICT:**
 - Department of Physics has chosen to conduct 'Computer Interface Experiments in Physics' at T.Y. B.Sc., wherein ICT is effectively used.
 - Because of the expertise developed in the respective subject through teaching, one of the teachers was invited by a local publisher to contribute to a book on the subject.
 - Our college is one of the few colleges in the country to adopt micro-scale-technique in the chemistry practicals for more than ten years.
 - Almost all the Departments are making effective use of ICT by developing e-resources necessary for in the department. Department of Zoology has prepared animal dissection demonstration CDs and Department of Botany is conducting UGC sponsored major research project on Digital Herbarium.
- **Environmental Education:**
 - The college conducts 'Environmental Awareness Course' at Second year Undergraduate level for the students of all faculties. Students are encouraged to undertake projects on various environmental issues.
 - The college has organized many conferences with themes related to environment. For example,
 - i. The Department of Botany organized an International conference on 'Biodiversity and its conservation', in the academic year 2011-12.

- ii. The Department of Electronic Science organized a National conference on 'Hazardous E-waste management', in the academic year 2013-14.
- iii. The National conference on Environment and biodiversity of India was organized by NSS unit of the college, in collaboration with North-East centre for Environmental Education and Research, Manipur in academic year 2013-14.
- iv. An International conference on 'Adopting new technologies for conservation of environment' was organized by faculty of Science, in the academic year 2014-15.
- v. A State level conference on 'Fresh Water Eco-Systems of Maharashtra', organized by Department of Zoology, in academic year 2014-15.

Active participation of students and teachers in these conferences has helped them in getting updated and practical knowledge of the subject.

- The college has signed MoU with 'PASCO', Pune for bio-medical waste disposal.
- Department of Physics has introduced a course on Energy Studies as the optional course at third year B.Sc.
- The college has taken initiative in installing solar energy equipment for lighting system and for distilling water. The college has submitted a proposal for the financial assistance, to Ministry of Environment through UGC, for installation of solar panel on entire rooftop of college building.
- The Geography students study rainwater harvesting as a topic as a part of their curriculum. The department therefore took efforts in installing the rainwater harvesting system in the campus.
- The students of Microbiology and Biotechnology have the topic of sewage treatment in their curriculum. The students visit various establishments to study the functioning of such systems. The college has installed the sewage treatment plant that enables the students to study the same in the college campus.

● **Human Rights:**

- The college conducts a course on 'Human Rights' for postgraduate students of all the faculties.
- Expert guest lectures are organized on Human Rights.
- The college also provides study material on Human Rights to the students through website.
- Adequate reference books have been made available in the library for the students.

● **Gender:**

- Staff academy of our college organises various programmes through which gender equality at various levels is emphasized to staff and students.

- In order to supplement the existing syllabus on gender issues, the college has initiated several programs such as Gender Sensitization workshops, Guidance lectures by female Police officers to the female students, Programs on women empowerment, self-defense training for girl students, lecture on legal provisions for women and their safety.
- An equal opportunity committee of the college also contributes towards this end.
- Workshops on pre-marital counselling are also organized for both boys and girls by Department of Psychology.

1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

• Moral and ethical values • Employable and life skills • Better career options • Community orientation

• Moral and Ethical Values :

- Promotion of moral and ethical values has been the part of our mission statement of the college. The college has formed Value Based Education Committee. Students' participation in the value based education programme and meditation workshops organized in the college, catalysed the process of inculcating of moral and ethical values in the students.
- The college has organized a National conference on Role of Spirituality in Education in the academic year 2011-12.
- The college students and staff members participated in 'Shanti Doot Cycle Yatra' (Peace Rally) organized by *Prajapita Bramhakumari Eshwariya Vishwavidyalaya*.
- Seven-day course on Values in Life of Prajapita Bramhakumari Eshwariya Vishwavidyalaya is organized by college.
- Life Skill Development Programme of four days durations was organized for first year undergraduate students.
- Exhibitions of books related with spirituality, morality, ethics and personality development were organized for college students on college campus.
- The college has conducted a 9 weeks self-development workshop, 'Heartfulness' in association with *Sahaj Marg* Spirituality Foundation for college students and staff members in the academic years 2014-15 and 2015-16.
- 'Ethical Committee' of the college monitors adherence to standard norms while conducting Bio-medical research projects that involve animals and human beings.
- More than 300 books on ethics and morality are separately made available in the girls' common room.
- The programmes on Salutation to eminent personalities, freedom fighters and social leaders are organized throughout the year on their

birth anniversaries.

- College participates in the Sadhu Waswani Mission's Global Forgiveness Campaign for promoting harmony and peace.
- From the academic year 2014-2015, the college has started celebrating the 'World Peace Day' on 21st September.

- **Employable and Life Skills:**

The college has designed 28 different add-on/skill development/employability enhancement courses enabling students to acquire vocational skills. The soft skill programmes of the college and mock interviews conducted by individual departments have helped students to build confidence while facing the challenges in the real world.

- For creating awareness on the needs of employers and strengthening the employability of the candidates the college placement cell organizes / conducts guidance lectures, career exhibitions, trade fairs, interaction with industrialists, campus interviews, and competitive examination guidance sessions. The placement cell publishes the brochures of final year students in print as well as digital form. Several companies visit the college for campus interview and select the students for appropriate positions. Special guidance programmes are organized for the students to prepare for GRE and TOFFEL examinations.
- Every year one International Conference, one National Conference and two State Level Conferences are organized in the college. Students' involvement in these conferences in various capacities was instrumental in achieving organizing and leadership skills in addition to community orientation. It also gives the students the necessary exposure to the frontiers of various subjects.

1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum.

The Department of Microbiology has been conducting Pharmaceutical technique course in collaboration with an industry to enhance the employability of M.Sc. (Microbiology) students. Feedback taken from the SERUM Institute of India revealed that the students lacked necessary pharmaceuticals required for the jobs at SERUM. The institute was therefore required to give training to make the students suitable for the jobs. Taking this into account Department of Microbiology of the college consulted senior scientist from SERUM institute and designed the course. This resulted in the enhanced employability of the students for SERUM and other similar institutes.

The faculty of Botany gave the feedback to the Statistics Department that the course of Bio-statistics be designed and conducted for life science teachers and students. The department accordingly designed the course and it was implemented as a part of skill development programme.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

It is a matter of pride that the college has a tradition of running enrichment programmes for last three decades. To monitor these programmes the college forms committees. The committees plan for conducting enrichment programmes, invited talks by eminent personalities and inviting college alumni for guiding the students. Every year the students are benefited by participation in these activities. The enrichment programmes are monitored through the separate committee and the coordinators appointed for each course. The committee ensures the smooth and effective conduct of the courses, availability of adequate infrastructure and other resources. The feedback forms are also filled at the end of the course and later they are analysed for further actions to be taken if any. Placement of such students in various areas gives an opportunity to evaluate and upgrade the programmes in the next sessions.

The concerned committees have to prepare annual report of the activities conducted. These reports are sent to college management parent body and university authorities where the reports are discussed and analysed.

The college has established skill development committee to monitor the working of various add-on courses and ensure that desired quality is maintained.

1.4 Feedback System

Synoptic View:

- Structured feedback from stakeholders and students is obtained for enriching the curriculum
- The institution also benefits by drawing from the feedback from national and international faculty.

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

- The college follows the method of taking feedback from all the stakeholders. Feedback forms are designed and uploaded on the college website. The feedback is obtained manually as well as online. Based on the feedback on curriculum obtained from concerned stakeholders, the teachers and heads of the departments have communicated to BOS for necessary improvements/modifications/ restructuring in the syllabi. The details are given below:
 - Teachers from eleven departments of the college (Marathi, Botany, Accountancy, Marketing, Business Administration, Statistics, Psychology, Economics, Animation, Biotechnology and Electronics) were part of Board of Studies (BOS) in their respective subjects as Chairpersons, members, Co-opted members, sub-committee members, etc. Members of many of the departments are working on syllabus revision sub-committees constituted by SPPU, Pune. Some faculty

members are also the members of BOS of other universities. These members contribute to the development of curriculum by the SPPU, Pune and other Universities. Many of the staff members have worked as resource persons in syllabi restructuring, framing and implementation workshops. Members of many of the departments have actively participated in preparing study material, practical lab-books and booklets etc.

- The BOS member in Botany Principal Dr. R. S. Zunjarrao took initiative and made efforts to introduce 'Industrial Botany' course in B.Sc. Curriculum. SPPU has accepted this suggestion and introduced the course w.e.f. academic year 2012-13.
- For M.A. Economics, BOS member in Economics Dr. M. M. Satam, Head, Department of Economics of our college suggested a separate elective subject on 'World Economy'. SPPU accepted this suggestion and introduced the course w.e.f. academic year 2013-14.
- Similarly, BOS member of B.Sc. Animation Prof. Anjali Sardesai, Department of Computer Science of our college, took initiative and made efforts to introduce following courses: i. Value Education (Skill Development, Personality Development, Mind Mapping), ii. Creative Writing and New Media. SPPU has accepted this suggestion and introduced the courses w.e.f. academic year 2015-16.
- Chairperson BOS of Marathi Dr. Mrs Snehal Taware, Head, Department of Marathi from our College has introduced a Translation Course for the students of SPPU.

The list of teachers involved in curriculum related activities (BOS members, sub-committee members, resource persons, etc.) is provided in Table 1.3.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes / new programmes?

- Yes. The college has established formal mechanism for obtaining feedback from all the stakeholders, as per the guidelines of NAAC. Feedback forms are designed and uploaded on college website. The feedback is obtained manually as well as in online manner. The feedback so obtained are analysed and the information is communicated to BOS for necessary improvements/modifications/ restructuring in the syllabi.
- The college also take feedback from regular students and alumni with respect to changes in the syllabi.
- Informal discussions are held regularly with students, alumni and parents about the syllabi.
- Industry-Academia meet is held every year to get concrete inputs on current trends in the industry. Based on this information, different skill development programs are modified and/or designed.

1.4.3 How many new programmes / courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/ programmes?

The rationale behind introducing new programmes is as per the Mission Statement of the institution. Keeping in the spirit of Mission Statement and taking into account demands from the students, the needs of the society, national and the global needs, the institution has introduced new courses. The details are as follows:

Table 1.9 New courses started in the college (2010-2016)

Year	Course Name	Affiliation	Research Centres	Affiliation
2015-16	Dress Designing and Tailoring	Autonomous	-	-
	M.Sc. (Physics)	SPPU	-	-
	M.Sc. (Zoology)	SPPU	-	-
2014-15	M.Phil. (Microbiology)	SPPU	Microbiology	SPPU
	M.Sc. (Mathematics)	SPPU	-	-
2013-14	B.Sc. (Animation)	SPPU	-	SPPU
2012-13	PGDBF	SPPU	Economics	SPPU
			Marathi	SPPU
2011-12			Electronic Science	SPPU

□□□

Criterion II: Teaching-Learning and Evaluation

2.1 Students Enrolment and Profile

Synoptic View:

- The process of admission is widely publicized and it is entirely transparent.
- The institution reviews the process of admission periodically and the outcomes are used for improvement of the admission process.
- The institution has inclusive admission policy and it caters to diverse student groups.
- Statutory reservation policies are strictly implemented.

2.1.1 How does the college ensure publicity and transparency in the admission process?

- The college publishes the updated prospectus every year. The prospectus is also available on college website for wide publicity of the admission process. In addition to the regular prospectus, for certain course such as M.Sc. (Computer Science), M.Sc. (Biotechnology), B.B.A., B.C.A. (B.B.A. Computer Application), separate prospectus is also published and for these courses, the admissions are given through entrance examinations.
- Articles written by teachers in local newspapers, advertisements published in dailies, talks broadcasted on radio stations, participation in career exhibition and regular career counselling done by teachers results into wide publicity of admission process. Senior teachers from the college, under the guidance of Parent Body, have conducted district wise career guidance sessions in the entire State of Maharashtra. This activity was carried out in collaboration with well-known media groups namely 'Indian Express', 'Sakal' and 'Loksatta'. In addition to the services of our pre-implemented Vridhhi online admission software, the college takes assistance from Shiksha.com and e-Pravesh for the publicity and transparency of online admission process.
- At the conclusion of academic year, college announces admission process as per norms of SPPU, Pune and Government of Maharashtra, for the next academic year. All the rules of reservations, preferences for differently abled students, merit list rules etc. are communicated through Admission Committee. Admissions for Under Graduate courses are given as per the merit list of the candidates. The admissions are strictly given by following Government rules and SPPU norms.
- Information regarding admission is displayed by the college in various educational fairs. After declaration of results of various universities, information about admissions to PG courses and entrance examination is published through advertisement in newspapers, prospectus, brochures, display boards, notices, websites, e-Pravesh, etc.
- Transparency in admission process is maintained through ERP software, Vridhhi. College has also implemented online admission process from the

academic year 2013-14. The college provides necessary assistance to the needy students for online admission process. The approved fee structure charts and admission cancellation norms are displayed on the notice board and college website. Information about concession in fees, scholarships, free-ships, etc., is communicated through the notices displayed on notice board dedicated for the same. The fees are paid directly in the bank. For the Post Graduate admissions, merit list is displayed and admissions are given through counselling sessions. Use of computer and internet technology for admission process has made it transparent and convenient.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

- The overall policy for admission is merit and rules of reservation, as per the norms of SPPU, Pune, and Government of Maharashtra.
- Admissions are given by conducting entrance examination for the courses like, M.Sc. Computer Science, B.B.A. and B.B.A. (C.A.). Admission Committee provides guidance for admissions at undergraduate as well as postgraduate levels.
- Admission process of International students is routed through the International Centre of SPPU.
- The latest guidelines on eligibility criteria and the process of admission, obtained from SPPU, are as follows:

Table 2.1 Course wise Eligibility criteria and process of admission

Sr. No.	Course Name	Criteria Adopted	Process of admission
1	B.A.	H.S.C. (10 + 2) level exam in science or equivalent examination with English or Diploma- Pharmacy, Education of bureau of Govt. of Maharashtra with English, MCVC Govt. of Maharashtra (3yr, after SSC)	As per merit and reservation (Govt. Policy)
2	B.Com.	H.S.C (10 + 2) level exam in science or equivalent examination with English or Diploma-Pharmacy, Intermediate commerce/arts examination of board of Secondary education, MCVC	As per merit and reservation (Govt. Policy)
3	B.Sc.	H.S.C. (10 + 2) level exam in science or equivalent examination with English or Diploma- pharmacy, education of bureau of Govt. of Maharashtra with English, MCVC Govt. of Maharashtra (3yr, after SSC)	As per merit and reservation (Govt. Policy)
4	B.Sc. (Comp.Sci.)	H.S.C. (10 + 2) level exam in science Or Diploma (3yr, after SSC)	As per merit and reservation (Govt. Policy)
5	B.Sc. (Biotech.)	H.S.C. (10 + 2) level exam in science or equivalent examination	Entrance examination + As per merit and reservation (Govt. Policy)
6	B.Sc. (Micro.)	H.S.C. (10 + 2) level exam in science with English, PCMB, Geography, Geology, etc.	As per merit and reservation (Govt. Policy)
7	B.B.A – CA (Formerly B.C.A.)	H.S.C. (10 + 2) level exam in science or equivalent examination with 40% marks from any stream (35% for reserved category) and English as one of the subjects or 3 year Diploma after S.S.C. or Diploma- pharmacy, MCVC	As per merit and reservation (Govt. Policy)

Sr. No.	Course Name	Criteria Adopted	Process of admission
8	B.B.A.	H.S.C. (10 + 2) level exam in science or equivalent examination with 40% marks from any stream (35% for reserved category) and English as one of the subjects or 3 year Diploma after S.S.C. or H.S.C. (10 + 2) any vocation subject with 45% marks.	As per merit and reservation (Govt. Policy)
9	B.Sc. (Animation)	H.S.C. (Science) or equivalent examination 50% marks (45 % for reserved category)	As per merit and reservation (Govt. Policy)
10	M.Sc. (Electronic Sc.)	B.Sc. with Electronic Science as principle subject OR B.Sc. (General) with electronics as one subject at TY level.	As per merit and reservation (Govt. Policy)
11	M.Sc. (Botany)	B.Sc. with Botany as Principal subject	As per merit and reservation (Govt. Policy)
12	M.Com.	Any bachelor's degree.	As per merit and reservation (Govt. Policy)
13	M.A. (Marathi)	Bachelor's degree in any faculty	As per merit and reservation (Govt. Policy)
14	M.A. (English)	Bachelor's degree in any faculty	As per merit and reservation (Govt. Policy)
15	M.A. (Psychology)	Bachelor's degree in any faculty	As per merit and reservation (Govt. Policy)
16	M.Sc. (Micro.)	B.Sc. with Microbiology as principle subject/ or one of the subjects at TY level (for General B.Sc.)	As per merit and reservation (Govt. Policy)
17	M.A. /M.Sc. (Geography)	B.Sc. (Special subject Geography) and B.A. (Special subject Geography), Any science graduate with Geography at second year.	As per merit and reservation (Govt. Policy)
18	M.Sc. (Chemistry)	B.Sc. with Chemistry as principal subject	As per merit and reservation (Govt. Policy)
19	M.A. (Economics)	Bachelor's degree in any faculty	As per merit and reservation (Govt. Policy)
20	M.Sc. (Biotech.)	B.Sc. (Biotech) with 55% marks as min. and 50 % for reserved category.	As per merit and reservation (Govt. Policy)
21	M.Sc. (Statistics)	B.Sc. Second class with mathematics and statistics at subsidiary level. M.Sc. Second class in Mathematics, B.Sc. Second class in Actuarial Science with mathematics and statistics at subsidiary level, B.Sc. second class with statistics as one of the subjects.	As per merit and reservation (Govt. Policy)
22	M.Sc. (Maths)	B.Sc. with Mathematics or Mathematics at least upto second year, B.E./B.Tech./B.Sc.	As per merit and reservation (Govt. Policy)
23	M.Sc. Physics	B.Sc. with physics , from recognized univ. with 50% marks (45 % for reserved)	As per merit and reservation (Govt. Policy)
24	M.Sc. Zoology	B.Sc. with Zoology, from recognized university with 50% marks (45 % for reserved)	As per merit and reservation (Govt. Policy)
25	PGDBF	Bachelor's degree in any faculty	As per merit and reservation (Govt. Policy)
26	Diploma in Dress designing and Tailoring	XII pass	As per merit and reservation(Govt. policy)
27	Ph.D.	Master's degree in respective subjects, SET/NET/PET/M.Phil.	Short listing and interviews of candidates by SPPU and as per rules of reservation.

- The office staff, Admission Committee, Heads of the Departments and Vice-Principals ensures that the above norms of eligibility and the procedure is strictly followed.

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

- The minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college are as follows

Table 2.2 Minimum and Maximum percentage of marks for admission at entry level

Minimum and Maximum percentage of marks for admission at entry level*												
Programme / Course	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
B.A.	35	82	35	84	35	90	35	91	35	90	35	85
B.Com.	45	80	45	86	45	82	45	85	45	82	45	88
B.Sc.	40	82	42	85	36	90	40	93	36	90	39	89
B.Sc. (Comp. Sc.)	45	80	45	82	45	95	45	90	45	95	45	87
B.Sc. (Biotech)	55	78	55	82	52	84	50	90	52	84	57	81
B.Sc. (Micro)	60	82	60	85	46	91	52	85	46	91	55	92
B.B.A.-C.A. (B.C.A.)	40	62	40	63	40	72	40	68	40	72	41	77
B.B.A.	40	60	40	62	40	70	40	56	40	70	40	73
B.Sc.(Animation) (w.e.f. 2013-14)	-	-	-	-	48	64	50	66	48	64	49	71
M.Sc. (Comp.Sci.)	50	83	50	88	50	83	50	82	50	83	50	88
M.Sc. (Electronic Sci.)	52	85	55	89	54	89	50	85	54	89	56	79
M.Sc. (Botany)	52	82	53	86	65	83	51	88	65	83	60	79
M.Com.	45	75	49	81	45	78	46	74	45	78	45	71
M.A. (Marathi)	45	65	45	68	42	73	48	80	42	73	40	65
M.A. (English)	45	70	45	68	43	76	45	72	43	76	40	65
M.A. (Psychology)	50	75	50	80	50	84	52	80	50	84	53	85
M.Sc. (Micro)	50	79	53	83	51	86	52	84	51	86	50	89
M.A. /M.Sc. (Geography)	50	76	52	78	51	86	54	84	51	86	50	79
M.Sc.(Chemistry)	50	80	50	78	51	83	50	83	51	83	55	84
M.A.(Economics)	52	68	50	72	51	77	50	72	51	77	50	79
M.Sc. (Biotech)	45	79	48	79	47	76	51	78	47	76	48	80
M.Sc. (Statistics)	55	78	52	76	56	80	55	85	56	80	59	79
M.Sc. (Maths) (w.e.f. 2014-15)	-	-	-	-	-	-	-	-	50	91	52	88
PGDBF (w.e.f. 2012-13)	-	-	-	-	51	81	52	78	51	81	50	78
M.Sc. Physics (w.e.f. 2015-16)	-	-	-	-	-	-	-	-	-	-	56	90
M.Sc. Zoology (w.e.f. 2015-16)	-	-	-	-	-	-	-	-	-	-	62	87

* Cut-off percentage given for students admitted through open as well as reserved categories.

- Compared to other multi-faculty, co-education colleges of affiliating university within the city, in many cases, the percentage of marks at entry-level admissions is higher.

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes', what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, there is a well-established mechanism in the institution to review the admission process and students profiles annually.

- Top management and Admission Committee of the college review the admission process and profile of the admitted students in last week of September of every academic year. Necessary improvements are suggested and implemented in the successive academic year.
- The mechanism to review and improve admission process category and merit wise operates through Admission Committee consisting of administrative staff as well as teaching staff. This committee holds meetings in vacation prior to commencement of new academic year and the admission process is reviewed during the commencement of new academic year as well.
- The mechanism of review and feedback of admission process has led in the gradual shift from manual to online admission system in last five years. It has expedited the admission process and has added to its transparency. Necessary assistance regarding the online admission process and the guidance regarding selection of courses, subjects, Choice Based Credit System (CBCS), examination patterns, availability of hostels, etc. is also given to the needy students. Counselling rounds are also conducted by the Admission Committee.
- In addition to the services of pre-implemented *Vridhhi* online admission software in college office, we also take assistance from *Shiksha.com* and *e-Pravesh* for the publicity and implementation of online admission process. Office generates class wise students profile through *Vridhhi* software for annual review.
- Thus, as a result of the continuous efforts, the admission process for students has become simple, convenient, transparent and more accessible. In last five years, there is an increase in total number of admitted students and particularly students from the other States and International Students. As far as admissions are concerned, it can be said that the admissions are inclusive.
- The college has established International Student Cell to guide and help the International Students willing to take admission to the college. The admissions of international students are routed through International Centre of SPPU.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion • SC/ST • OBC • Women • Differently abled • Economically weaker sections • Minority community • Any other

- The admission policy ensures that the National commitment to diversity and inclusion is carefully followed. Efforts are made to fill Category wise admission quota as per the Government policies and University regulations.

- In order to enable economically weak students to take higher education, the facility of payment of fees by instalments is given. Assistance from Students' Aid Fund and Earn while Learn Scheme is also made available. Adequate facilities like ramp, elevators, and wheel chairs are made available to encourage the admission of differently abled students. Admission Committee provides necessary assistance to visually challenged students. The Equal Opportunity Cell of the college takes care of inclusion of all the categories of the students.
- The International Students Cell of the college takes care of admissions of International Students.
- The national commitment towards diversity and inclusion of the students is reflected from admissions are shown below:

Table 2.3 Student Profile

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
SC/ST	644	687	741	950	923	1160
OBC	667	717	790	930	1008	1094
Women	2362	2538	2607	3353	3656	3811
Differently Abled	1	1	1	1	2	6
Minority	0	0	12	86	326	295
Other (DT, NT, SBC, NRI, Foreign students)	342	383	330	479	576	561

The table reveals that:

- There is a continuous increase in number of the students.
- The college is satisfactorily complying with the national commitment towards diversity and inclusiveness.

2.1.6 Provide the following details for various programs offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.

- Details for various programs offered by the college in the last six years are as follows:

Table 2.4 Programmes offered by the College and trends of admission

Sr. No.	Program	Details	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Comment
1	B.A.	No. of Application	485	513	605	855	958	1411	Demand ratio has increased steadily
		No. of students admitted	229	233	274	297	355	324	
		Demand Ratio	2:1	2:1	2:1	3:1	3:1	4:1	
2	M.A.	No. of Application	349	371	652	519	461	751	Demand ratio has increased
		No. of students admitted	191	184	209	170	140	194	
		Demand Ratio	2:1	2:1	3:1	3:1	3:1	4:1	

Sr. No.	Program	Details	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Comment
3	B.Sc.	No. of Application	1855	2463	3122	3452	3012	3566	Demand ratio has increased
		No. of students admitted	397	493	500	512	468	547	
		Demand Ratio	5:1	5:1	6:1	6:1	6:1	6:1	
4	M.Sc.	No. of Application	1733	2053	2312	2721	2213	4056	Yearly increasing demand ratio
		No. of students admitted	236	257	251	267	215	357	
		Demand Ratio	7:1	8:1	9:1	10:1	10:1	11:1	
5	B.Com.	No. of Application	2831	5123	4794	6045	5055	7693	Demand ratio has increased
		No. of students admitted	442	761	712	873	743	993	
		Demand Ratio	6:1	6:1	6:1	7:1	7:1	8:1	
6	M.Com.	No. of Application	192	362	412	437	315	455	Demand ratio has increased
		No. of students admitted	61	114	119	126	96	118	
		Demand Ratio	3:1	3:1	3:1	3:1	3:1	4:1	
7	B.B.A.	No. of Application	75	82	376	582	927	753	Demand ratio is increasing steadily
		No. of students admitted	29	30	102	146	184	247	
		Demand Ratio	1:2	1:2	1:3	1:4	1:5	1:5	
8	B.B.A.-CA (B.C.A.)	No. of Application	182	205	1405	1021	1365	750	Demand ratio is increasing steadily
		No. of students admitted	63	66	248	196	215	249	
		Demand Ratio	3:1	3:1	5:1	5:1	6:1	6:1	
9	P.G.D.B.F.	No. of Application	-	49	65	47	81	61	Demand ratio is constant
		No. of students admitted	-	23	33	28	36	27	
		Demand Ratio	-	2:1	2:1	2:1	2:1	2:1	

- There is an overall increase in the admissions for all the programmes.
- The demand ratio seems to be notably higher in case of Commerce and Science Programmes.
- The demand ratio has been on considerably higher side in case of some PG programmes such as M.Sc. Statistics, Computer Science, etc.
- The increase in demand ratio in case of UG and PG Arts faculty programmes seems to be steady.

2.2 Catering to Diverse Needs of Students

Synoptic View:

- Orientation / Induction programs are organized for new entrants.
- Students learning levels are identified and accordingly programs are designed for advanced learners and slow learner (academically weak students).
- Analysis of academic needs of differentially abled students is done and tutorials for needy students are provided.
- The institution fosters an inclusive academic ambience.

2.2.1 How does the institution cater to the needs of differently abled students and ensure adherence to government policies in this regard?

In order to cater to the needs of differently abled students, the college has established Equal Opportunity Cell. This cell ensures the availability of necessary services and facilities to such students.

The college has provided ramps, elevators, special entrance to the library and canteen, wheel chair, Braille books, more than 500 audio books, CDs and CD player, Angel e-book reader, JAWS software, etc. for visually challenged students. A separate Braille Library Section in collaboration with SPPU is developed. The visually challenged students are provided writers at the time of written examinations.

The members of the staff give special guidance whenever so demanded by such students and the students in general are also appealed to adopt caring attitude for such students. A group of students of our college has been actively participating in the activities conducted for blind students by NGO called *Drushti: Vision for Blind*, which works for the welfare and wellbeing of visually impaired students. NSS unit of our college has conducted several workshops in collaboration with NGO's namely *Drushti* and *Sparshdnyan* for blind students.

The college carefully makes the compliance of Government and University norms w.r.t. the admission, provision of infrastructure facilities and conduct of examination for differently abled students.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the program? If 'yes', give details on the process.

Yes. When the students approach for admissions to various courses, the Admission Committee and the concerned Vice-Principals carefully consider the performance of the students in their previous examinations and discuss with them the suitable options available to them such as suitable course, special subjects and medium of instruction etc. In case of some courses, the entrance tests are held to find out the minimum knowledge and skills possessed by the student for the successful completion of the course. The students are also advised to avail the facility of aptitude test and career counseling available in the Department of Psychology.

In the beginning of every academic year, the Guidance Lectures are held for newly admitted students to give information about library, Physical Education and Sports, extra-curricular and co-curricular activities, various value added and skill development courses, etc., available in the college.

Before commencement of the practical sessions in the laboratories, the orientation sessions are held to impart necessary knowledge and skills in handling the instruments and apparatus and maintain laboratory safety.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

Remedial courses are conducted for academically weak students to improve their academic performance and to develop their confidence.

The students enrolled without Mathematics at HSC level, for B.Sc. Biotechnology, are specially trained and upgraded up to necessary level in Mathematics.

The knowledge content of the courses completed by the some of the students seeking admissions to PG courses of our college is sometimes less than the one required. In such case, we conduct orientations lectures for such students to bring them on par with other students.

For PG course in Electronics Science, special practical sessions in MATLAB, PSPICE, and C-Programming are conducted. For M.Sc. Computer Science course, guidance of LINUX operating system is provided to the students seeking admission from other University where such course is not covered in the previous curriculum. Department of Statistics conducts training course in SAS, R - statistical software for similar purpose.

Guest lectures, industrial visits and workshops are arranged to provide them latest information in the respective subjects.

Department of Zoology conducts Microscopy Workshop so as to enable the students to become familiarize with the various aspects of handling microscope.

The college has a strategy to offer various skill development/ add-on courses through different departments since such courses are expected to bridge the gap between the requirements of the future field of employment and the knowledge/skills offered by the existing curriculum. These skill development/ add-on courses have been specially designed and offered by the college to meet the specific needs of the concerned programmes.

Generally, the students coming from sub-urban and rural areas are unable to understand instructions in English medium at the beginning of the course. College offers English communication courses for such students.

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment, etc.?

- Staff Academy and PG Association of our college organize various sensitization programs such as Women's Day, street play with reference to women empowerment, save the girl child, poster competitions and essay competitions etc. through which gender equality, inclusion and environment related issues are emphasized.
- The events like exhibitions on environment related charts, projects and models, e-waste management, campaign on eco-friendly Ganesh idols, and disposal of festival leftovers (*Nirmalya*) at the time of Ganesh festivals are promoted.

- ‘*Yuva Manch*’ organizes exhibitions and lectures on gender equality for the students. These platforms help girl students to become aware of the social responsibilities, gives them mental support to fight against sexual harassment and other issues related to modern culture of the society.
- More than 300 books related to gender equality, responsibility of family life, pre-marital counselling, etc. are available to the girl students. Self-defense training program for girl students is conducted.
- College has established Equal Opportunity Cell that ensures the availability of opportunities to all the staff and students irrespective of gender and socio-economic status.
- Environmental education course is conducted at the second year of all graduation programs. The study material for the said course is prepared by the college for the benefit of students. Students are encouraged to undertake the projects on various issues of environment studies. Some of the projects prepared by the students have received awards in ‘*International Youth Convention*’.
- College has formed GCI (Green Campus Initiative) committee and has completed energy audit of the campus. Bio-diversity audit and green audit of college campus have also been completed.
- Non-conventional energy, particularly, solar energy is being used. Solar energy based gadgets such as distilled water unit and lighting system have been installed.
- Several conferences were organized based on the theme on environmental awareness and its conservation.
- College has established bio-medical waste disposal system. The concept of Zero Garbage Campus has been implemented.
- The college has been running Vermiculture training programme since last five years and Vermiculture facility is being used very effectively.
- Students of Department of Botany have conducted identification and naming of more than 1000 roadside trees on four prominent roads in Pune city.
- Waste/used papers from college campus are sent for pulping and re-use. Efforts are made to use recycled papers and paper manufactured from agricultural waste for practical journals, college magazine, prospectus, office files, etc.
- From the point of view of environmental conservation, the use of digital copies of prospectus, magazine, placement brochures, etc. is encouraged thereby minimizing the use of paper.
- For conservation of water, storage tanks are installed with automatic water level controllers.
- Rainwater harvesting system is also installed.
- Some of the state level conferences organized by the college were exclusively on the theme of water conservation. Well known water conservationist of India, Dr. Rajendra Singh (commonly referred as Water

Man of India), delivered a keynote address and guided the teachers and students on aspects of water conservation.

- Teachers, administrative staff and students have actively participated in 'Bus Day' campaign, organized by 'Sakal' media group. This was done to create awareness about air pollution caused due to individual vehicles.
- Nature photography competition for staff and students is organized every year.
- One of the National level conferences organized by the college was on the theme of 'e-waste management'. College has started e-waste collection and disposal activity in collaboration with Modern College of Engineering and Department of Electronic Science, SPPU.
- Students and teachers have conducted 'e-waste management awareness campaign' in a village adopted by the college.
- College has started e-governance activities with a clear objective of environmental conservation by minimizing use of paper.
- Digital Record Room, Digital Library, Online Admission System, Digital Classrooms and Virtual Classroom facilities have minimized the use of papers and thereby helped in environmental conservation.
- Fluorescent lamps are replaced by CFL and energy efficient LED bulbs, to reduce electricity consumption.
- UGC sponsored Digital Herbarium project of Department of Botany, Digitized Simulations of Animal Dissections in Department of Zoology, Micro-scale experiments in Chemistry Laboratories and introduction of 'Environmental Chemistry' elective course, introduction of 'Renewable Energy' elective course by Department of Physics, etc., are other examples of efforts made by the college in environmental conservation.

2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

- The institute has a system of class advisors through which advanced learners are identified with their previous year's performance in academics, extra-curricular activities, leadership activities, etc.
- Through Arts circle and Gymkhana, advanced learners in extra-curricular activities are identified and motivated. IQAC provides ICT facilities and extra hours in laboratories for these students, additional books on demand are also provided to the students.
- The students, who have been awarded the 'Inspire' scholarship by DST, are encouraged to carry research work while pursuing their studies for science graduation.
- Applications are invited from advanced learners from all faculties, for 'Yuva Sanshodhak' scheme introduced by the college. Financial assistance is provided to the selected students under the scheme. Some advanced learners are also associated with the research schemes granted to the faculty members. Students are also encouraged to participate in state level research project competition 'Avishkar'.

- Students desiring to participate in State, National and International Conferences, Seminars and Workshops for presenting their papers are also provided financial assistance by the college.
- Some advanced learners are provided financial assistance and necessary guidance for filing patents of the research work with which they were associated with the faculty members. Student from Department of Biotechnology have successfully applied for filing of Indian patent.
- Advanced learners from Commerce stream are encouraged to prepare for the professional examinations and guidance is also provided for the same. Some of the advanced learners participate in ‘*Young Inspirators Network*’ scheme sponsored by ‘Sakal’ media group, under which the students are groomed for leadership.
- ‘Best Student Trophy’ has been instituted for the student who is selected as best student (having best performance in academics, sports, culture, etc.)
- Our college supports financially as well as academically, advanced learners to participate in various competitions and research project presentations.
- Various association activities provide way to the need of advanced learners.
- Students take lead in organizing educational programs such as visit to industries, organizing guest lectures, organization of Quiz competitions etc.
- Advanced learners are encouraged for participation in Quiz, Debate, writing skill workshops, play reading competition (*Natyawachan*), lecture competition, power point presentation competition, programming competition and problem solving competitions, project competitions on recent topics. Articles, poems, scripts, stories, etc., written by the students are published in the form of in-house publications.
- Some advanced learners are also sent to other universities and reputed institutions.
- Special guidance sessions are held for advanced learners in the field of sports and cultural activities. The college has facilitated interaction of advanced learners with the eminent personalities such as Dr. Jayant Naralikar (Scientist), Dr. Raghunath Mashelkar (Scientist), Dr. Sharad Kale (Scientist), Shri. D.S. Kulkarni (Entrepreneur), Shri. Krushnakumar Goyal (Banker), Shri. Rajeev Bajaj (Industrialist), Dr. Uday Tade (Scientist ISRO), Dr. W. N. Herbert (Poet, Scotland), Dr. Yael Sharan (Pedagogue, Israel), Georg Martins (Shadow Theatre workshop, Artist, Germany). Workshops are organized by the college, conducted by renowned artists for advanced learners in the field of music. Every year college organizes musical programme in collaboration with SPIC-MACY. The well-known artists from the film industry and theatre are invited to interact with advanced learners every year.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the program duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections, etc. who may discontinue their studies if some sort of support is not provided)?

- Probable dropouts are identified by the Class Advisors and Attendance Committee. Regular meetings of defaulters and their parents are arranged. Efforts are made to minimize the dropouts due to the financial, medical, academic causes, with proper counselling and help.
- Class Advisors play a vital role of mentors, for collecting, analysing and using the data of students from the disadvantaged sections of society, physically challenged, slow learners and economically weaker sections. Academic performance data of such students and the students with good academic record but having other problems are collected by Class Advisors. Personal interaction with students and their parents improves the academic performance of such students and reduces the risk of drop out. Academic performance of the students is discussed after result analysis in every department and staff meetings. Remedial Coaching Committee takes feedback of students having backlog in some subject. Slow learners (academically weak students), mostly come from vernacular medium to higher education. For such students, bilingual teaching method is used in the beginning of the course. Department of English conducts add-on course on Spoken English, in addition to several Soft Skill programmes conducted by the Soft Skill Development Committee, for the improvement of communication skills of students.
- Need based instalment/concession in fees is sanctioned by college management to needy students. Student Welfare Officer and Chairperson of Student Aid Fund Committee make efforts to provide financial assistance to economically weak students, in addition to the scholarship available for economically backward students.
- The experts from department of Psychology give psychological counselling to needy students. The department has psychological counselling facilities and expertise, under which it arranges psychological counselling camps for neighbourhood community, which includes family members of the students staying in nearby areas. With the intention of preventing the tendency of dropout of students due to psychological problems, the Department of Psychology has conducted 'Psychological well-being screening' of newly admitted students.
- To prevent the possibility of dropout of physically challenged students, college provides facilities like ramps, elevators, special entrance to the library and canteen, wheel chair, Braille books, more than 500 audio books, CDs and CD player, Angel e-book reader, JAWS software, etc. A separate Braille library Section in collaboration with SPPU is developed.

- After collecting and analysing the data of academic performance of such students, it has been observed that due to above mentioned efforts and facilities, the dropout rate of students is negligible.

2.3 Teaching-Learning Process

Synoptic View:

- *Planning and organization of teaching schedule by teacher's diary, teaching plans, weekly worksheets and academic calendar.*
- *Establishment of a 'Centre for Innovations in Teaching, Learning and Evaluation' to promote use of experiential learning, participative learning, problem solving methodologies, student centered pedagogic methods for enhancing learning experiences.*
- *Formal linkages with national agencies like NMEICT to promote blended learning.*
- *Latest technologies (Digital Classrooms, Digital Laboratory, Digital Library, use of ICT in classrooms and laboratories, Virtual Classroom) are used by the faculty for effective teaching. (e-learning resources, OER's, NPTEL etc.)*
- *Conductive critical thinking, creativity and scientific temper in Science Laboratories*
- *Class Advisor system to meet the academic and personal needs of student through mentor-mentee relationship.*
- *Recognition to innovation and creative contributions of faculty and students by felicitation and appreciation certificate*
- *Feedback on the evaluation to improve the quality of teaching-learning process.*

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

- **Academic Calendar :**
 - The college IQAC prepares academic calendar by taking into account the dates of commencement and conclusion of the terms, teaching schedule, internal examination schedule, declaration of the results at the first year level, conferences/workshops to be organized, celebration of national days, annual social gathering, extra-curricular, co-curricular activities etc.
 - Based on the Institutional academic calendar, every department prepares academic calendar for lectures, practicals, examinations and extra-curricular activities of the department.
 - Examination Committee prepares time table for internal and term end examinations, evaluation schedule, marks submission schedule, result announcement dates by considering University examination dates and issues notices accordingly.
 - Every PG department displays evaluation pattern selected by the department for Choice Based Credit Systems.

- **Teaching Plan and Teachers' Diary:**
 - At the beginning of the term, every teacher prepares course wise weekly teaching plan and submits it to concerned Head of the Department.
 - In addition to the teaching plan, every teacher maintains teachers' diary in which teachers maintain daily teaching activity report, participation in extra-curricular, co-curricular activities, research activities, details of examination work, result analysis, leave record, meetings attended, personal timetable, etc.
 - Heads of the departments prepare their departmental timetable and submit it to the Vice-Principal of their faculty. Based on the departmental timetable every teacher prepares his/her personal timetable and submits it to concerned Head of the Department.
 - Intra- and Inter-departmental adjustments of lectures/practical sessions, on account of leave or absence of a teacher are made so that the academic schedule is not disturbed.
- **Evaluation Blue Print:**
 - **Science Faculty:** As per the evaluation pattern of SPPU, there is annual examination system, for UG, with 20 marks internal examination based on objective type questions and 80 marks external examination based on descriptive type questions for first year. For second year and third year, semester system on 10-40 marks basis is followed.
 - **Arts and Commerce Faculty :** As per the evaluation pattern of SPPU, there is annual examination system, for UG, with 20 marks internal examination and 80 marks external examination for first, second and third year. Since the internal evaluation is based on descriptive type answers, examination is conducted for 60 marks and the marks are converted out of 20.
 - For Post Graduate courses of all faculties, the college follows Choice Based Credit System (CBCS) of SPPU.

2.3.2 How does IQAC contribute to improve the teaching-learning process?

- IQAC analyses teaching – learning feedback from teachers, students and parents. Decisions for improving the academic process, the infrastructure, library facilities, and laboratory up-gradations are recommended to Local Managing Committee for their proper implementation.
- IQAC monitors the execution of teaching plan, weekly worksheets and teacher's diary and thereby helps to improve teaching and learning process.
- To suit the students' convenience, timetables for practical and theory classes are planned in three sessions.

- IQAC insists and encouraged the use of ICT for enhancing the quality of teaching-learning process.
- IQAC organizes lecture series, quality enhancement workshops, seminars and conferences for facilitating interaction with the experts in respective fields.
- The IQAC has taken initiative to establish '*Centre for Innovations in Teaching, learning and Evaluation*' under the leadership of INSA awardee teacher Dr. Mrs. S. D. Joag.
- IQAC plays an important role in all academic processes. It is an interface between students and teachers on one hand and the administration on the other.

2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

- Teaching and learning is made student-centric by providing the support structures, like ICT facilities, Networking and digital library, Virtual Class room, Digital Class rooms, virtual laboratory and Intranet based e-learning facility.
- Guidance sessions on Pedagogic methods are organized. Study groups for use of new pedagogy methods in classroom teaching are formed. Regional workshop on co-operative learning was conducted under the guidance of International expert from Israel Dr. Yael Sharan in the academic year 2012-13.
- Some teachers have launched their individual web sites. The college has provided 10 Mbps leased line internet connection to all the departments and Wi-Fi connectivity in some departments to facilitate use of ICT to teachers. Digital library, INFLIBNET, NPTEL, OER, etc. facilitate the **interactive and independent learning** process for the students.
- The teachers are deputed for orientation, refresher courses and hands-on training workshops where they learn the new methods and skills in teaching. College organizes Faculty Development Programmes (FDP) for newly recruited teachers. This enables teachers to develop different **teaching skills**.
- Study tours, excursions, industrial visits, industrial training, fieldwork, industry sponsored projects are conducted for students by the college.
- College has designed 26 hands-on training programs to supplement traditional classroom teaching with **experience-based learning**.
- Contacts are established through virtual laboratory in the department of Electronics, with IIT Mumbai for student's **interaction and collaborative study**.
- For PG students, Choice Based Credit System is implemented where the supplementary credit courses like Human Rights and Cyber Security are

included. The teaching learning and evaluation is interactive and collaborative type.

- Teachers are encouraged to organize project competitions, poster competitions, scientific model competitions, power point presentation competition, Essay competition, Reference books and Research journal review competition, etc. for the students.
- For overall personality development of the students, college organizes several co-curricular and extra-curricular activities. These include *Yuva Sanshodhak* scheme for promoting research among the students, Sports Scholarship for promoting sports, facilitating interactions of well-known personalities in cultural fields for promoting cultural activities, etc.
- Study material of Environmental Science, collection of e-study material, practical manuals, questions banks, etc. are prepared and made available to students by teachers.
- Remedial coaching is arranged for academically weak students.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

- The institution nurtures critical thinking, creativity and scientific temper among the students by providing them the platform in different ways. Ex. poster exhibition, poster competitions, and scientific model competitions – this helps to promote **creativity** among the students.
- The college has established ‘*Centre for Innovations in Teaching, Learning and Evaluation*’ to promote innovative teaching practices.
- Quiz competitions, essay competition, PowerPoint presentation competitions, reference book reviews, research journal reviews help to promote **critical thinking** among the students.
- Trade fairs, digital photography competitions, hobby exhibitions, group discussions, writing skill workshops, workshops on music, dance and acting, various academic exhibitions organized by Science Association, Commerce Association, Arts Association, Arts Circle, etc. further add to **promotion of creativity and development of scientific temper of the students.**
- Students are associated with minor research projects and they present research projects in ‘*Innovation*’, ‘*Avishkar*’ the research competitions at University and State level.
- Students are also deputed for various activities organized by DST, IISER, National conferences etc. They are given opportunity to apply their advanced skills to perform challenging experimentation/ projects in laboratories. College has implemented *Yuva Sanshodhak Scheme* for inculcating scientific temperament among the students.
- The college promotes creativity amongst students through activities such as Wall Magazine, News Bulletin, Current Affairs and encourage to

contribute in college annual magazine. Students are involved in organizing activities related to their subjects. Such activities with students own ideas and contribution inculcates lifelong skills among them, which are reflected in the life and reported by number of Alumni of the college.

- Lifelong learning is encouraged with the activities and functions organized by various departments, committees, NSS and NCC. Student's role as organizer and volunteer plays vital training in his/her life. The college arranges a variety of community programs on the subjects like voting campaign, traffic rules awareness, literacy awareness, save girl campaign, anti-dowry, clean environment, waste management, financial literacy campaign etc., which nurture critical thinking and creativity.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning- resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

- With recommendations of IQAC, the college authorities promote the use of ICT: The classrooms and laboratories are ICT enabled. College has also made available facilities of Digital Library and Digital Record Room(1), Digital Class room (02), Laboratories with Digital Classroom facility (3), Virtual Class room (01), Virtual Laboratory (01), Digital Language Laboratory(1), to make teaching learning process more effective.
- Students are encouraged to refer open source educational resources like Wikipedia, YouTube, Khan academy, edX, Udemy, iTunes U, TEDTalks, etc.
- The downloaded educational material like lectures by eminent professors, demonstrations, illustrations, power-point presentations and technical simulations are used in the classroom teaching to support traditional teaching.
- The facility of Digital Library and Wi-Fi Campus supports easy referencing on campus.
- The college has installed online OPAC in library, which has helped the students to know and search availability of desired books. The library has subscribed to N-LIST Program of INFLIBNET, British Council Library (BCL), Pune, DELNET, Maratha Chamber of Commerce, Industries, Agriculture (MCCIA), Deccan College, Jaykar Library- SPPU, Gokhale Institute of Economics and Politics, etc. through which the faculty and students are able to access a wide range of e-journals and e-books.
- The departments encourage students to use available educational mobile apps of their subjects to enable them to use mobile learning methods to understand basic concepts. e.g. QVprep, SimpleNeasyApp, Physics Notes,

mobile network analyser, Botany Buddy, WAGmob, econedlink, psychGuide, SolutionCalculator, etc.

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

- The college has initiated the process of blended learning via use of Virtual Classroom and Virtual Laboratory. The facility of Virtual Classroom and Virtual Laboratory is created. ICT facilities provided in laboratories, classrooms and digital library encourage teachers to use blended learning methods.
- The college organizes International, National and State level conferences/seminars every year. The details of last six years are as follows:

Table 2.5 Conferences / seminars organized by the college

Level of Conference / Seminar	Number
International	6
National	6
State	12

- Furthermore, Department of Psychology organized Webinar in collaboration with Harvard University; NSS unit organized National Conference on Environment and Biodiversity of India in collaboration with North-East Centre for Environmental Education and Research; Library organized a National Conference on Impact of e-publication on Librarianship and Higher Education in collaboration with Modern Institute of Business Management. The college organized a National Conference on Role of Spirituality in Higher Education in collaboration with 'Prajapita Brahmakumari Ishwariya Vishwavidyalaya'.
- Department of German organized 'Miss-Media' a 'Depiction of Women in Literature and Media', one-day conference for Bachelor and Master Degree students of German studies, in collaboration with Fergusson College.
- All Post Graduate students and the faculty members are encouraged to participate actively in conferences, workshops and seminars and to present papers and posters.
- College organizes soft skill programs for the benefit of all students. Add-on courses and skill-oriented programs are developed and organized to inculcate various skills in addition to University curriculum.
- Use of technology advances the enhances level of learning process for example, Computer interface experiments in Physics help students to perform experiments with various degree of freedom and confidence.
- College has designed 28 add-on courses / hands on training programs.
- A lecture series entitled 'Die Kulturation Deutschland' was organized in

the college. German experts Mr. Johannes Hofmann and Mrs Renate Hofmann delivered the lecture on Deutsche Poppoeten and Die Jugendkultur.

- Department of English has collaborated with British Council Library to conduct Blended English Course.
- The departments of Botany, Zoology, Geography, Microbiology and Biotechnology conduct fieldwork and excursions.
- Project work is assigned to PG students of all the departments and UG students of departments of Biotechnology, Computer Science, Animation, Physics and Electronic Science.
- Most of the departments organize study tours, industrial visits, poster competitions, quiz competitions, programming competitions, trade fairs, career exhibitions, guest lectures, study excursions to acquaint the students with the practical/applied aspects of their curriculum

2.3.7 Detail (process and the number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling /mentoring/ academic advice) provided to students?

The college takes maximum efforts in providing academic, personal, psycho-social support and guidance services to the students so as to enable them to become globally competitive and multifaceted and proactive personalities as stated in our mission statement. Following are the details:

Table 2.6 Services provided to students

Sr. No.	Support/ Guidance	Details of Support/ Services	Support given by	Number of students benefitted per year
1	Academic Advice	Classroom and laboratory sessions, library services, remedial coaching, advanced learner's programmes ICT support, skill development, Digital Record Room and value added courses, etc.	Principal, Vice-Principal, HODs, Admission committee, administrative staff	Approximately 6800 students
2	Personal Support	Earn and Learn Scheme, SAF, Book Bank, Endowment prizes, sport and research scholarships, need based mentoring etc.	Student welfare officer, Library, Gymkhana, NSS unit, NCC unit, HODs, Class advisors, Subject teachers	Approximately 1000 students
3	Psycho-social Support	Psychological counseling, aptitude testing, career counseling, Social services through NSS, NCC and NGOs.	Department of Psychology, NSS, NCC, Class advisor	Approximately 800 students
4	Guidance Services	Professional /Career counseling, Career exhibition, SET, NET, PET guidance, competitive examination guidance, and placement guidance services.	Placement cell, ED cell, Competitive Examination Guidance Centre.	Approximately 1500 students

Class advisors personally do the mentoring of the students in their class. The subject teachers are also in contact with students to know their academic and other difficulties. They recommend the students for further counseling to the respective authorities. In practical course work, small groups of students

interface with teachers where they play the role of mentors for that particular batch. Several students have resolved their problems with the help of guidance obtained from departments.

2.3.8 Provide details of innovative teaching approaches/ methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

Innovative teaching:

- Efforts are taken to adopt advanced technology in teaching certain topics with the help of simulations, demonstration in class with LCD and Laptop.
- Innovative pedagogical method called **Cooperative Learning** is adopted by some teachers in classroom teaching. This helped in improving performance of the students in internal examination
- For certain experiments in Botany, Zoology, and Physics, online demonstrations are organized, which explain the basic ideas in experimentation in the said subjects. e.g. to make and observe slides, dissection of animals, least count of Vernier caliper, spectrometer etc.
- In sports, recorded matches are screened for the players to eliminate and minimize the errors while playing the games.
- Budgetary provisions are made for these facilities. Various grants received like BSR, CPE, FIST and DBT Star College Scheme help college to innovate teaching methods by faculty.
- Under new approaches, teachers develop small projects and assignments in their subjects. They encourage students for self-learning through advanced technology and competitions like poster presentation, model making, power point presentations.
- Science and Commerce departments conduct hands on training programs on Embedded Systems, Microscopy and Tally Package.
- Along with regular curriculum, efforts are made to inculcate communication skill and English conversation through language laboratory.
- Curriculum related films are screened by departments of English and Psychology.

Efforts by the Institution:

- In order to encourage and guide the teachers to adopt innovative teaching approaches / methods the institution has provided all the necessary infrastructure, facilities and equipment.
- The college has recently constituted a Centre for Innovations in Teaching, Learning and Learning to promote the use of modern pedagogic methods of teaching.

- The college provides free internet access to the students and teachers in Central Computer Centre, College library as well as in all the Departments.
- Every department is provided with a laptop, router, and LCD.
- Teachers prepare power point presentations and use educational CDs, downloaded and YouTube resources to create a rich learning environment in class rooms and laboratories.
- The institution also has made a provision for Virtual Classroom, Digital Classroom, digital laboratory, Digital Library, google classroom etc.
- The college has organized i.) regional workshop ‘Cooperative Learning Applied to Classroom’ conducted by International Pedagogic Dr. Yael Sharan from Israel ii.) Workshop on effective teaching methods organized for science teachers iii.) International conference on ‘Use of Advanced Technology for Enhancing Quality of Science Education’.
- The college conducts orientation programme for newly recruited teachers and also encourages them to participate in orientation programmes of SPPU.

Impact on students:

- The response and participation of the students has increased as a result of adoption of innovative methods in teaching learning process.
- There is a growing response from students to participate in intercollegiate state level research competition (‘Avishkar’); the number of students contributing to the journals, magazines in the form of articles, papers presentations has also increased.
- The choice based credit system introduced by SPPU could also be smoothly implemented, as the response of the students to all these new experiments was quite encouraging.

2.3.9 How are library resources used to augment the teaching- learning process?

The library staff keeps the faculty and the students updated regarding its recent additions by publishing its online library bulletin every month. It provides question papers of internal examination, term-end examinations and university examination online through this bulletin. The library organizes book exhibitions for promoting the reading habits of the students and staff. The display of new books through the ‘*library on wheels*’ is arranged every year.

The library has subscribed to various online journals and free access journals related to different subjects in collaboration with British Library and INFLIB-NET. The library has facilitated access to more than 22,400 e-journals and more than 4,82,000 e-books.

The library arranged a National conference on ‘e-publications and their impact on Librarianship’. It also arranged workshops on Plagiarism, Impact Factor, Citation Index, h-index etc.

Library provides Braille books, more than 500 audio books, CDs and CD player, angel e-book reader, JAWS software, etc. A separate Braille Library Section in collaboration with SPPU is developed.

Library has Reprography facility for students and staff. In order to maintain silence in reading hall, mobile jammer has also been installed.

The visits of the library staff to other renowned libraries are arranged to know the recent practices in library services.

The teachers give references to the students while teaching the topic in class. Relevant reference books and textbooks are made available to the students as per their demand. Internet facility is available to all students on the campus. Library assignments are given for preparing library notes for the topics in syllabus. Digital library is available to the students for referring e-books, teacher's notes, question banks, previous examination question papers, related literature, digital copies of college magazine and college prospectus in PDF format. Audio-visual facility is also provided in digital library for teachers as well as students. In collaboration with Multiversity 'Intranet Based e-learning facility' is being created in the Digital Library.

Monthly library e-bulletin and library brochure are published to give library information to the staff and students and make them aware of the new arrivals.

2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

In some extraordinary situations the challenges are posed on completion of curriculum in planned time, e.g. Teachers strike, Strikes or 'Bands' announced by political parties, situations like heavy rain and floods or epidemic diseases. In such situations, college authorities call the meetings of all concerned including the representatives of students and teachers to prepare special timetable and complete the curriculum in time. Sometimes lectures and practical sessions are also arranged on Sundays and holidays, Short Term and Long term vacations are also curtailed to face such challenges. Thus, college takes proper care to complete the curriculum prior to examination schedule.

2.3.11 How does the institute monitor and evaluate the quality of teaching learning?

The college mainly evaluates and monitors quality of learning through the result analysis of every course. The feedback given by Students Council is discussed in the meetings of Heads of the departmental. The feedback received from experts drawn from industry and other fields through their lectures and visits as well as the feedback receive from placement officers are taken in to account. Accordingly, steps are taken to implement the suggestions towards improvement.

The heads of the departments regularly hold the meetings in which the review of teaching is taken and individual problems of teachers with reference to teaching of different subjects are discussed. The HOD and senior teachers provide guidance to the junior teachers for improving the quality of their teaching.

The Principal regularly calls meetings of Heads of the Departments for getting feedback on teaching-learning progress of department. Necessary guidance is provided to enhance the quality of teaching learning process, infrastructure and implementation of ICT.

The college has evolved a system of maintaining teachers diary, teaching plans, annual academic calendar through which the teaching programmes are monitored.

2.4 Teacher Quality

Synoptic View:

• Adequate well qualified faculty. Diversity in the recruitment of faculty is encouraged. • The institution facilitates the participation of its teachers in teacher recharge programmes. • The institution ensures that teaching positions against sanctioned posts are filled in reasonable time. • The institution adheres to UGC/ State Govt. norms for faculty recruitment and promotion. • The institution organizes induction and in-service academic development programmes for its faculty. • The institution attracts distinguished faculty for appointment as emeritus / distinguished professors. • The faculty are encouraged to demonstrate creativity and innovation in teaching. • The institution facilitates mobility of its faculty through exchange programmes.

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum.

Table 2.7 Qualified Teachers' Details

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D.Sc./D.Litt.	0	0	0	0	0	0	0
Ph.D.	0	0	10	7	8	9	34
M.Phil.	0	0	4	5	0	0	9
P.G.	0	0	12	1	22	35	70
Temporary Teachers							
Ph.D.	0	0	0	0	1	0	1
M.Phil.	0	0	0	0	0	0	0
P.G.	0	0	0	0	19	47	66
Part-Time Teachers							
Ph.D.	0	0	1	0	0	1	2
M.Phil.	0	0	0	0	0	1	1
P.G.	0	0	0	0	1	0	1

Recruitment of teaching staff and other staff is governed by rules and regulations of SPPU and Government of Maharashtra. The college adopts certain strategies and implements the plan to ensure that the staff of desired quality and qualification is selected.

- The management has maintained the reputation of selecting the best teaching talent.
- Advertisement for recruitment is given in local newspapers as well as national newspapers.
- The selection is made strictly on merit basis as per UGC regulations.
- The adequate welfare facilities are provided to the staff members.
- Encouragement is provided to give scope for skills abilities, and talent of staff members.
- Staff members are encouraged to undertake research and other relevant activities, which help them to build their successful career.
- In order to enable the faculty members to do research (Ph.D.) and thereby to upgrade their qualification, the college encourages and arranges to depute the staff members through UGC Faculty Improvement Programme (FIP) Schemes. In last five academic years, eight staff members have availed this facility. Lien facilities are provided to the deserving candidates, if required.
- With the encouragement of college management, two research scholars have successfully completed their post-doctoral studies. Two members of the staff availed of the benefit of UGC Post-Doctoral scheme and another staff member completed her Post-Doctoral studies in Helmholtz Centre for Infection Research, Braunschweig, Germany.
- Staff members are encouraged to write textbooks as well as reference books.
- Suitable policies are adopted to provide opportunities for professional self-development and computer skills and to provide incentives to the staff.
- Necessary budgetary provisions are made and particular attention is also paid to enable the teachers and other staff to participate in various training programmes, seminars, workshops and conferences.
- Staff training and development programmes like hands on training programme, workshops at various levels of management are arranged e.g. seminar on library management, training programme for accounts staff and library staff.
- College conducts training programme for newly recruited teachers.
- College has made efforts to provide Safe Work Environment in all the laboratories. Fire extinguishers, safety goggles, gloves, exhaust fans, eyewash, safety shower, fume-hoods, first aid boxes etc. are made available.
- Frequent meetings of laboratory assistants with Vice-Principals and Principal are arranged and necessary instructions about laboratory safety are given.

- Care is taken to ensure that congenial and cordial atmosphere is maintained in the college. Staff Academy is established to promote academic and research atmosphere in the college. Grievance Redressal Cell is also constituted. The LMC, which consist of representatives of teaching and non-teaching staff play an important role in safeguarding and promoting the interest of the members of the staff.
- College authorities appreciate the outstanding performances of staff by giving awards every year. Best Administrator and Best Teacher, awards are given by the management.
- Outstanding performance of staff members are considered for nominations to be made to University, State and Union Government.
- College forwards the proposals of highly qualified and deserving staff members to UGC for the consideration of award of Emeritus Professor.
- The college makes arrangement for deputation of deserving staff members for research at doctorate as well as post doctorate scheme of UGC.
- To meet changing requirements of curriculum and to provide encouragement for research work, academic growth and professional growth the college provides upgraded infrastructure and instrumentation. College has successfully obtained financial assistance through UGC-BSR, DST-FIST, DBT-Star College, UGC-CPE, ICSSR, ISRO, BCUD-SPPU, etc. This has helped to improve the infrastructure, academic ambiance and research culture of the institution.
- The college also provides encouragement to senior teachers, particularly the retiring teachers by forwarding their extension proposals to the concerned authorities.
- The college has continued the services of some retired teaching staff members and scientists, as Eminent Professor to seek their guidance and make use of their experience. At present, seven such Eminent Professors are associated with the college and their guidance is available for the staff. These senior professors are actively engaged in different activities of the college e.g., research, administration of self-financed courses, *Centre for Innovations in Teaching, Learning and Evaluation*, college management, etc.

2.4.2 How does the institution cope with the growing demand / scarcity of qualified senior faculty to teach new programmes / modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.) ? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

- Pune being a well-known educational centre and IT hub, the college does not find it difficult to appoint the qualified and senior faculty to teach new programmes such as IT, Biotechnology, and Animation.

- Eminent professors and scientists from national research institutes, universities, professional and industry experts, and consultants are invited as guest lecturers.
- For the subject like Bioinformatics, a mathematics teacher conducts lectures. Laboratories are enriched with all necessary equipment and facilities.
- The college authority deputed the teachers for getting advanced topic information through training programs organized by national institutes and universities.
- Because of such arrangement, the college could successfully continue the teaching of new subjects and could also get the advantage of the expert visiting faculty. It also facilitated the industry collaboration and the placement of our students.

2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

- Nomination to staff development programmes**
- Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning**
- Teaching learning methods/approaches :Handling new curriculum, Content/knowledge management, Selection, development and use of enrichment materials, Assessment, Cross cutting issues, Audio Visual Aids/multimedia, OER's, Teaching learning material development, selection and use Percentage of faculty Invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies, Participated in external Workshops / Seminars / Conferences recognized by national / international professional bodies, Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies**

a) Nomination to staff development programmes

Table 2.8 Academic Staff Development Programmes

Academic Staff Development Programmes	Number of faculty nominated
Refresher courses	25
HRD programmes	02
Orientation programmes	20
Staff training conducted by the university	02
Staff training conducted by other institutions	40 Teaching 32 Nonteaching
Summer/winter schools, workshops, etc.	05

b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching learning.

The college authorities are always keen to introduce advanced technology in teaching learning and evaluation.

- **Teaching learning methods/approaches:** Staff Academy organizes guest lectures on various subjects. Department of Computer science and Science Association organize various workshops to empower and enable teachers to use advanced techniques in teaching learning. Group Study, Pedagogy and Hands on Training programmes. Some of these are listed below:
 - Inclusion of a session on ‘Chemistry Education’ and Exhibition cum Completion of Educational Aids in Chemistry in the National Conference on Perspectives of Chemical Sciences” organized by the college (February 2012).
 - Formation of a study group of teachers for use of innovative pedagogic methods in teaching in college. Four interactive sessions were conducted under guidance of an Expert Pedagogue (July 2012).
 - Organization of a Regional Workshop on ‘Cooperative Learning Applied to Classroom’ conducted by renowned international Pedagogue Dr. Yael Sharan from Israel (February 2013).
 - Workshop on Study Skills organized by department of Psychology for science teachers (February 2014).
 - International conference on ‘Use of Advanced Technology for Enhancing Quality of Science Education’, organized by IQAC. (February 2015).
 - The college organized a one month Teachers Training Programme, an orientation workshop for newly recruited teachers.
 - College organizes various seminars/guest lectures for improving the teaching quality, exploring research skills, encouraging use of advanced technology and methodologies of teaching, updating their subject knowledge.
 - IQAC conducts quality enhancement workshop for every department with subject experts from parent University and teachers from other colleges.
- **Handling new curriculum:** Teachers from all the departments take active part in syllabus framing workshops organized by Board of Studies in various colleges, after that they also attend workshops conducted for implementation of the syllabus. The reference books, internet references, Question Banks, examination patterns, quality and difficulty level of questions are finalized through these workshops (Refer tables 1.1, 1.2 and 1.3).

- **Content/knowledge management:**

Following steps have been taken towards knowledge management

- Use of digital library, Online Library transaction through use of OPAC, subscribing various journals, e-journals and online e-resources, barcoding identification of books, etc.
- The Department of Chemistry of the college has made special efforts in this regard such as 'Crossword Puzzle of Periodic Table', a computer game developed and exhibited as Educational Aid in the National Conference in the college.
- Live and recorded demonstrations of basics of measurement instruments in Physics with the help of audio-visual aids help the students to improve the practical skills to in using the instruments effectively.

- **Selection, development and use of enrichment materials:**

The use of ICT and Digital Library reference work makes available latest information to the student. The lectures, demonstrations and online explanations on particular topics are listed by the staff members and made available to the students. Collection of digital copies of reference material is made available in department laboratories. All the books recommended in syllabus and many more references recommended by Head of the Departments are purchased by Library. Laboratories are upgraded with necessary equipment. Laboratory and practical manuals are prepared by the staff members for smooth conduct of practical sessions. Lecture notes and study material of few departments are available on intranet.

- **Assessment:**

For entrance examination, the college has introduced computerized OMR sheets as answer books. The examination reforms made by SPPU, Pune, are implemented in the institute by organizing hands-on training workshop for use of bar-coding system for examination answer books, online mark entry system, etc.

- **Cross cutting issues:**

The cross cutting issues like gender equality, climatic problems, environmental education, human rights, use of ICT, college autonomy, are discussed in staff academy and programmes are organized by *Yuva Manch*.

- **Audio Visual Aids/multimedia :**

The Department of Computer Science provides informal guidance sessions to the teaching staff regarding use of laptop, LCD projector, regarding technical guidance for including audio-visual clips using multimedia in preparing educational e-contents, retrieving available e-resources from internet websites etc. Most of the departments use the audio-visual aids for effective teaching-learning.

- **OER's:**
Open Educational Resources are made available to the teaching staff and students through digital library and internet connections provided to every department. Laboratory manuals were prepared by Department of Electronic Science and Department of Physics.
- **Teaching learning material development, selection and use:**
For practical courses in science, staff members have prepared handbooks. The teaching notes prepared by staff members on particular topics are available for the students through ICT. Specific references teaching materials, website addresses are communicated in the classroom while teaching particular topic. Through posters and model making competitions on the topics from curriculum, teaching learning process is made effective.

c) Percentage of faculty

Table 2.9 Percentage of Faculty

Invited as resource persons in Workshops/Seminars/ Conferences organized by external professional agencies	10%
Participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies	30%
Presented papers in Workshops/ Seminars/ Conferences conducted or recognized by professional agencies	20%

2.4.4 What policies/ systems are in place to recharge teachers? (e.g.: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

- The college encourages participation of teachers in orientation programmes and refresher courses to enhance their subject skills.
- The college also supports teachers for attending conferences, seminars, paper presentations, by sanctioning leave as well as by providing registration charges to them.
- All the departments of the college organize Seminars/ Conferences/ Workshops of State, National, International levels by rotation every year on various themes. Teachers are motivated and facilitated to attend the same.
- The college encourages teachers to undertake minor and major research schemes from various funding agencies like BCUD, SPPU, Pune, UGC, DST, DBT, etc.
- Teachers who are research guides in our Research Centres guide research scholars for Ph.D. in the college.
- Some of the teachers are pursuing research work for their Ph.D. in other centres like National Chemical Laboratory, CEMET, SPPU, Pune, SNTD Mumbai, BAMU Aurangabad, Solapur University, Shivaji University Kolhapur and TMV Pune.
- In-house publication of every research centre with ISSN number is proposed from this year. Teachers are encouraged to do research in their

subjects and publish their research work in reputed peer-reviewed journals.

- The teachers are also encouraged to write / contribute to textbooks and reference books of their subjects.
- The college sanctions leave for attending hands-on and training workshop on technical skills organized by IIT Mumbai, Agharkar Institute, Pune, NCL, Pune, SPPU, Pune, etc.
- The college has designed few skill-based courses, which are run in collaboration with industries. E.g. Department of Zoology runs Vermiculture course in collaboration with Praj Industries. Department of Microbiology conducts a course of Pharmaceutical Techniques in collaboration with different industries.

2.4.5 Give the number of faculty who received awards/ recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance / achievement of the faculty.

- Dr. S.D. Joag received a prestigious INSA (Indian National Science Association Award) in October 2015.
- Dr. H.V. Ghate received ‘Sarpamitra’ Herpetological Society of India award in 2015. He is also a recipient of Best Teacher award by the Government of Maharashtra in 2010. He is an expert in the subject of Zoology and has been recognized as a Researcher in his subject. The Research Centre in Zoology, established in 1982, is developed and recognized at international level because of his excellent academic and research work. The college has helped him by providing laboratory infrastructure facility and academic flexibility to conduct his activity in the best possible manner.
- Dr. S. D. Joag received First Prize in the national competition organized by ICT-BASF on the theme ‘Role of chemical industry in enhancing quality of education in India’, in February 2011.
- Principal Dr. R. S. Zunjarrao received ‘Best Principal’ award of the Savitribai Phule Pune University.
- Prof. P.S. Varade received ‘Best Program Officer’ of NSS at State Level.
- Dr. R. S. Zunjarrao, Prof. Anjali Sardesai, Prof. P.S. Varade, Dr. Rebecca Thombre have been awarded ‘Academic Excellence Award’ by Uttar Bharatiya Sanstha, Pune.
- Prof. M.S. Datre received ‘Best Librarian Award’ by Pune Nagar Wachanalaya, Pune.
- Dr. K. D. Gopale received Young Scientist Research Project Scheme by SERB DST government of India, New Delhi.

The college management provides constant encouragement to the staff for continuous improvement and achievements in their respective field. The necessary facilities such as laboratory, library, financial assistance,

duty leave are provided. The achievements of the staff are appreciated by awarding certificates and by felicitation. The proposals of the staff for academic and research activities are forwarded to the higher authorities with recommendations. The examples of senior faculty members provide inspiration to the young staff members in respect of academic achievements. The seniors are always available for guidance and help. Senior retired professors and researchers are associated with some departments for research and other academic activities.

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes. The college has introduced the system of evaluation of teachers, particularly evaluation by students through feedback forms. The college has a practice to discuss the feedback received from students with every teacher. Necessary instructions are given to the concerned teachers for improvement in the quality of their teaching.

Teachers who had recently joined the college and have less than 5 years' service are guided, motivated together by senior teachers and retired prominent teachers from college.

Evaluation of teachers by the committee appointed by the University for Placement in the higher scale is done as per the rules.

As far as the evaluation of teachers is concerned especially by the external peers, it is regularly performed by IQAC and University experts to verify CAS scores of the teachers. Parents' feedback at the time of result declaration is also taken in to consideration for improvement of teaching learning process.

External peers in the form of guests are invited at various functions and conferences held in the college. Similarly, professors from parent University also interact with our teachers. The interaction results in appropriate opinions about recent education and teachers' role and our participation in teaching learning process. This is a sort of an informal evaluation of teachers by the external peers to motivate teachers in teaching their subject with wide angle and broad perspective.

2.5 Evaluation Process and Reforms

Synoptic View:

- The evaluation processes is disseminated to all its stakeholders.
- The institution adheres to the academic calendar for conduct of examinations.
- Timely declaration of first year and M.Sc. Statistics (Autonomous course) results.
- Reforms in the examination procedures and processes have positively impacted the college examination management system.
- Transparency and security of evaluation system is ensured by facilities like separate Examination Control Room, Strong Room and CCTV surveillance.
- Use of computer technology in the examination management process.
- Effective mechanism for redressal of grievances pertaining to examinations through the Unfair Means Committee.

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

- Stakeholder of the institution, especially students and faculty are made aware of the evaluation process by giving information in the college prospectus. Prospectus is made available at the time of admission. The rules about the examination and evaluation process are given in the college prospectus, college website as well as in University website.
- The institution organizes ‘induction programme/guidance sessions’ for first year undergraduate and postgraduate students for orientation.
- The institution has constituted an examination committee, which arranges to give necessary information about the rules, procedures and regulations relating to various examinations to the concerned faculty and students from time to time.
- The notices related to the examination are displayed well in advance for the information of students and staff and relevant circulars are made available in the office as well as on the institutional website
- In classroom, the subject teachers and class advisors guide the students about the theory and practical examination pattern.
- At the time of admission, postgraduate students are made aware of the Choice Based Credit System pattern.
- Teaching faculty regularly attends workshops regarding implementation of newly introduced Choice Based Credit system.
- There is a bulk SMS facility in the college, from where students and staff are well informed about the examinations.
- In various departments, Parent-Teacher meetings are regularly conducted to discuss the syllabus as well as evaluation process.
- One of the Vice-principals is appointed as College Examination Officer (CEO) to look after all concerned aspects of examination processes.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

Major evaluation reforms of the University that are successfully adopted by the college, in last five years are:

- Online Examination Forms
- Online Question Paper Delivery System
- Barcode System
- Online Marks Entry
- Choice Based Credit System for Post Graduate students

Institution/College Reforms

- The institution has implemented “ERP” software named ‘Vridhhi’ for evaluation process of First Year students.

- The institution has appointed 'College Examination Officer' (CEO).
- Vice-Principals are appointed as Internal Senior Supervisors. Along with External Senior Supervisor, they ensure that examination reforms are properly implemented.
- The institution has constituted Unfair Means Committee to probe/ investigate the cases of misconduct in the examination, if any.
- Central Assessment Programmes (CAP) for Under Graduate and Post Graduate courses are conducted on behalf of SPPU.
- For First Year B.A., B.Com, B.Sc. examinations, Central Assessment Program (CAP) is arranged.
- A broad based mechanism for continuous internal assessment of the students in theory and practical is evolved under Choice Based Credit System.
- Few of the staff members use their personal websites for online assignments and evaluation.
- Online examinations are conducted in few Post Graduate subjects for internal evaluation.
- The system of OMR sheets has been introduced for evaluation of entrance examination answer papers.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

- **Effective Implementation of Evaluation Reforms of the University:-**
 - **Online Examination Forms**
 - From year 2013-14, university has adopted online submission of examination forms for the university examinations.
 - The institution has provided a facility of computers with Wi-Fi connectivity in each department, for students for filling the online forms. The faculty members and the office staff provide assistance, if required.
 - **Online Question Paper Delivery System**
 - From year 2013-14, university has adopted online question paper delivery system.
 - The examination control room has been made spacious and better equipped to download the question papers and to maintain necessary confidentiality.
 - **Barcode systems**
 - SPPU has adopted Bar Code System of answer books for the affiliated colleges from year 2013-14.
 - Documentary on Barcode system implementation was screened for the staff in 3-4 sessions. The college also organized workshops where experts from University were invited as resource persons for guidance in this regard.
 - **Online Marks Entry:** Marks of University Internal Theory

examination and External Practical examination are entered online for which college has installed high speed, secured 10 Mbps leased line of internet connectivity.

- **Choice Based Credit System:** The College has implemented all kinds of evaluation methods of Choice Based Credit System. Teachers were encouraged to participate in Choice Based Credit System guidance workshops organized by various colleges under SPPU.
- **Effective Implementation of Evaluation Reforms of the College:**
 - The examination process for the first year students i.e. preparing admit cards, marks entry, results, revaluation, etc. is carried out through 'Vridhhi' software. The verification, photocopy and revaluation process of first year examination is followed at college level as per University rules.
 - Internal Squad under the guidance of Chairman of Examination Committee monitors the examination process and ensures smooth conduct of examination.
 - One of the Vice-Principals is appointed as College Examination Officer (CEO).
 - **Senior supervisors:** Vice-Principals are given the responsibility as senior supervisors during examination.
 - **Unfair Means Investigation Committee:** This committee conducts the investigation sessions of students involved in misconduct during examination. Parents are also invited for such sessions. The cases are resolved as per the norms of the University.
 - **Central Assessment Programmes (CAP) :** College regularly conducts CAP on behalf of University. The CAP is conducted effectively with the help of experienced members of office staff. CCTV enabled evaluation halls; adequate computer and internet facility are made available for CAP.
 - **Central Assessment Programmes (CAP) College level:** The evaluation of answer books of First Year B.A., B.Com. and B.Sc. examination is done at department level, under the custodianship and guidance of respective heads of the departments. Such decentralization has increased the efficiency and effectiveness of evaluation process.
 - **Mechanism for continuous internal assessment of the students in theory and practical sessions is evolved:** The evaluation methods such as group discussion, oral examinations, Power Point presentation, open book test, surprise tests, seminars, home assignments, reference book review, small projects, research paper review, practical assignments, quiz, etc. have been newly introduced. The infrastructural facilities and technical support are provided to every PG department for implementation of evaluation methods.
 - **Online Evaluation System:** Some members of teaching staff from the Departments of Microbiology, Botany, Computer Science, Physics, Electronic Science, Psychology and Commerce use online assignments

through their personal websites or email accounts.

- **Online Examination:** Department of Electronic Science conducts online internal examination at PG level.
- **OMR:** Implementation of OMR sheet based evaluation system in the entrance examinations conducted by college has increased the efficiency and has ensured accuracy of evaluation process.

2.5.4 Provide details on the formative and summative evaluation approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.

- **Formative tests:**

The teachers conduct topic wise periodic tests, seminars, question-answer sessions, group discussions, etc. and the evaluation of the students is done on the basis of their understanding of the concepts. Few teachers also conduct mock-viva sessions.

- **Summative tests:**

At the end of each semester, summative examinations are conducted. It is observed that due to formative examination, there is improvement in the students' performance in the summative examination.

The formative and summative evaluation approaches adopted have shown an improvement in the performance of the students.

Examples:

- In practical courses, the formative evaluation is based on oral questions asked while regularly submitting journals for checking. The summative evaluation is done at the final examination (Annual/Semester) conducted by institution or University.
- In case of formative tests, in few departments, surprise tests are conducted.
- In the Department of Computer Science, weekly test based Programs / codes are conducted in the following manner:
 - Question is displayed on notice board. Students are asked to answer within one week. Correct answer is displayed on notice board at the end of the week.
 - Similar type of tests is conducted in Department of Statistics.
 - Computer based aptitude test of self-evaluation system is conducted in Department of Psychology and Computer Science.
- In Department of Microbiology, in PG courses, according to the newly introduced Choice Based Credit System, students have to design protocols on their own by using standard references. These are evaluated for their internal assessment. The summative evaluation is done by the final semester examination conducted by University.

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.)

- **Transparency**
 - Internal tests are conducted for both UG and PG courses and their marks are revealed to the students.
 - For subjective examinations, the students can apply for photocopy of answer sheet.
 - Department of Electronic Science conducts online internal examination using *Quiz Fire* software. Such examination system maintains the transparency in the evaluation system.
- **Weightage for behavioral aspect:** Twenty percent weightage is allotted for attendance, sincerity and participation of the students (UG and PG) in the interactive sessions and group discussions.
- **Weightage for Independent Learning and Communication Skills**
 - In the year 2013-14, SPPU, Pune has introduced credit system for PG courses.
 - Out of 100 marks for evaluation, 50 marks are reserved for continuous internal assessment. The subject-in-charge decides the type of the test to be conducted from the following list specified by SPPU:
 - Written test and/or mid-term test (not more than one or two for each course)
 - Term End Paper
 - Journal/Lecture/Library notes
 - Seminar
 - Power point presentation
 - Group Discussion
 - Short Quizzes
 - Home Assignments
 - Extension work
 - An open book test (where the concerned teacher decides which books are to be allowed for this purpose)
 - Mini research project by individual student or group of students
 - For the internal examinations of objective type, the model answers sheets/answer keys, are displayed on the notice board after the examination, so that students can verify their answers with model answers.
 - Best Student Trophy is awarded by the institution, to meritorious students. The students' curricular as well as extracurricular activities are considered for the same.
 - An equal opportunity is given to all students by distributing merit

forms for the best student trophy. The forms are screened and marks are allotted based on criteria decided by the Best Student Trophy Committee. The students scoring highest total marks are called upon for the interviews. The final result is declared by the panel of experts appointed by the committee.

- For independent learning, following methods are used: Home assignments, reference book review, research paper review, open book test, power point presentation, seminars, group discussions etc. Internet facility of 10 mbps leased line, Digital library, LCD projectors have facilitated the independent learning of students.

2.5.6 What are the graduate attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?

Although the university is yet to specify the graduate attributes, the college has laid down the following graduates attributes:

The college being a multi-faculty college, it imparts education leading to graduate degrees of B.A., B.Com., B.Sc., B.Sc.(Biotechnology) and B.Sc. (Computer Science), B.B.A, B.B.A.C.A. (formerly B.C.A) etc. in Arts, Commerce and Science faculties respectively.

- **General Graduate Attributes :** As stated in the Mission Statement, the college aims at producing graduates having scientific temperament, moral, ethical values and multifaceted proactive personality. The graduates of different faculties are expected to have the special attributes as defined by the respective faculty. They are as follows:
- **Commerce Graduates**
 - Should have computational, analytical, entrepreneurial, interpretational skills.
 - Should possess fundamental knowledge of accounting, management, law and taxation, Business and trade practices and economics.
 - Should have adaptability to use Information Technology.
 - Should have knowledge of Business Environment and latest developments in trade, commerce and industry.
 - Should possess effective presentation, communication and soft skills.
- **Science Graduates**
 - Have critical thinking, scientific temperament, scientific attitude, aptitude and logical reasoning, enquiring mind, analytical skills and problem solving ability
 - Engage in the scientific process of drawing inference based on observations and experimentation, hypotheses formulation, synthesize scientific information, gather and analyze data, apply statistical techniques and draw conclusions
 - Should have good practical knowledge in the relevant subject and

- should have laboratory oriented skills
 - Should be able to use Information Technology
 - Should possess effective communication skills, soft skills and presentation skills
- **Arts Graduates**
 - **Languages**
 - Should be proficient in the language opted for and possess technical writing and other language skills
 - Should possess learning, reading, writing and speaking skills of that particular language
 - Should possess multilingual skills in terms of translation, interpretation, creative writing etc.
 - Should be able to use Information Technology
 - Should possess effective communication skills, soft skills and presentation skills
 - **Social Sciences**
 - Should have fundamental knowledge in the relevant area (Economics, Political Science, History and Psychology)
 - Should be able to interpret, analyze, correlate the theoretical knowledge with the changing scenario on local and global scale
 - Should be able to understand the local, national and international human, political, social and economic developments.
 - Should be able to use Information Technology
 - Should possess effective communication skills, soft skills and presentation skills.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

The University as well as college has made a provision for redressal of grievances w.r.t. evaluation. The detailed process is given on the university and college website.

- **Revaluation and Photocopy:** The students can apply for rechecking, revaluation and photocopy of answer books, for college as well as university examinations.
- **Unfair Means Investigation Committee:** The College has constituted a committee to look into the matters of unfair means during examinations.
- **Counseling:** The students are encouraged to consult the respective subject teachers for their queries in the photocopy of the answer books.
- The grievances of the students pertaining to the question papers of examination and the matters arising out of the university examinations are forwarded to the concern university authorities for the necessary further action.

2.6 Student performance and Learning Outcomes

Synoptic View:

- The graduate attributes of the institution are clearly defined /articulated.
- Various programmes and activities of the institution help to achieve the specified graduate attributes.
- Encouragement to all the departments to clearly state the learning outcomes of department wise programmes.
- The achievement of intended learning outcomes is central to the pedagogical and assessment processes of the university.
- Mechanisms in place to analyse shortfalls in achievement of learning outcomes and suggest improvement measures.
- New technologies are deployed by the institution to enhance student learning.

2.6.1. Does the college have clearly stated learning outcomes? If ‘yes’, give details on how the students and staff are made aware of these?

Yes, the college has clearly stated the learning outcomes.

- The learning outcomes stated in the mission statements such as *creating multi-disciplinary best citizens, who will suit the local, national and international needs and have scientific temperament, moral and ethical values and who will be proactive personalities* are integrated with the objectives of the curriculum of each course or programme and extra and co-curricular activities. The information of these outcomes is communicated to the students through the prospectus, display of mission statement, induction programmes and association meetings.
- Learning outcomes and skills expected by the employers are also communicated to the students, which are as follows:
 - Knowledge of the subject
 - Strong analytical skills
 - Ability to interact effectively with peers and leaders as part of a multi-disciplinary team.
 - Ability to work in a challenging and fast-paced environment and multitask effectively.
 - Strong attention to detail organizational skills.
- The students are informed about the learning outcomes of the various programmes / courses offered by the college through meetings before commencement of the course.
- Learning outcomes are clearly stated in the syllabi of the various courses/ programmes. The subject teachers are deputed for the workshops and seminars held for focussing the learning outcomes.
- In departmental meetings, every teacher is instructed to explain the learning objective of each subject at the beginning of the curriculum. While teaching the topic and subtopic in curriculum, the teacher emphasizes on the concepts, skills and the overall knowledge that the students are expected to acquire.
- Institution has formulated Value Education Committee to inculcate social

and behavioral values in the students.

- Skill Development Committee regulates and guides various skill development courses conducted by various departments of the institution, e.g. Seed technology and Plant Tissue Culture by Department of Botany, Vermiculture Technology by Department of Zoology, Animal Tissue Culture Techniques by Department of Biotechnology, Tally by the Department of Commerce and Pharmaceutical Techniques by the Department of Microbiology.

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme.

Provide an analysis of the students' results/achievements (Programme / course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

- The duly assessed answer sheets are circulated among the students. The marks obtained by the students are displayed.
- A collective list of marks obtained by the students in all the internal assessments is made available to the students to enable them to compare their performance.
- Faculty wise result analysis is also shown to the students after the declaration of University results.

Table 2.10 Faculty wise Result Analysis

Name of Course	Under Graduate Courses % of Passing					Post Graduate Courses % of Passing				
	10-11	11-12	12-13	13-14	14-15	10-11	11-12	12-13	13-14	14-15
Arts	82.82	87.84	90.22	89.02	87.10	79.56	92.57	86.95	90.69	83.87
Science	76.97	72.52	67.75	74.19	69.32	79.54	77.08	78.42	84.56	83.48
Commerce	84.00	84.00	79.22	79.00	91.46	45.94	80.39	75.00	80.00	67.67

However, it is felt that the introduction of greater flexibility in the courses /programmes will provide them a wider horizon of career options.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

- **Teaching strategies:**
 - The institution regularly conducts lectures and provides advanced facilities like Digital Classroom and Virtual Classroom. Most of the classrooms are provided with the ICT facilities. Intranet facilities are also provided in the departments.
 - Institution is equipped with the facility of Virtual Classroom. This helps students to interact with the subject experts from different countries through video conferencing, webinars etc.

- Industry- academia facility in each department has been constituted to organize guest lecturers for enlightening the students about the application of their subject knowledge in various companies / industries / research laboratories etc.
- Students are encouraged to appear for various examinations such as NET/SET/GATE/GRE/MPSC/UPSC/TOEFL/CA/CS/ICWA (CMA), etc.
- **Learning strategies:**
 - The learning strategies are implemented through the skill development programmes, association activities along with the classroom teaching.
 - Taking into account the breakup of number of lectures and practical for each topic given in prescribed curricula by the university, the total plan is prepared by each teacher.
 - The teacher makes appropriate use of the equipment, learning aids, literature etc. to include learning effective.
 - College library is equipped with digital library system, which facilitates self-learning among the students.
 - Students perform research work as a part of their curricula in the final year of the course/program.
 - The institute encourages the students along with the concerned faculty to perform social activities to develop social awareness among the students.
 - Extracurricular activities such as poster competitions, quiz competitions etc. are organized to aid in smart learning of the course.
 - Some of the professors in the institution have designed personal websites, which are freely available for the benefit of the students.
 - All departments regularly organize various intra-department, inter-department, inter-college extra-curricular activities for the students. Such activities facilitate development of the students in various aspects.
- **Assessment strategies:**
 - Institution at departmental level regularly gives home assignment for the students for motivating the students to avail library facility and promote the students for self-study.
 - Institution regularly conducts objective and subjective tests for the evaluation of the students at departmental level. Such tests facilitate the assessment of the subject knowledge of the students. The students are guided based on their performance in the subject by the subject teacher.
 - Institution at departmental level regularly conducts formative tests for assessment of U.G and P.G students. This is done with the help of objective tests, oral tests etc. at the end of each semester. If required these tests are repeated for the improvement of the students' performance. Extra lectures are conducted for slow learners in order to improve their performance.

- For all the U.G and P.G courses, summative assessment is conducted, either semester wise or annually as per the University rules. Remedial classes are regularly conducted at departmental level for the benefit of students having backlogs.
- Company personnel are invited to provide guidance to the students about aptitude tests conducted by them.

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality, jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

- Institution has formulated Industry Academia Cell, which regularly organizes guest lecturers of renowned industrialists for guiding the students. This cell has also organised Panel Discussion with experts from different fields such as, Bank Officials, HR Officers and Entrepreneurs so as to guide students.
- College has organized exhibition wherein the students were allowed to sell their products in order to promote entrepreneurship among students. e.g. ‘Vyapar Mela’ organized by the Department of Commerce.
- The departments have Placement Cell, which organizes campus interviews for the students. Many students have been placed through such campus interviews.
- In the institution, the departments have research projects funded by BCUD, UGC and PICC, in which students are associated. This helps in nurturing innovative and research aptitude among the students.
- The students are encouraged to select project themes that aim at focussing and resolving issues of the society or which have socio-economic relevance, e.g. Vermiculture and bio fertilizer production project.
- The departments of the institution run Add-on certificate courses for the skill development among students; which help the students to become competent and acquire good job.
- Institution has appointed Student Welfare Officer who looks after the needs of the poor students.
- Institute has active NSS Unit, which organises various activities for the benefit of students and society.
- Street plays are organized by the college with the help of the students for creating awareness regarding social issues.
- The students of the college participated in the cultivation of rice plantation
- Students are encouraged to participate in various competitions, seminars and conferences to enhance their course/program aptitude.

2.6.5 How does the institution collect and analyse data on student learning outcomes and use it for planning and overcoming barriers of learning?

- The feedback received from the employers (placement offering agencies) and the feedback obtained during the industry-academia meet is taken into account for planning of the programmes and overcoming the barriers of learning. The gaps observed between the contents of the syllabus and the requirements of the employer are bridged by designing certificate courses e.g. Pharmaceutical Techniques by Department of Microbiology and Quick Heal program by the Department Of Computer Science.
- The feedback given by the alumni through their experiences also is considered.
- Result Analysis is done by each department in the institution annually and at the end of each semester (internal and external assessment) as well as subject paper wise result analysis is done at each department.
- College performs academic audit, which involves assessment based on result analysis followed by necessary recommendation for improvement.
- Some important and relevant topics that are not included in the syllabus are introduced to the students through guest lectures and visits to industries and research institutes.
- Skill oriented programs are conducted by the institute through the departments. e.g. Pharmaceutical Techniques, Animal Tissue Culture.
- The extra efforts are made by the teachers to facilitate the learning more effectively, particularly in case of subjects like Mathematics, Accountancy, English, extra lectures and remedial coaching are provided.
- Efforts are made by the teachers to explain the concepts in simple language and if necessary, in vernacular language. Students are encouraged to undertake soft skill development programs.

2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?

- College arranges meetings with Head of the Departments with result analysis and students feedback. During meetings, it is verified that the barriers in learning outcome are resolved.
- Remedial coaching facilitates the improvements in the performance of the students.
- College authorities organized regular meetings with student council to discuss the issues regarding sports, cultural activities and soft skill programs.
- For every subject, attendance is taken by the respective subject teacher and in case of unsatisfactory attendance of the student, it is communicated to their parents.
- Term-end meetings are conducted at every department in the presence of Vice-Principal, where issues related to performance of students are

discussed and accordingly necessary steps are taken for the benefit of students.

- Institute monitors and facilitates campus placement for the students.
- Institute regularly takes alumni feedback for ensuring the achievement of the learning outcomes.
- Parents-teacher meetings are also organized to discuss the performance of the student and remedial measures to be taken, if any.

2.6.7 Does the institution and individual teachers use assessment and evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes', provide details on the process and cite a few examples.

Yes. The institution has carefully framed the policy of devising an appropriate internal assessment system for evaluating the performance of the students and knowing the achievement of learning objectives. The Choice Based Credit System that focuses on the continuous assessment and evaluation of the students is being implemented by the college. The academic departments decide various internal assessment tests such as assignments, oral presentations, open book tests, seminars, viva, group discussions, role-plays, objective type questions, tutorials, etc. The departments assign the weightage to these different tests depending upon the nature of subjects and the topics involved.

The performance of the students in various kinds of internal tests held from time to time is carefully studied in the departmental meetings and an attempt is also made to find out the extent to which the learning objectives in each subject, considering the inherent characteristics of that subject, are being achieved. The decisions regarding changes to be made in the implementation of the syllabi with reference to methods of teaching, the teaching aids to be used, the remedial classes to be held, etc. are also taken.

The outcomes of assessment and evaluation along with the performance of the students in the placement interviews enable the college to make necessary changes in planning and implementing the syllabus of each subject. Few examples in this regard can be cited as follows:

- Department of Microbiology introduced add-on course in pharmaceutical techniques based on the feedback obtained from concerned employers.
- Biotechnology department introduced Animal Tissue Culture and Plant Tissue Culture courses to enhance the employability of Biotechnology students.
- The course in Tally was started for the Commerce students taking in to account the requirement of the knowledge of computerized accounting in industry.

Taking in to account the certain gaps in the expectations/ needs of industry and the knowledge and skills gained by the students at the end of the course, the college authorities instituted *Industry-Academia Collaboration Committee*. The committee arranges the meetings of academicians and industry experts. The guidance and the discussions of the committee are found to be quite useful in bridging the gaps mentioned above. □□□

Criterion III: Research, Consultancy and Extension

3.1 Promotion of Research

Synoptic View:

• The institution facilitates its faculty to undertake research by providing research funds (seed money). • Provision for research facilities in terms of laboratory equipment, research journals and research incentives are made available to the faculty. • The institution encourages and promotes a research culture. • The faculties are encouraged to undertake research by collaborating with other research organizations/ industry. • Faculty are given due recognition for guiding research. • The institution has research committees for promoting and directing research. • The institution encourages the establishment of specific research units/ centres by funding agency/university. • Workshops/ training programmes/ sensitization programmes are conducted by the institution to promote a research culture on campus. • The institution has a good percentage of faculty who have utilized sabbatical leave for pursuit of higher research in premier institutions within the country and abroad.

3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

The college has seven Post-Graduate Research Centres (PGRCs) namely, Zoology, Botany, Commerce, Economics, Marathi, Electronic Science and Microbiology recognized by SSPU, the affiliating university. Established in 1979, the PGRC in Zoology is the first and oldest research centre of our college. The PGRC in Botany was established in 1985 followed by the PGRC in Commerce in 2008 and three more PGRCs viz. Economics, Marathi and Electronic Science in 2012-13. Recently, in 2014, PGRC in Microbiology has been recognized by the affiliating University. In addition to these seven PGRCs recognized by SPPU, an autonomous Research Centre in Life Sciences was established in 2006 with an objective of conducting industry sponsored interdisciplinary projects.

3.1.2 Does the Institution have research committee to monitor and address the issues of research? If so, what is its composition? Mention few recommendations made by the committee for implementation and their impact.

Yes. The college has Research Monitoring Committee (RMC) to monitor and address the issues of research in the college. The RMC is responsible for:

- Creating awareness about the various funding agencies, their schemes, and preferences as thrust areas.
 - Encouraging faculty to undertake research at individual and/or interdisciplinary level, to organize seminars, conferences, workshops and to contribute the promotion of research activities.
 - Organising interactive sessions with scientists from national laboratories.
- The composition of the Research Monitoring Committee (RMC) is as follows:

Table 3.1 Composition of Research Monitoring Committee

No.	Name	Designation	
1	Dr. R. S. Zunjarrao	Principal	Advisor
2	Dr. N. M. Patil	Associate Professor, Department of Botany, PGRC in Botany	Chairperson, Research Monitoring Committee
3	Prof. S. S. Thengadi,	Head, Department of Physics and PGRC	Member/ Academic and Research Coordinator
4	Dr. A. K. Pande	Eminent Professor	Advisor
5	Dr. P. P. Kanekar	Eminent Professor	Advisor
6	Dr. H.V. Ghate	Eminent Professor and PGRC Zoology	Advisor
7	Dr. S. Y. Paranjape	Chief Advisor, Centre for Promotion of Research and Development Initiative (CPRDI).	Advisor
8	Prof. S. R. Chaudhari	Head, Department of Electronic Science and PGRC	Member
9	Prof. A.G. Gosavi	Ex-Principal, MCASC.	Member
10	Dr. Y. R. Waghmare	Vice Principal, Head, Department of Commerce and PGRC	Member
11	Dr. Ms. N. J. Kulkarni	Vice-Principal, Head, Department of Geography	Member
12	Dr. Mrs. S. P. Tawre	Head, Department of Marathi and PGRC	Member
13	Dr. Mrs. M. M. Satam	Head, Department of Economics and PGRC	Member
14	Dr. K. D. Gopale	Assistant Professor, Department of Botany	Member

Valuable guidance for enhancing the quality of research is obtained from experts from research institutes, industries and senior professors of SPPU and other universities.

The RMC has given the following recommendations for promoting research in college:

- Encourage teachers to undertake minor and major research projects.
- Conduct orientation sessions for potential researcher to disseminate research related information on funding agencies, preparation of research proposals, plagiarism, submission of reports and audited statement of expenditure, publications, ethical issues, databases and impact factor.
- Provide financial support to every research centre.
- Provide facilities and encourage teachers to undertake research activities, and seek recognition by the affiliating university in the field of academics and research.
- Inculcate research aptitude among the students.

These recommendations have resulted in:

- **Major Research projects:** In the last five years the faculty members have successfully obtained research funding to the tune of **2,17,34,750/- (Two crore, Seventeen Lac., Thirty Four Thousands, Seven Hundred Fifty only.)**
- **Research publications:** The committee has recommended for quality work and publication of research papers in peer reviewed journals. A large number of faculty members and students have taken interest in publishing their research articles in national and international journals.

The process of publishing research annuals with ISSN of seven research centres in the college has been initiated. In house e-journal of students' research projects is also published.

- **Infrastructural improvements:** The necessary infrastructural additions and improvements in research facilities have been made as per the recommendations of the committee. Further, each Research Centre has a certain budgetary provision that is reviewed annually.
- **Library services/ workshops/ reference works:** The research committee has recommended to conduct the guidance workshops for the researchers especially on plagiarism, impact factor, h-index, citation index, etc. In response to these recommendations, the workshops were organized to guide the researchers on the above-mentioned aspects. As a result, the number of subscriptions to e-journals and print copies has substantially increased.
- **'Yuva Sanshodhak'** scheme has been launched under which research projects of the students are funded by the college. The institution has created special centre called Centre for Promotion of Research (CPR), to coordinate/conduct research programme involving basic, applied, interdisciplinary and inter-institutional research. It is also in the process of introducing skill development programme specially taking into account the various subjects that this multi-faculty/ composite college offers (e.g. courses such as Plant tissue Culture, Vermitechnology, Pharmaceutical Techniques, Seed Technology, Herbal Product Preparation, PCR techniques, Chemical-based product preparation, etc.).
- **Encouragement to faculty members for participation in seminars and conferences:**
The committee has recommended for greater participation of faculty members in seminars and conferences for the promotion of research activity. Encouragement to faculty members and students for organizing and participating in seminars/conferences/workshops has resulted in the increase in the number of members participating in seminars, conferences and workshops.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

- **Autonomy to the principal investigator • Timely availability or release of resources • Adequate infrastructure and human resources • Time-off, reduced teaching load, special leave etc. to teachers • Support in terms of technology and information needs • Facilitate timely auditing and submission of utilization certificate to the funding authorities • Any other**
- **Autonomy to the principal investigators:**
The Principal investigator has full freedom to decide area of research project, with reference to selection of subject, utilization of funds

according to the guidelines of the approved proposals and adjustments in lectures and practical sessions.

- **Timely availability or release of resources:**
Adequate timely resources are made available to the Principal investigators/co-investigator(s). The RMC members look into the requirements and procurement of instruments and special facilities required for conducting the research project.
- **Adequate infrastructure and human resources:**
Sufficient infrastructure is available to carry out research in all the research centres. Science Departments have separate research laboratories with required equipment, and basic amenities for research. The assistance from supporting / nonteaching staff is also taken whenever required.
- **Time-off, reduced teaching load, special leave etc. to teachers:**
As per UGC rules, no special time is given to Principal investigators for research work. However, available time after adjusting teaching schedule is utilized for research. Two faculty members had availed leave for pursuing Post-Doctoral research under UGC scheme. Few staff members have been granted leave under FIP-UGC for pursuing Ph.D.
- **Support in terms of technology and information needs:**
Computers and internet facility are available for research in most of the departments having postgraduate programmes. The college has subscribed to INFLIBNET and N-LIST programmes which give access to various research journals. Reference books are also available for research.
- **Facilitate timely auditing and submission of utilization certificate to the funding authorities:**
At the college level, follow up is taken by RMC. The office staff looks after accounting, utilization and timely submission of statements and reports to the funding authority.

3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

- Teaching staff as well as graduate and postgraduate students are encouraged to participate in various national and international conferences, seminars and workshops.
- Teachers motivate the students for their projects at under graduate and post graduate level such as 'Avishkar' organized by SPPU, 'Ignited Innovators of India' (I2I) organized by COEP in collaboration with Bhau Institute, Pune, International Conference 'Youth United for voluntary Action' (YUVA-2013) organized by 'The Energy and Resource Institute' (TERI) and 'Pune Intercollegiate Consortium' (PICC) and project competitions organized by various departments of the college.
- The college promotes research amongst undergraduate and postgraduate students under 'Yuva Sanshodhak' scheme by funding the projects of the students under the guidance of faculty members.

- Presentation of faculty research work under BCUD funded projects in National Seminars such as ‘*Innovation*’ is encouraged.
- Notices and circulars on conferences, seminars, workshops, training programmes for PG students and research students are displayed on notice boards for the information of students.
- To promote research, Ph.D. candidates are preferred during recruitment.
- Interaction of the students with the scientists from various industries and institutes is organized.
- Visits for students are arranged to various research organizations.
- Infrastructure for in-house and inter-departmental research projects is provided.
- Faculty is encouraged for submission of research proposal to various funding agencies.
- Aptitude tests, technical test, subject test of students appearing for competitive examinations are conducted through ‘*Eklavya online examination*’ facilities purchased by the college.
- Under ‘Talent Search and Nurture Scheme’ implemented in the College, budgetary provision is made for promoting research among the students. The activity was initiated in the academic year 2013-14.
- Special sessions on IPR, Cybercrime, Scientific writing, Interview techniques, Personality development, Communication skills, etc. are organized.
- Activities like Hobby exhibitions, Poster exhibitions, Street plays on socially relevant issues, etc. are conducted.
- Book exhibitions and sale are organized in collaboration with *Ramakrishna Math*, Pune.
- To promote reading habit in students and staff, main library arranges display of books on general topics on every Saturday.
- Film club activity is carried out to supplement traditional classroom teaching learning method.
- To promote students research activity, projects, exhibitions and in-house e-research journal publications are undertaken.

As result of encouragement given to the students and staff for doing research, several teachers and students have presented their research papers in national and international conferences.

3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual / collaborative research activity, etc.)

In last five years, teachers of our college have successfully obtained funds of Rs. 2,17,34,750/- for their individual / collaborative research work from various funding agencies. The details are as in table 3.2

Table 3.2 Research Projects granted to the teachers

No.	Name of Principal Investigators	Title of the Project	Name of funding agency	Amount sanctioned (Rs.)	Duration of the Project
1.	Prof. Mrs. R. M. Phadke	Evaluation of potential of cytotoxicity of curcun protein from <i>Jatropha curcus</i> L.	UGC	3,35,000/-	2016-17
2.	Dr. Mrs. A. S. Oak	Emotional Intelligence among adolescents: Tool Development, Enhancing through training and study of correlates	ICSSR	17,00,000/-	2015-17
3	Dr. Mrs. M. M. Satam	A Study of Minimum Balance Account as a tool for Financial Inclusion and its impact on urban unemployed youth in Pune	BCUD, SPPU	75,000/-	2014-16
4	CA Mrs. R. P. Date	Gender Audit of Educational Institutes- A case study of select Deemed Universities in Pune.	BCUD, SPPU	1,10,000/-	2014-16
5	Mrs. M. S. Datre	Designing E-learning courses to improve information literacy skill of College students	BCUD, SPPU	90,000/-	2014-16
6	Dr. Mrs. R. S. Thombre	Studies on bacterioruberin and membrane protein production by haloarchaea isolated from Mumbai salterns	BCUD, SPPU	2,30,000/-	2014-16
7	Dr. Mrs. S. V. Bhagat	Screening of some indigenous plant species for xanthineoxidase inhibitors: Potential remedies for gout	BCUD, SPPU	1,60,000/-	2014-16
8	Dr. R. S. Zunjarrao	Optimization of Growth Rate of Potential Biodiesel Producing Microalgae.	BCUD, SPPU	2,40,000/-	2014-16
9	Prof. R. L. Dabhade	Green synthesis of metal nano particles and their applications	BCUD, SPPU	1,30,000/-	2014-16
10	Dr. Mrs. V. S. Waman	Development of CZTS based low cost thin film solar cells by electrochemical deposition method	BCUD, SPPU	2,20,000/-	2014-16
11	Dr. Mrs. G. M. Litake	Evaluation of Environmental dissemination of Multi-Drug Resistant <i>Staphylococcus species</i>	BCUD, SPPU	1,80,000/-	2014-16
12	Dr. S. S. Patil	Systematic synthesis, characterization and Field emission investigations of Novel Metal Oxide nanostructures/heterostructures	BCUD, SPPU	2,40,000/-	2014-16
13	Dr. Y. S. Shinde	Taxonomy and Distribution of Ostracoda (<i>Crustacea</i>) of Phytotelmata from Western Maharashtra.	BCUD, SPPU	2,20,000/-	2014-16
14	Dr. A. B. Shinde	A Study of Behavioral Finance Pertaining to Management Institutes Faculty in and around Pune .	BCUD, SPPU	70,000/-	2014-16
15	Dr. A. H. Shende	A Study of Competition, Co-operation and Conflict of India and China with special reference to Trade and Commerce.	ICSSR	8,00,000/-	2014-16
16	Dr. M. M. Satam	Financial inclusion and women empowerment	UGC	1,70,000/-	2014-16
17	Prof. Wayal Navnath	Ground water management for sustainable development of Agriculture in Akole tehsil, Ahmednagar district, western Maharashtra.	UGC	1,40,000/-	2014-16
17	Dr. Mrs. N. M. Patil	Isolation of the induced mutants in linseeds (<i>Linum usitatissimum</i>) under salt stress	UGC	12,80,500/-	2013-15
18	Prof. Mrs. A. P. Goggi	Utilization of potential of <i>Alternanthera sessilis</i> (L.) R. Br. Ex DC an ethanomedicinal weed	UGC	1,30,000/-	2013-15
19	Prof. Mrs. A. P. Kulkarni	Protease inhibitors and antioxidants from <i>Sonchus asper</i> Hill.	UGC	1,25,000/-	2013-15
20	Prof. R. M. Jagtap	Synthesis and Biological applications of 2-aryl thiazolidine carboxylic acids and their ester derivatives	BCUD, SPPU	2,30,000/-	2013-15
21	Dr. Mrs. R. S. Thombre	Green Synthesis of Nano particles	UGC	90,000/-	2013-15
22	Dr. Mrs. R. S. Thombre	Microbial Biodiversity of Marine ecosystem	ISRO	17,00,000/-	2013-15

No.	Name of Principal Investigators	Title of the Project	Name of funding agency	Amount sanctioned (Rs.)	Duration of the Project
23	Dr. Mrs. P. P. Kanekar	Exploring Halophiles from west cost of India for production of Bacteriorhodopsin	CSIR	17,00,000/-	2013-15
24	Dr. K. D. Gopale	Fatty acid profiling and Molecular Characterization of Potential biodiesel producing microalgae from south India	SERB-DST	24,00,000/-	2013-16
25	Dr. R. S. Zunjarrao	Developing a Digital Herbarium of Angiospermic Plants of the Western Ghat Regions of Maharashtra	UGC	9,86,750/-	2013-15
26	Dr. Mrs. R. S. Thombre	Green synthesis of Silver Nano-particles using Congress weed	BCUD, SPPU	2,00,000/-	2012-14
27	Mr. B. T. Kalbage	Taxonomical Studies on Scarabaeinae Dung Beetles in and around Pune	BCUD, SPPU	1,80,000/-	2010-12
28	Dr. R. S. Zunjarrao	Bio-ecological and Bio-chemical Approach to Assess Bryophytes - Pigmy Locust Association	DST	39,52,500/-	2010-13
29	Dr. Mrs. S. D. Joag	Evaluation of antioxidant activity of vegetables referred to in Ayurveda	UGC	2,00,000/-	2010-11
30	Prof. S. S. Sakate	One pot synthesis hydroxy flavones	UGC	2,00,000/-	2010-11
31	Prof. S. R. Pokharkar	Synthesis and characterization of metal oxides used in Ayurvedic medicines	BCUD, SPPU	2,50,000/-	2010-11
Total Rs. Two Crore, Seventeen Lac, Seventy Four Thousand, Seven Hundred Fifty only.				2,17,34,750/-	From 2010 Till date

3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbining research culture among the staff and students.

Every year college organizes International, National and State level conferences, workshops and seminars, with a focus on capacity building in research and imbining research culture among the staff and students. The details of activities in the last five years are given in table 3.3.

Table 3.3 Conferences organized by the college.

Type	Title of International / National /State (Conferences/Seminars /workshops)	Duration	Expn. (Rs.)
International Level : 6	Innovations in Teaching, Learning and evaluation in Higher Education	29-30 Jan, 2016	3,69,418/-
	Application of Advanced Technology for Enhancing Quality of Science Education	26-27 Feb., 2015	6,46,321/-
	Environment Conservation by Adopting New Technology by Adopting New Technologies	28-29 Jan 2014	5,14,210/-
	Employability enhancement through Proficiency in Indian and Foreign Languages	28-30 Jan. 2013	7,47,833/-
	Business Opportunities in Life Sciences	28-30 Jan. 2012	4,89,762/-
	Biodiversity and its Conservation	28-30 Jan. 2011	10,14,819/-
National Level : 9	Dynamics Microbes: Role in Human Welfare	20-21 Feb. 2015	6,58,636/-
	Impact of E-Publication on higher Education and Librarianship	17-18 March 2015	2,24,328/-
	Hazardous e-waste Management	23-24 Dec. 2013	1,58,366/-

Type	Title of International / National /State (Conferences/Seminars /workshops)	Duration	Expn. (Rs.)
	Environment and Biodiversity of India	6 Oct. 2013	20,00, 00/-
	Emerging Trends in Indian Commerce and Industry	23-24 March 2013	1,08,927/-
	Role of Spirituality in Education	27-28 April, 2012	84,827/-
	Perspectives of Chemical Sciences	23-25 Feb. 2012	1,88,374/-
	Medical Statistics and Clinical Trials	18-20 Dec. 2010	1,63,104/-
	Government of India –Ministry of Statistics and Programme Implementation	20-24 Sep. 2010	5,16,372/-
State Level : 16	Fresh water Ecosystems of Maharashtra: Their Biota, Ecology and Health	6-7 Feb. 2015	1,38,443/-
	Statistics and clinical trials	18-20 Dec. 2010	1,63,104/-
	“Mazi Zadan-Ghadan”	26 Feb. 2014	57,212/-
	Role of Tourism in the regional Development	27-28 Feb. 2012	85,166/-
	Drikshravya Malikanchi Nirmiti Prakriya ani Udyogachycya Sandhi	5-6 March, 2012	64, 335/-
	Research in Social Sciences – Techniques and trends	7-8 Jan. 2010	57,998/-
	Implementation of the interactions financial reporting standards	1-12 March, 2011	65,406/-
	Business Innovation Through Advanced Information Technology	13-14 Feb. 2015	72,457/-
	Emerging Trends in service Sector	4-5 Feb. 2014	63,422/-
	Marathi Vinodi Katha –Swarup ani Sadarikaran	4-5 Feb. 2013	66,387/-
	Fuzzy logic and related topics	29-30 March 2012	86,029/-
	Microbiology in 21 st Century	25-26 Dec. 2010	1,64,873/-
	Workshop in Scilab for teachers	21 Jan. 2011	32,640/-
	Workshop on syllabus revision of UG (Commerce)	11 Nov. 2010	24,058/-
	Workshop on syllabus revision of T.Y.B.Sc. (Botany) syllabus	21 Aug. 2010	20,934/-
	Workshop on syllabus revision of T.Y. B.A. (Economics) syllabus	March 2015	14,000/-
	Workshop on syllabus revision of M.Sc. part I (Statistics) syllabus	1-2 March 2013	13,996/-
	Workshop on syllabus revision on M.Sc. part II (Statistics) syllabus	21-22 Apr. 2014	11,397/-
	Current Status of Social Science and Further Scope (Economics)	11 Jan. 2012	13,840/-
	Total		69,11,567/-

3.1.7 Provide details of prioritized research areas and the expertise available with the department / institution.

Table 3.4 Department wise Research areas/expertise

Departments	Research Areas/Expertise
Biotechnology	Nano-biotechnology, Animal tissue culture, Stem cell technology, Protein chemistry, Diabetes, Clinical research, Medical microbiology, Opportunistic infections, Biochemistry, Enzymology, Photochemistry, Microbial biotechnology, Extremophiles, Zoology, Animal developmental biology, Cell-biology, Molecular biology, Plant biotechnology, Plant breeding and Floriculture.
Botany	Plant tissue culture, Biodiesel, Plant stress physiology, Seed physiology, Secondary metabolites through PTC, Plant biotechnology, Plant physiology, Plant biotechnology,

Departments	Research Areas/Expertise
	Plant taxonomy, Mycology, Genetics and Plant biotechnology, Algology, Digital herbarium.
Commerce	Accountancy, Banking and Finance, Business Administration and Marketing, Business Law Management faculty: Banking and Finance, Business Administration and Marketing
Chemistry	Organic chemistry, Catalysis, Chemicals with anticancer properties, Analytical chemistry, Physical chemistry
Computer Science	Fuzzy sets and fuzzy logic, Applications of Computer Science and fuzzy logic in gynecology, Applications of Computer Science and fuzzy logic in environmental science, Computer networking, e-waste management
English	Dalit literature studies, Poetry, Pragmatics, East-Asian literature
Economics	Banking and Finance, Agricultural Exports, International Economics, Economics and Social Welfare,
Electronic science	Embedded System, Digital Electronics, Quantum Mechanics, Power electronics.
Fashion Technology	Pattern making and stitching, Pattern grading, Indian traditional embroidery.
Geography	Economic Geography, Population Geography, GIS
German	History and Civilization of Dach Laendern German Speaking Countries , Genre, Poetry, Philosophy
History	Traditional knowledge of India (Indology)
Mathematics	Algebra, Analysis, Discrete Mathematics, Number Theory, Operations Research
Marathi	Linguistics, Drama, Modern Marathi literature, (Poetry)
Microbiology	Microbiology, Microbial Biotechnology, Extremophiles, Biodegradation and bioremediation.
Physics	Material Science, Nanotechnology, Energy studies, Quantum mechanics, Electronics.
Physical Education	Handball, Netball, Korfball, Cycling, Hockey, Softball, Baseball, Basketball.
Psychology	Emotional intelligence, Aptitude testing, Psychological wellbeing, Carrier Counseling, Family counseling, Sport Psychology, Parenting and HIV counseling.
Statistics	Survival Analysis, Statistical Quality Control, Logistics regression.
Zoology	Taxonomy- especially related to entomology, Developmental biology and Vermi-technology, Freshwater zoology, Ecology and biogeography of freshwater vertebrates, Hydrobiology and zooplankton culture.

3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

The college organizes lecturer series, panel discussion, workshops and interactive sessions with eminent researchers.

Table 3.5 Lectures of eminent scientist organized in the college

Sr. No.	Name of Scientist/Researcher	Affiliation	Title of session	Date
01	Dr. Suresh Naik	Ex- group director of ISRO	Mangalyaan expedition and opportunities in ISRO	29/02/2016
02	Mr. Deepak Shikarpur	Director, IT Ventures auto line designed software private ltd.	Opportunities in IT	10/11/ 2016
03	Dr. Jyotiram More	Head Department of Geography, JSPM College, Wagholi	Career Opportunities in Geography	10/03/2015
04	Dr. Jyotiram More	Bharatiya Jain Sanghatana, Wagholi, Pune	Career Opportunities in Geography	10/03/2015
05	Dr. Ashok Giri	Scientist, NCL, Pune	Advances in Mass spectroscopy	19/08/2015
06	Dr. Vijay Bhatkar	Founder Executive director of C-DAAC	Application of Advance Technology in Education	28/01/2015
07	Mr. Rajendra Singhji	Waterman of India. Tarun Bharat Sangh	Water conservation	22/10/2015
08	Dr. Shailesh Puntambekar	Medical Director, Galaxy Care Laparoscopy Institute, Pune	Robotics Surgery	29/01/2015

Sr. No.	Name of Scientist/Researcher	Affiliation	Title of session	Date
09	Dr. B. D. Bhole	Dept. of Microbiology, Garware College, Pune.	Role of IQAC in accreditation process	18/04/2014
11	Dr. B. D. Bhole	HoD, Dept. of Microbiology, Abasaheb Garware College, Pune.	Role of IQAC in accreditation process	18/04/2014
12	Dr. Sudipti Banerjee	Former Head, Dept. Of Commerce, University of Calcutta, Kolkata, West Bengal.	Seven criteria of SSR	26/04/2014
13	Dr. Ravindra Jaybhaye	SPPU, Pune	Job Opportunities in Travel and Tourism	12/02/2014
14	Dr. Manchester	Curator, Florida university	Plant Fossils	11/08/2014
15	Dr. Nagnath Kotapalle	Ex. Vice chancellor BAMU	'Mazi Jadan Ghadan'	15/04/2014
16	Dr. Ravindra Jaybhaye	BCUD, SPPU	Job Opportunities in Travel and Tourism	12/02/2014
17	Dr. P. Neeta	NIIT University	Career Opportunities in GIS	18/09/2014
18	Dr.B.D.Bhole	HoD, Dept. Microbiology, Abasaheb Garware College	Research Methodology	2013-2014
19	Dr. A. P. Gore	Vice-president, CYTEL Statistical Software	Statistical Numeracy	18/01/2014
20	Mr. Kushal Bagi	Deutsche Bank	Career in Banking	25/10/2014
21	Dr.V.Parmeswaran	Deputy Director General, NSSO	Statistics in Government sector	29/06/2014
22	Mr.Santosh Payas	Deputy Director, Census Mumbai	Dr. Sukhatme's contribution to statistics	26/07/2014
23	Dr. Raghunath Mashelkar	Ex director, CSIR, Ex director, NCL	Challenges in Higher Education	15/06/2014
24	Dr. Jayant Naralikar	Director, IUCCA Pune	Education in India	25/10/2014
25	Mr. Sanjay Katkar	CTO Quick Heal	Current threats in IT	22/02/2014
26	Mrs. Mrunal Joshi	CEO, NIIT	Explore the world of travel	12/02/2013
27	Dr. Gaikwad S. W.	S.P. College, Pune	Application of GIS	15/10/2013
28	Dr.Ashok Shanbhague	Sardar Vallabhbhai Patel University, Anand, Gujrat	Uniformly minimum Variance Unbiased Estimator	16/03/2013
29	Dr.Onkareshwar Prasad	State Transport Corporation, MH	Use of Statistics in Government	01/05/2013
30	Dr. Arun Nigawekar	Ex. UGC Chairman, Ex. Vice-chancellor Pune University	Autonomy for colleges	15 June 2013
31	Dr. Jagdish Hiremath	Director – Cath lab – Ruby Hall Clinic, Pune.	Cardiac health, diet and stress management	15 June 2013
32	Dr. Manoj Chawan	CDAC	Application of GIS	04/10/2012
33	Mr.Raju Thombare	MINDA industries	Automotive electronics	05/01/2012
34	Dr. Susan Lang	Glasgow Caledonian University, Glasgow, UK	Biofilms	07/02/2012
35	Dr. Christopher Thorpe-Dixon	Plymouth University	Fauna of ephemeral water bodies and discussed about possible collaboration.	01/07/ 2012
36	Dr. Bulganin Mitra and Dr. Kailash Chandra	Senior scientists, Zoological survey of India	A collaborative project on Cerambycidae.	22/10/2015
37	Prof. Anil Dandekar	Principal, Kamataka Jr. college, Pune	Tsunami-In relation to plate tectonic Movements	10/09/2012
38	Dr. Manoj Chawan	CDAC	Application of GIS	04/10/2012
39	Dr.D.G. Naik	Senior scientist, ARI, Pune	Career opportunities in Research	15/12/2012
40	Dr. M. B. Kulkarni	B.Y. K. college, Nasik	Astrology and statistics	23/08/2012
41	Dr. M. N. Deshpande	Institute of Sciences, Nagpur	Statistics and fun	07/09/2012
42	Dr. Mohan Kale	SPPU	Application of Markov chain	12/10/2012

Sr. No.	Name of Scientist/Researcher	Affiliation	Title of session	Date
43	Prof. A. E. Lagad	Ahmed Nagar College, Nagar	Comp.Programming C Prg. Bitwise Operator	16/03/2012
44	Dr. Varsha Deshpande and Dr. Sanyogita Nadkarni	Psychologist and Child psychologist	Current status of Postgraduate syllabus in Psychology	08/01/2011
45	Prof. C.A. Viraktamath	GKVK, Bangalore	the progress of bug taxonomy	24/12/2014
46	Dennis Pamlin	an NGO from Sweden,	The ecological problems and his ideas about solving some of those.	7/10/2011
47	Mrs.Nalini Spareling	From Germany	German Ani Bharat Yanchyatil Shaikshanik Pravas	17/12/2011
48	Dr. Christopher Bartholomew	Dean, Glasgo Caledonian University, Glasgow, UK	Cancer, Diabetes and Stem cells	15/12/2011
49	Dr. Ashok Deshpande	BISC, University of California, Berkeley, USA	Fuzzy Sets and its applications	29/03/2011
50	Dr. Pawan Lingras	Saint Mary's University, Halifax, Canada	Applications of Rough Sets	28/03/2011 29/03/2011
51	Dr. S. R. Chaudhari	Shivaji University, Kolhapur	Introduction to Fuzzy Sets	28/03/2011
52	Mr. R.S. Deodhar	Department of Applied Mathematics, Defense Institute of Advanced Technology, Pune	Introduction to Fuzzy Logic with Applications in Computer Engineering	28/03/2011
53	Dr.Sanjay Kadam	Senior Scientist, C-DAC, Pune	Applications of Artificial Neural Networks	10/08/2011 09/12/2011
54	Mr.Atul Kahate	Sr.Consultant, Oracle Financial Ltd	Web services and application	13/02/2011
55	Dr. Jyoti Yadav	Dept. of Computer Science, SPPU, Pune	Fuzzy Sets and Fuzzy Operations : A primer	28/03/2011
56	Prof. Anjali Pendse	SKNCOE, Pune	Fuzzy Logic and Fuzzy Inference System	29/03/2011
57	Dr Amithabh Joshi	JNCASR, Bangalore	Discussion on DST project	08/08/ 2011
58	Mr. Anand Das	CTO, Pubmatic Pvt. Ltd.	Internet advertising and massive scale Data Processing	12/01/2011
59	Mr. Gautam Rege	Director, Josh Tech.	Ruby on Rails	13/01/2011
60	Ms.Shraddha Joshi	Senior Software Engineer, PSL	Google App Engine, F#	13/01/2011
61	Delegation from Georgia University	Chairperson of Academic section and representatives	Courses and curriculum to enhance the standards of education	09/10/2010
62	Mrs. Anja Hallacker	Chief, DAAD	Opportunities of Higher studies in Germany	09/10/2010

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

Sabbatical/ Special leave is granted to teachers who wish to avail the leave for study/ research purpose. Following teachers have availed such leave in last five years:

Table 3.6 Teachers on FIP

Name of the teacher	Department	Status	Name of the Institute/ University	Period
Dr. Mrs. S. V. Pawar (Bhuyan)	Microbiology	PDF	Helmholtz Centre for Infection Research, Braunschweig, Germany.	16/04/2012 to 15/04/2015
Dr. A. H. Shende	Economics	PDF	Savitribai Phule Pune University	01/08/2009 to 31/07/2011
Prof. Mrs. N. K. Bhandare	Marathi	FIP	Savitribai Phule Pune University	20/02/2013 to 21/02/2015
Prof. S. S. Sakate	Chemistry	FIP	National Chemical Laboratory	25/03/2014 to 24/03/2016
Prof. V. N. Kamble	Geography	FIP	Savitribai Phule Pune University	01/12/2008 to 27/11/2011
Prof. V. N. Gaikwad	Commerce	FIP	Savitribai Phule Pune University	25/10/2012 to 05/04/2014
Prof. R. Bansode	Commerce	FIP	Savitribai Phule Pune University	25/03/2015 to 24/03/2017
Prof. Mrs. S. J. Ahiwale	Commerce	FIP	Savitribai Phule Pune University	25/03/2015 to 24/03/2017

Teachers' participation in research activities has helped the college in following ways.

- Post-doctoral research experience of Dr. Shende has helped to establish research centre in Economics.
- Establishment of linkages for academic and research activities.
- Access to international library and other resources (in the case of German language)
- Framing and revising the current syllabi.
- Participation in workshops/Seminars on understanding contemporary Google educational services, G-trends in teaching.
- Positive impact on learning environment and postgraduate students do apply for studies abroad.

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness / advocating/ transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).

- The college along with the parent body has evolved a policy of patenting the research work done by the faculty and the students. So far, eight teachers and students of our college have participated in the process of applying for Indian and US patents. Proposals have been filed for obtaining Indian and US patents. One of the proposals of patent involves research work done by students of Department of Biotechnology.
- The college has formulated the norms for remunerative consultancy under the guidance of the parent body. This has encouraged the faculty members to undertake consultancy work. Few staff members have been appointed as members on panel of consultancy by the corporate bodies.
- The research done by the Department of Psychology on Psychological Health of PMT drivers and the research done by NSS unit on Socio-economic survey of neighbourhood community are the examples of research leading to the social benefits.

- Department of Biotechnology has conducted research on ‘women health in rural area’ is another example of research work done by the college for the benefit of society.
- Research papers of faculty members and students have been published in referred journals, abstract book and proceedings of the national and international conferences.
- Few staff members have given radio talks, written articles in the newspapers and magazines for the benefit of common people on important subjects.
- Industry-academia meet facilitates the interaction between researchers in the college and the industrial experts.
- Few faculty members have also contributed to the reference books and textbooks published on concerned subjects.

3.2 Resource Mobilization for Research

Synoptic View:

- Financial provisions are made in the institution’s budget for supporting students’ research projects.
- The institution takes special efforts to encourage its faculty to file patents.
- Projects sponsored by the industry / corporate houses are availed by the institution.
- The institution receives quantum of research grants from external agencies for major and minor projects (UGC, ICSSR, ISRO, DST, DBT, and ICMR).
- The institution has recognized Research Centres.

3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

The staff members are encouraged and guided to apply to various funding agencies for research grants. As a result of this, in last five years, the college has been sanctioned total research grant of Rs. 6,27,47,275/- (six cores, twenty seven lac, forty seven thousand, two hundred, and seventy five. In addition to these funds, in last five years, college has provided funding for research to the tune of Rs. 2,85,95,899/- (including student research, equipment, laboratories, conferences, infrastructure). Thus, in all, budgetary provision for research in last five years is Rs. 2,85,95,899/-. This amounts to 30% of the total budget of expenditure other than salary.

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years.

- The college is promoting research amongst undergraduate and Post Graduate students under ‘Yuva Sanshodhak’ scheme by funding the projects (Rs. 50,000/- Per annum) of the students by college under the guidance of faculty members. The finance for student research projects is given through UGC-CPE and UGC-BSR schemes.

- Students are encouraged to participate in research activities like ‘Avishkar’ organized by BCUD, SPPU, International Conference ‘Youth United for voluntary Action’ (YUVA-2013) organized by ‘The Energy and Resource Institute’ (TERI) and ‘Pune Intercollegiate Consortium’ (PICC). For this activity college gives financial assistance.
- The college participates in the project competition ‘Ignited Innovators of India’ (I²I) conducted by COEP, Pune in collaboration with Bhau Institute, Pune .
- In addition to the seed money, the college also provides start-up facilities like library, infrastructure, etc. College library provides different services to the researchers in the college viz., digital library, Wi-Fi, internet, subscribing e-journals and print copies of research journals, plagiarism software, arranging workshops on research methodology, workshops on scientific writing, Ph.D. course work workshops, etc.
- Interdepartmental collaborative facilities are also provided to researchers.

3.2.3 What are the financial provisions made available to support student research projects by students?

The college has taken initiative to promote research amongst undergraduate and post graduate students under ‘Yuva Sanshodhak’ scheme by funding the projects of the students under the guidance of faculty members. The college has made the special budgetary provision for the research activity. The details are as follows:

Table 3.7 (a) Financial Provisions for Student Research by the college for the year 2014-15

Sr. No.	Name of the Department	Title of Project	Amount Sanctioned (Rs.)	Guides
1	Electronics	Resolving the mystery behind the room temperature superconductor : a step towards the noble research	6,000/-	Dr. S. S. Patil Prof. S. R. Chaudhari
2	Biotechnology	Antibiotic resistance profiling and plasmid profiling of Haloarchaea	7,500/-	Dr. Rebecca Thombre
3	Biotechnology	Evaluation of cytotoxic potential of curcumin protein from <i>Jatropha curcas</i> L.	6,000/-	Mrs. Rama Phadke
4	Botany	Nutritional value in <i>Portulaca oleracea</i> L.	9,000/-	Dr. Neeta M. Patil
5	Botany	PCR amplification of fatty acid synthesis genes from (<i>Linum usitatissimum</i> L.)	8,000/-	Dr. Neeta M. Patil Dr. Sagar Datir
6	Botany	Effects of salt stress on physiological and biochemical parameters in rice (<i>Oryza sativa</i> L.)	7,000/-	Dr. Neeta M. Patil Dr. Sagar Datir
7	Botany	Study of effect of different light sources on growth of marine microalgae <i>Nannochloropsis salina</i>	7,000/-	Dr. K. D. Gopale
8	Botany	Low cost LED illuminator for student microscope	6,000/-	Dr. U.R. Wayase
9	Microbiology	Isolation, characterization and enzymatic profiling of bacteria isolated from snake gut	6,000/-	Mrs. Sheetal Pardeshi
10	Microbiology	Characterization and agricultural application of nanoparticles synthesized by microorganisms isolated from rhizosphere	6,500/-	Mrs. Shradha Boid
Total			69,000/-	

Table 3.7 (b) Financial Provisions for Student Research by the college for the year 2013 -14

Sr. No.	Name of the Department	Title of Project	Amount Sanctioned in Rs.	Guide of the students
1	Electronics	Systematic survey and experimentations to establish e – waste management centre in Modern College Shivajinagar, Pune – 5	5,000/-	Prof. S. R. Chaudhari
2	Chemistry	The separation of L – Cysteine derived diastereomers by differential solubility method using L – (+) – Tartaric acid	5,000/-	Mr. R. M. Jagtap
3	Biotechnology	Isolation, Purification and Characterization of Lectin protein from Plant seeds.	4,000/-	Mrs. Rama Phadake
4	Botany	Study of effect of different culture media on growth of marine Microalgae <i>Tetraselmis</i> sps. and <i>Nannochloropsis salina</i> .	6,000/-	Dr. K.D. Gopale
5	Botany	Development of an effective phytoremediation technology for chemicals (metals) emitted by Chemistry department of Modern College Shivajinagar, Pune – 5	7,000/-	Dr. N.M. Patil
6	Botany	Assessment of genetic diversity in Rice varieties	5,000/-	Dr. N.M. Patil
7	Psychology	Study on PMPML Bus-Drivers personality, Stress and Addictions	5,000/-	Prof. Sairaj M. Patki
8	Psychology	Comparative study of Arts, Science and Commerce students on Personality and Adjustment from Jalana City	5,000/-	Prof. Shradha Sakatkar
9	Economics	Impact of e –shopping on Consumer Behavior	4,000/-	Dr. M. M. Satam
10	NSS	Socio – economic survey of neighborhood community	4,000/-	Prof. P.S. Varade
Total Amount			50,000/-	

3.1.4 How does the various department(s)/unit(s)/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful Endeavours and challenges faced in organizing interdisciplinary research.

The college makes special efforts in case of interdisciplinary research needs. RMC provides a platform for such interdisciplinary projects and helps in coordinating with different departments and teachers. There are a few examples where such an exercise was carried out.

- A research project entitled “Bio-ecological and Bio-chemical Approach to Assess Bryophytes - Pigmy Locust Association” sanctioned by DST for the year 2011-2014. This project was carried out jointly by department of Botany and Department of Zoology.
- Another interdisciplinary research project undertaken was ‘Developing a Digital Herbarium of Angiosperm Plants of the Western Ghat Regions of Maharashtra’. This project was carried out jointly by Department of Botany and Department of Computer Science.
- Another example is project entitled ‘Assessment of factors impacting Natural Resources and Biodiversity in Tamhini Region of Western Ghats and to identify strategies for conservation of this ecosystem’. This project is submitted to the Ministry of Environment of Forest and Climate Change, government of India. This project will be carried out jointly by the Department of Botany and Department of Geography.

The faculty and students of Department of Biotechnology has collaborations with different department viz., Department of Botany, Department of Chemistry, Department of Microbiology, etc.

3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- Usually the equipment purchased by departments are used during their regular practical sessions and research projects. The students from other departments of our college can also use the equipment with the permission of HoDs.
- College has created central research facilities having high-end equipment in its *Centre for Promotion of Research (CPR)*.
- College runs in three sessions, which enables optimal use of various equipment and research facilities.
- The departmental equipment are made available to the neighboring college students to carry out specific work. e.g. a student from Government College of Engineering (COEP) of Pune, Miss. Yogeshwari Sonawane, carried out an experiment by using Bomb Calorimeter in the Department of Botany.

3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

The college receives funding under various schemes from government funding agencies like UGC, DBT, DST, ISRO, etc. Total funds raised in the last five years, was rupees Six core, Twenty seven lakhs, seventy two thousand, two hundred seventy five (Rs. 6,27,70,275/-). The details of funds received and equipment/facilities developed are as follows:

Table 3.8 Funds received by college in last 6 years

Sr. No.	Funding Agency/Scheme	Purpose	Amount (Rs.)
1	Community College (2015-17)	Dress designing and tailoring course	46,00,000/-
2	XIIth plan (2013-2014)	Instruments/Equipment	35,41,550/-
3	Additional assistance to the Colleges already covered under section 12B: (2012-2013)	Infrastructure	50,00,000/-
4	DBT Star College Scheme (2012-2013)	Instruments/Equipment	47,00,000/-
5	XIth plan (2011-2012)	Instruments/Equipment	4,94,928/-
6	XIth plan (2011-2012) Additional assistance	Instruments/Equipment	20,00,000/-
7	UGC:BSR (2011-2012) Phase I	Up gradation of basic laboratory infrastructure	45,00,000/-
8	UGC:CPE (2011-2012)	Instruments/Equipment	1,00,00,000/-
9	DST:FIST (2011-2012)	Instruments/Equipment/Renovation of labs/books	46,50,000/-
10	UGC (Major and Minor) (2011-2016)	Research Work	33,47,250/-
11	DST (Major) (2011-2016)	Research Work	63,52,500/-
12	ICSSR (2011-2012)	Workshop/Project	20,00,000/-
13	XIth plan (2010-2011)	Instruments/Equipment	18,76,714/-

Sr. No.	Funding Agency/Scheme	Purpose	Amount (Rs.)
14	UGC:NAAC (2010-2011)	Instruments/Equipment (One Time Grant)	10, 00,000/-
15	ISRO(MRP) (2010-2013)	Research work	22,00,000/-
16	NASA(National Academy of Statistical Administration) (2010-2011)	Training Programme	5,90,410/-
17	SSPU BCUD Res. Pro. (2010-2016)	Research and Instruments	25,95,000/-
18	SSPU, BCUD QIP (2010-2016)	Conferences/Workshop/Seminars	21,68,000/-
19	CSIR	Research work	22,08,923/-
20	NABARD	Conference/Workshop	75,000/-
21	ICAR	Conference/Workshop	2,00,000/-
22	Inspire Scholarship for students	Research Project by students	6,00,000/-
23	Avishkar State Level Research Project Competition (SPPU)	Research Project Competition	50,000/-
Total			Rs. 6,27,70,275/-

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

- Through, staff meetings the RMC disseminates information about funds available from various funding agencies. Necessary support is provided to teachers to prepare the proposal and its submission.
- The RMC/IQAC also helps in purchasing equipment through research funding. Details of ongoing and completed projects and grant received during the past five years are given below:

Table 3.9 Details of ongoing and completed projects and grant received

Major/Minor	Name of the funding agency	Total projects sanctioned	Total grants (Rs.)		Total grants received till date
			Sanctioned	Received	
Minor Projects (Completed)	UGC	6	7,15,000/-	7,15,000/-	7,15,000/-
	BCUD	4	8,60,000/-	8,60,000/-	8,60,000/-
Major Projects (Completed)	UGC	2	22,67,250/-	22,67,250/-	22,67,250/-
	ICSSR	1	8,00,000/-	8,00,000/-	8,00,000/-
	ISRO	1	17,00,000/-	17,00,000/-	17,00,000/-
	CSIR	1	17,00,000/-	17,00,000/-	17,00,000/-
	DST	1	39,52,500/-	39,52,500/-	39,52,500/-
Major Projects (Ongoing)	UGC	1	3,35,000/-	2,00,000/-	2,00,000/-
	BCUD	12	19,65,000/-	9,82,500/-	4,91,250/-
	ICSSR	1	17,00,000/-	17,00,000/-	17,00,000/-
	DST	1	24,00,000/-	24,00,000/-	24,00,000/-
Interdisciplinary Projects(Proposed)	MoEF	1	60,78,400/-	-	-
Industry Sponsored	-	-	-	-	-
Students' Research Projects (Completed)	College	20	1,19,000/-	1,19,000/-	1,19,000/-

3.3 Research Facilities

Synoptic View:

- Efforts are made by the institution to improve its infrastructure requirements to facilitate research.
- Residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research fellows of various academies and visiting scientists (national/international) are available.
- The institution has a specialized research centre/ workstation on-campus and off-campus to address the special challenges of research programmes.
- The institution has centres of national and international recognition/repute.
- Research facilities are enhanced through research projects.

3.3.1 What are the research facilities available to the students and research scholars within the campus?

- Six departments are recognized as research centres by University of Pune. (Botany, Zoology, Commerce, Marathi, Economics and Electronic science) and recognition of three Departments (Biotechnology, Microbiology and Chemistry) as research Centre is in process. Life Science research centre is on autonomous basis.
- Well-equipped research laboratories.
- Subscription of national and international research journals in the library.
- Additional resources like 'INFLIBNET' are available to teachers and researchers.
- Central Network Resource Centre/Computational Centres and unlimited access for students.
- Statistical Packages for social sciences and software for data analysis were available in statistics department.

Special Equipment:

Chemical Sciences: Fume-hoods for Chemistry Laboratories:02, Digital Polarimeter (Research Model), 2. Digital Fluorimeter (Elico), 3. Thermogravimetric analysis instrument, 4. Rota evaporator with water bath (Buchi Type)
Physical Sciences: Flow Transducer Trainer Kit, Digital Storage Oscilloscope (DSO) :2 , Zeeman Effect Apparatus, Optical Pyrometer :4
Life Sciences: PCR: 2, Fermenter: 1, Well equipped Plant tissue culture Laboratories: 2, Well equipped Animal Tissue culture Laboratory: 1, UV-Visible Spectrophotometers: 6, CO ₂ Incubators: 2, Inverted 'Research Microscopes': 3, Dissecting 'Research Microscopes (Leica)':2, HPLC: 2, Rota evaporator: 2, Phase contrast microscope: 1 Bomb calorimeter: 1, Cooling Centrifuge: 5, Deep freezer: 3, Blood Analyzer: 1, Gel Documentation System: 1, Elisa Reader: 1 , Environment test Chamber: 1, Well equipped microbial culture laboratories
Social Sciences: L.C.D. Projector, Digital Theodolite 2 seconds accuracy with aluminum Stand SETL make, Galton Bar, Habit Interference Board, Wrights for constant method with turn table (set of 6 weights std 200 gr), Koh's Block Design test, Binet Kamat Test-Marathi, Binet Kamat Test-English, Study habit inventory- English, Study habit Marathi,

BaquerMehd-Non verbal test of creativity thinking-combined, Jai Prakash and Srivastava-Teaching aptitude test- Hindi, Singh and Sharma-Teaching aptitude test battery- Hindi, Mangal teacher adjustment inventory-Hindi, Mangal teacher adjustment inventory-English, Chauhan and Arora et al Attitude scale – Hindi, Memory drum using Stepper motor and Electronic Controller, Stop clock, Maze Stylus (equated), David's of Battery of Differential Abilities (DBDA), Natu and Wadekar Attitude towards the mother scale-English, Chauhan and Sharma- The Parent child relationship scale-Hindi, R.B. Cattle and Cattle- 'HSPQ' English form A, Vohra-Levenson's Scale for Locus of control Indian Adaptation-English, Dhar and Jain- Type A/B Behavioral Pattern scale-English, Bharadwaj-Aggression scale-English, Hindi, I AM CD software for intelligence and aptitude measurement, Computer spares, Printer, Headphone with Mic, Mc-Dougalls Disc Apparatus (with manual), Recognition photos- set of 40, JPIP test of scholastic ability level II (Std VII and VIII), Et al Attitude scale- English, Natu and Wadekar Attitude towards the mother scale-English, Chaterjee-Non-verbal Preference Record 'Form 962', J. Bharat Raj Medico Psychological questionnaire-English, Only key for 'Multi-Dimensional parenting scale-English, Interest Inventory-English, Interest Inventory- Marathi, Adjustment Inventory-English, Adjustment Inventory-Marathi

Languages: Language laboratory software's in English department

The lists of recognized M. Phil/ Ph. D. Guides in the College are as follows:

Table 3.10 M.Phil./Ph.D. guides

No.	Name	Subjects	Period of recognition
1.	Dr. R. S. Zunjarrao	Botany	29/08/2013 to 30/08/2021
2.	Dr. Mrs. N. M. Patil	Botany	08/05/2012 to 07/05/2020
3.	Dr. Mrs. S. S. Puranik	Zoology	21/02/2013 to 20/02/2021
4.	Dr. H. V. Ghatge	Zoology	19/06/2009 to 18/06/2017
5.	Dr. Y. R. Waghmare	Commerce	14/03/2012 to 13/03/2020
6.	Dr. A. V. Kamble	Commerce	24/11/2012 to 23/11/2020
7.	Dr. Mrs. M. M. Satam	Economics	23/04/2010 to 22/04/2018
8.	Dr. Mrs. S. L. Taware	Marathi	20/03/2012 to 19/03/2020
9.	Dr. Mrs. Sanjivani Rahane	Commerce	17/08/2012 to 16/08/2020
10	Dr. R. B. Barmukh	Botany	20/02/2015 to 19/02/2023
11	Dr. Mrs. S. S. Muzumdar	Microbiology	08/05/2015 to 07/05/2020
12	Dr. A. H. Shende	Economics	19/01/2010 to 18/01/2015

Table 3.11 Associated guides

Sr. No.	Name of the Guides	Department	Sr. No.	Name of the Guides	Department
01	Dr. Shobha Dadlani	Commerce	11	Dr. S. B. Patil	Zoology
02	Dr. Waman Mohan	Botany	12	Dr. Shobha Patil	Marathi
03	Dr. Mahendra Khyade	Botany	13	Dr. Mahadev Walunj	Marathi
04	Dr. Mrs. Nivedita Ghayal	Botany	14	Dr. Shobha Ingole	Marathi
05	Dr. V. A. Patil	Botany	15	Dr. Madhukar Mokashi	Marathi
06	Dr. Mrs. Pradnya P. Ghanekar	Microbiology	16	Dr. Ramchandra Rasal	Marathi
07	Dr. Subash Devlu Pawar	Commerce	17	Dr. Rekha Deshpande	Marathi
08	Dr. Vibhdra Santukrao	Commerce	18	Dr. Madhavi Kharat	Marathi
09	Dr. Sanjay S. Kharat	Zoology	19	Dr. Jaya Kadam	Marathi

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging area of research?

- Every year college has been organizing international conference, national

conference, State level conferences and workshops for the benefit of teachers.

- Teachers are motivated to participate in the seminars, conferences, symposia and workshops organized by other Institutes.
- Teachers are motivated to do research for M.Phil., Ph.D. and also to apply for research project funding.
- Guidance session for teachers is organized to write the research proposal.
- Teachers are encouraged to take benefit of UGC FIP for doing their Ph. D. degree.
- The strategy of college is to identify budding researchers amongst teachers and students and provide resources as well as seed money through ‘Yuva Sanshodhak Scheme’.

3.3.3 Has the institution received any special grants for finances from the industry or other beneficiary agency for developing research facility? If ‘Yes’, what are the instruments/ facilities created during the last four years.

Yes, The College has received financial assistance under various schemes from UGC, DBT and DST. The details of research facilities created are as follows:

Table 3.12 Research facilities created

Funding Agency	Research Facilities
UGC-XI Additional grant	DLP projectors, LCD monitors, Laptops (commerce), Laptop, DLP projectors (2), Desktop PC (library), DLP projectors,
DST-FIST Scheme	Digital electronic balance (3), Double beam UV- Vis Spectrophotometer, UV-transilluminator, High speed refrigerated microcentrifuge, Leica microsystem, Electronic balance, Polarimeter, research model, abrefractometer, Visible spectrometer/ spectrophotometer, fluorimeter (digital), Digital potentiometer, microprocessor colorimeter (4), Compound microscope and pH meter (11), Computer spares and antivirus software(8), HP monolaser printer, LabVIEW software, Development board for picture microcontrollers and communication boards (8), Analogue input- output module (4), Platforms and accessories for robotic research, VLSI boards (7), Processor based development board and ADC, DAC interfacing card (3), Digital signal processor, Wi-Fi router, Digital thermometer, altimeter and Barometer (4), Digital theodolite, Flow transducer trainer kit, optical pyrometer, air compressor, tachometer, control CPU (6), Single beam UV- Vis spectrophotometer with software (11), Mini- submarine gel electrophoresis unit and mini vertical electrophoresis unit, Canon digital camera and accessories for photomicrography
UGC-CPE Scheme	Laptop with antivirus software, DLP projectors, Printer (HP), Tally (Commerce), DLP projectors (20), Online test software, Blood analyzer Botany/ Biotechnology, Multifunction DAQ bus, Phase contrast microscope, Laminar air flow, Gel rocker, Digital video camcorder, Bacteriological incubator, Water analysis kit, soil analysis kit, laser Diode laser 5, Digital multimeter, voltmeter 23, SLR camera and telescope, Telescope, prisms, SPSS, Antivirus software, spares, printers, headphones, Software and test material, DLP projector, Laptop and antivirus, Printer, Solar power plant, Solar power plant, Solar distilled water plant, Printers and scanners, Compound microscopes, pH meter, colorimeter, water bath, laminar air flow, UV spectrophotometer, Desktop PC with antivirus (10), Microscope with fluorescent attachment(7), Vertical gel electrophoresis unit and mini submarine gel unit, pipettes
DBT STAR College Scheme	Binocular microscope (7), Vis spectrophotometer (2), Photo colorimeter (2), Electronic balance (2), Micropipettes (5), Monocular Magnus microscopes (10), Thermostatic water bath, Olympus student microscopes (10), pH meter (2), Micropipettes, Vertical gel electrophoresis unit, Binocular microscope (10), Photo colorimeter (4), Electronic balance (4), Monocular Magnus microscopes (11), Thermostatic water bath (2), Olympus student microscopes (11), pH meter (3), Micropipettes, Photo colorimeter, Micropipette (10), Rotary shaker, Olympus student microscopes (14), Electronic balance (2), Monocular Magnus

	microscopes (14), Programmable micro-centrifuge, pH meter (3), Vertical autoclave, Incubator, UV- transilluminator, Photo colorimeter, Electronic balance (3), Monocular Magnus microscopes (11), Micropipettes (5), Olympus student microscopes (11), pH meter, Micropipettes,
UGC BSR	Desktop computers(12), LCD projector, LED monitors (40), Software (.NET commercial(1), academic(5), Software WIN 8 SL (6), Antivirus software Quick heal

3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?

UG and PG students are assigned research projects/dissertations. Some part of their dissertation (Testing/analysis) is carried out at University laboratories as well as other laboratories national institutes like NCL, ARI, IISER, etc. The College teachers take all necessary efforts to ensure that facilities are made available in other institutes/ universities, which include FTIR, SEM, TEM, XRD, LCMS, GCMS, NMR, etc.

The research facilities available in the Department of Biotechnology were made available to the students of College of Agricultural Biotechnology, Paud.

3.3.5 Provide details on the library / information resource center or any other facilities available specifically for the researchers?

- Internet facility is provided to all research scholars (Wi-Fi facility), eBooks and eJournals Digital Library.
- The college is member of N-LIST-INFLIBNET.
- In Economics Research Centre, Research Journal are available. Economic Times, Financial express, EPW etc. are available for reference.
- In Marathi Research Centre, Research Journal and reference books are available e.g. *Lalit, Navbharat, Maharashtra Sahitya Patrika, Ruchi* etc.

3.3.6 What are the collaborative researches facilities developed / created by the research institutes in the college? For ex. Laboratories, library, instruments, computers, new technology etc.

- Individual research workers are encouraged to collaborate, the actual collaboration between the College and the other Institution. For example, *Dr. H.V. Ghate* of Zoology, through his collaboration with *Dr. Y. S. Shouche* of National Centre for Cell Science, has obtained grants for college from department of Biotechnology, New Delhi, and it is treated as collaboration between Modern College and NCCS, Pune.
- At individual level also, there is an ongoing collaborative work (person-to- person interaction) going on in Zoology department. Here also the institution benefits as the publication carries the name of the Modern College. *Dr.H.V.Ghate* is having long-term collaboration with the *Prof Lech Borowiec* and *Dr. Jolanta Swietojanska* (University of Wroclaw, Poland). Several papers have been published jointly in the last 5 years. These include descriptions of new species of Cassidinae beetles as well as a very comprehensive paper on larval morphology in a book devoted to this group of insects.

- Dr. H. V. Ghate collaborated with *Dr. Nikolai Orlov* of Russia in describing a few new species of frogs from India and South East Asia. A major paper on this work has been published in the Russian Journal of *Herpetology* is one of the leading journals in the field.
- A collaborative work with *Dr. Roger Roy* of Natural History Museum, Paris, has also produced a paper describing a new species of Mantodea. Further collaborative work is in progress. All these papers have been published in International Journals.
- In addition, Dr. Ghate has collaboration with Dr. T.K. Mukherjee (Kolkata) and so far three papers have been published and two are in preparation. Dr. Ghate also has collaboration with Zoological Society of India Scientist P.M. Sureshan and again a series of papers have been published in collaboration.
- Collaborative effort generated scientific data under Tiger Project at Sri Sailam, Andhra Pradesh. Dr. Thulsi Rao, Co-ordinator of Project Tiger had invited Dr. Ghate to collaborate on insect diversity in their project. Papers have also been published from this project. These papers have been published in refereed foreign as well as Indian journals.
- Another collaboration that is ongoing for the past five years is between H.V. Ghate and Y.S. Shouche and Milind Patole of NCCS (National Centre for Cell Science), Pune. Through a DBT funded project, they are looking at the microbial symbionts of insects and also molecular phylogeny of these microbes.
- The second project involves DNA Barcoding of Butterflies of Western Ghats. Both of them are “front-line” areas of research all over the world. A couple of papers have been published during this collaboration in International Journals.
 - A new autonomous laboratory for **Life Science Research Centre** has been developed in the Department of Biotechnology. The following instruments have been purchased in the Research Centre: Fluorescence Microscope with Phase contrast attachment (Olympus), Incubator Shaker (Remi), Incubator (Remi), Hot Air Oven(Remi), pH meter, Micro weighing balance (Contech), Microwave oven (Samsung), Horizontal Gel Electrophoresis (BioEra), Vertical Gel electrophoresis (BioEra), Variable Power Pack (BioEra), Computer with Printer, DGGA Differential Gel Gradient
- Ten new computers were purchased for Bioinformatics laboratory
- CPE and BSR FIST fund are being used to enrich research facility (equipment) through research projects. Common Computing Centre with internet facility under FIST funds is established in the Department of Electronic Science and Life Science Research laboratory.
- Digital library and virtual laboratory have been established, subscriptions to research journals have been increased and efforts for publication of research annuals are being made and conferences also have been organized.

3.4 Research Publications and Awards

Synoptic View:

• Significant faculty involvement in research is evident. • The institution has an official Code of Ethics to check malpractices and plagiarism in research. • Interdepartmental / interdisciplinary research projects are undertaken. • The institution has instituted research awards. • Incentives are given to the faculty for receiving state, national and international recognition for research contributions. • Research awards and recognition are received by the faculty and students from reputed professional bodies and agencies. • Output in terms of M.Phil., Ph.D. students is significant. • The institution has received research recognition and awards (including patents). • The institution's research has contributed to the industry's requirements/ productivity. • A significant number of research articles are published in reputed/ refereed journals. • The institution has published books and proceedings based on research work of its faculty. • The institution is acclaimed for its research as evidenced by metrics such as Citation Index, Impact Factor, h-index, etc.

3.4.1 Highlight the major research achievements of the staff and students in terms of Patents filed (process and product) Original research contributing to product improvement Research studies or surveys benefiting the community or improving the services. Research inputs contributing to new initiatives and social development.

Table 3.13 Patent obtained / filed (product / process patent)

Inventors/Teachers	Title	Date of filling and registration No.	Date of Award	Status
Dr. Mrs. Shilpa Mujumdar,	Plasmid encoding IAA and a method there of	28 th April 2004 20050070435	6 th January 2007 US Patent No. 834698	Obtained
Dr. Mrs. Rebecca Thombre	Method for synthesis for biostabilized silver nanoparticles using water hyacinth	10 th October, 2014 3223/MUM/2014	-	Filed

- The department of Psychology conducts Counseling Camp for the neighborhood community to eliminate/reduce the psychological distress. The M.A. Part II students in collaboration with the Pragati Foundation Group Testing and Career Awareness provided psychological testing and career awareness sessions to the children of brick-kiln laborers.
- Our NSS unit under the banner of 'Drushti' conducted few workshops for blind students for making them aware of various schemes by the state government. A workshop on mathematics was also conducted for the blind students preparing for competitive examinations.
- Financial literacy campaign was conducted for the students, staff, neighbouring community and schoolchildren on Friday 17th Jan 2014. The aim of the campaign was to create awareness about Banking functions, services and techniques. About 130 students participated and shared their

knowledge with the parents, neighbouring society women and young school children on the subject like functions of bank, types of accounts, types of cheques, various currencies of the world, RBI policy, insurance policies, Maha Bank, NABARD, Stock Exchange, etc. and importance of financial awareness for development.

- Dr. Sudhir Ujalambkar conducted a special workshop on ‘preparation of home based products’ such as phenyl for cleaning floor. This training was offered free of cost. About 200 women participated in this workshop.
- Prof. R N Ingole from the Department of Botany conducted three free of cost workshops on preparation of ‘Herbal Cosmetics’ for women. Preference based admission in the college to the students from Police Colony. Free guidance sessions for preliminary preparations for competitive examinations like MPSC, UPSC etc. are arranged for students from Police colony. A separate study room and required books are made available for these students.

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

Yes. The college publishes RESECO: Annual Research Journal in Economics. It is listed as ISSN 2395-6860. The composition of editorial board is as follows:

Table 3.14 Composition of editorial board of RESECO

Sr. No.	Name	Designation	Sr. No.	Name	Designation
01	Prof. Dr. Gajana R. Ekbote	Chief Patron	09	Prof. S. S. Deshmukh	Editorial Advisor
02	Prof. P. S. Chirputkar	Patrons	10	Dr. Madhu Satam	Editor-in -Chief
03	Prof. Mrs. Jyotsna G. Ekbote	Patrons	11	Prof. Sandhya Vartak	Member
04	Dr. A. K. Pande	Patrons	12	Prof. Padmashri Mujumdar	Member
05	Dr. S. Y. Paranjpe	Chief Editorial Advisor	13	Prof. Sameer Thakur	Member
06	Prof. Dr. Rajendra S. Zunjarrao	Editorial Advisor	14	Dr. Suresh Avhad	Member
07	Dr. Nayana Kulkarni	Editorial Advisor	15	Dr. Abhay Shende	Member
08	Prof. A. G. Gosavi	Editorial Advisor	16	Dr. Suresh Deshmukh	Member

- In addition to the publication of above journal, the college has partnered in publication of following Research Journals:
 - Environment Observer: National Conference on Hazardous e-Waste Management –December 2013, ISSN: 2320-5997. Vol. 17.
 - Environment Observer: International Conference on Environment Conservation by Adopting New Technologies – January 2014, ISSN 2320-5997 Vol. 18.
 - International journal of current microbiology and applied sciences ISSN: 2319-7706.

- The parent body i.e. Progression Education Society also publishes the research journal entitled, “*Dnyanomay*” a peer reviewed quarterly research journal with ISSN No.2395-7484 in which three members of staff from college are on the editorial board.

Table 3.15 Composition of editorial board of ‘Dnyanomay’

Sr. No.	Name	Designation	Sr. No.	Name	Designation
01	Prof. Dr. Gajana R. Ekbote	Chief Editor	08	Prof. Dr. Sunita Adhav	Member
02	Prof. Mrs. Jyotsna G. Ekbote	Member	09	Prof. Dr. Vijayalaxmi Srinivas	Member
03	Prof. Prakash G. Dixit	Member	10	Prof. Dr. Shashikant Dhole	Member
04	Prof. Dr. Rajendra S. Zunjarrao	Member	11	Prof. Dr. Shubhangi Walvekar	Member
05	Prof. Dr. Kalyani R. Joshi	Member	12	Prof. Nivedita G. Ekbote	Member
06	Prof. Dr. Sanjay S. Kharat	Member	13	Prof. Shamkant S. Deshmukh	Convener
07	Prof. Dr. Pravin D. Chaudhari	Member			

3.4.3 Give details of publications by the faculty and students.

Table 3.16 Books published by faculty

Sr. No.	Name of the Faculty	Books/ Chapters in Book			Total
		International	National	Book articles	
1	Prof. Gauri Khire	-	1	-	2
2	Prof. Namrata Gadgil	-	3	-	4
3	Dr. Thombre Rebecca	-	-	2	2
4	Dr. R.S. Zunjarrao	1	2	-	3
5	Dr. K.D. Gopale	1	-	-	1
6	Prof. Sangeeta Mavale	-	1	-	1
7	Dr. M.M. Satam	-	3	-	3
8	Dr. A. H. Shende	-	1	-	1
9	Dr.Mrs. N.J.Kulkarni	-	6	-	6
10	Dr. A. E. Sonawane	-	1	-	1
11	Prof. Sanjeevani Kuvalekar	-	4	-	4
12	Dr. Rajesh Kulkarni	-	8	-	8
13	Dr. Snehal Tawre	-	15	7	22
14	Dr. Madhura Koranne	-	3	1	4
15	Dr. Vijayantimala Jadhav	-	-	1	1
16	Dr. G. R. Apine	-	-	1	1
17	Dr. Shilpa Mujumdar	-	-	2	2
18	Dr. Smita Bhuyan	-	-	4	4
19	Prof. Sheetal Pardeshi	-	-	1	1
20	Prof. P. G. Dixit	-	37	-	37
21	Prof. P.S. Kapre	-	9	-	9
22	Prof. Mrs. A. S. Sardesai	-	8	-	8
23	Prof. S. A. Deshmukh	-	2	-	2
24	Prof. Mrs. J. D. Pawar	-	1	-	1
25	Dr. Perna Ubale	-	3	-	3

Table 3.17 Research Paper publications by staff

	Name of the faculty	International	National	Proceedings	Total Publication	Impact factor	Citation	H-index	SNIP/SJR
1	Prof. Nilesh Pardeshi	1	-	-	01	3.5	1	1	-
2	Dr. S. S. Patil	18	-	09	27	46.2	153	7	-
3	Dr. V. S. Waman	30	-	09	39	47	142	6	-
4	Dr. Amruta Oke	-	-	02	02	-	-	-	-
5	Prof. Vijaya Jagtap	-	-	01	01	-	-	-	-
6	Prof. Smita Vaidya	-	-	02	02	-	-	2	-
7	Prof. Mrs. Shradha Sakatkar	-	-	02	02	-	-	2	-
8	Dr. Sairaj Patki	1	-	04	05	-	-	1	-
9	Prof. R. D. Bansode	1	3	-	-	-	-	-	-
10	Prof. Rasika Date	1	3	5	09	-	-	-	-
11	Dr. Mrs. N. J. Kulkarni	1	-	1	02	-	-	-	-
12	Dr. A. E. Sonawane	-	5	-	-	-	-	-	-
13	Dr. Snehal Taware	4	5	-	09	-	-	-	-
14	Dr. Madhura Korranne	3	-	-	03	-	-	-	-
15	Vaijayantimala Jaqdhav	1	2	-	03	-	-	-	-
16	Dr. G. R. Apine	2	-	-	02	-	-	-	-
17	Prof. P. G. Dixit	-	1	11	12	-	-	-	-
18	Prof. Mrs. A. T. Kamble	5	-	-	-	-	-	-	-
19	Lawly Das	2	3	-	05	-	-	-	-
20	Amol Shinde	1	1	-	02	-	2	1	-
21	Prof. Vaibhav Thakre	1	-	-	01	-	-	-	-
22	Prof. Gauri Khire	1	-	-	01	-	-	-	-
23	Prof. Namrata Gadgil	-	1	-	01	-	-	-	-
24	Dr. Mrs. Bhagat Sangeeta	1	-	9	11	-	-	-	-
25	Dr. Mrs. Thombre Rebecca	13	9	37	59	8.2	36	3	-
26	Dr. Mrs. Litake Geetanjali	6	3	6	15	-	161	6	-
27	Prof. Mrs. Rama Phadke	-	-	12	12	-	-	-	-
20	Miss. Radhika Oke	3	-	2	05	8.2	-	-	-
28	Dr. Sangeeta Sathey	3	-	-	03	-	210	4	-
29	Prof. Kanekar Pardnya	2	-	-	02	7.6	1254	19	-
30	Dr. R. S. Zunjarrao	4	5	1	10	4.2	40	3	-
31	Dr. Mrs. N. M. Patil	9	5	1	14	-	25	3	-
32	Dr. R. B. Barmukh	2	-	1	03	-	73	4	-
32	Dr. U. R. Wayse	1	-	2	03	0.56	1	-	-
33	Prof. Mrs. A. P. Kulkarni	4	-	-	04	0.92	40	3	-
34	Dr. K. D. Gopale	3	3	1	07	3.8	2	3	-
35	Dr. Mrs. S. D. Joag	2	-	1	03	1.12	-	-	-
36	Prof. H. K. Gaikwad	8	-	-	08	-	-	-	-
37	Prof. S. S. Sakate	3	-	4	07	-	110	5	-
38	Prof. R. M. Jagtap	2	-	3	05	5.26	-	-	-
39	Dr. Kunda Gaikwad	4	-	2	06	2.25	-	-	-
40	Dr. H. V. Ghate	60	45	6	11	-	601	-	-
41	Dr. Yugandhar Shinde	2	-	-	02	-	3	1	-
42	Prof. Pradnya Kanekar	69	11	65	145	-	1342	21	-
43	Dr. Mrs. Shilpa Muzumdar	13	2	11	26	-	40	16	-
44	Dr. Smita Bhuyan	4	2	3	09	4.5	28	3	-
45	Prof. Mrs. Sheetal Pardeshi	2	-	1	03	-	-	-	-
46	Prof. Anushka Devale	3	-	-	03	-	-	-	-
47	Prof. Rupali Sawant	1	-	-	01	-	-	-	-

	Name of the faculty	International	National	Proceedings	Total Publication	Impact factor	Citation	H-index	SNIP/SJR
48	Prof. Madhuri Kothawade	2	-	-	02	-	-	-	-
49	Prof. Sharadha Bashetti	1	2	-	03	-	-	-	-
50	Prof. Miss. Jyoti Mohite	1	1	-	02	-	-	-	-
51	Prof. Nileshkumar Pardeshi	1	-	-	01	3.5	1	1	-
52	Prof. S. R. Hirve	2	-	2	04	-	-	-	-
53	Prof. S. S. Deshmukh	1	-	-	01	-	-	-	-
54	Prof. Jyoti Mohite	1	1	-	02	-	-	-	-
55	Dr. M. M. Satam	4	8	12	24	-	-	-	-
56	Dr. A. H. Shende	-	11	-	11	-	-	-	-
57	Prof. Shilpa Pund	2	-	1	03	2.157	6	2	-
58	Prof. Anjali Sardesai	2	-	4	06	5.173	6	1	0.552
59	Prof. Kalyani Salla	2	-	3	05	4.089	3	1	-
60	Prof. Madhuri Ghanekar	-	-	2	02	-	-	-	-
61	Dr. Snehal Tawre	4	5	-	09	-	-	-	-
62	Prof. Mrs. Nisha Bhandare	-	-	1	01	-	-	-	-
63	Dr. Madhura Koranne	0	3	-	03	-	-	-	-
64	Dr. Vijayantimala Jadhav	1	2	-	03	-	-	-	-
65	Dr. G. R. Apine	0	2	-	02	-	-	-	-
66	Dr. Rajesh Kulkarni	-	-	1	01	-	-	-	-
67	Dr. M. K. Admane	-	-	3	03	-	-	-	-
68	Prof. Sunita D Purohit	2	2	-	04	-	-	-	-
69	Dr. Prerana Ubale	2	3	-	05	-	-	-	-
70	Prof. Philomena R. Fernandes	-	-	3	03	-	-	-	-
71	Prof. Niketan Shet	-	-	3	03	-	-	-	-
72	Dr. A. V. Kamble	-	3	-	-	-	-	-	-
73	Prof. S.R. Chaudhari	1	2	2	05	-	-	-	-
74	Prof. T.B. Sonawane	4	2	1	07	7.921	2	1	-
75	Prof. T.R. Kumbhar	2	-	-	02	1.1	2	1	-
76	Prof. M.R. Bodke	3	2	-	05	-	-	-	-
77	Prof. P.S. Varade	-	1	1	02	-	-	-	-
78	Prof. R.V. Vidap	3	0	7	10	6.277	6	1	-

3.4.4 Provide details (if any) of Research awards received by the faculty Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally.

Research awards received by the faculty/students are as follows:

Table 3.18 Research awards received by the faculty/ students

Name of Teacher	Title of Awards/Honor	Level	Constituted by
Dr. Mrs. S. D. Joag	INSA Award	National	National Science Academy, New Delhi.
Dr. K. D. Gopale	Young Scientist Research Scheme award of 24 lakh.	National	Department of Science and Technology, Government of India
Prof. Anjali Sardesai	Best paper Award	International	2 nd World Conference on Soft Computing, Baku, Azerbaijan (2012)
Meenal Sable F. Y. B.Sc. (B) -2012	DST-INSPIRE scholarship.	National	Department of Science and Technology, Government of India

Name of Teacher	Title of Awards/ Honor	Level	Constituted by
Dr. Rebecca Thombre	Best Paper Presentation Award	National	National Conference on Dynamic Microbes: Role in human Welfare organized by Department of Microbiology, Modern College, Pune-05.2015.
Dr. Rebecca Thombre	Best Poster Presentation award	National	International Conference on Bioinformatics and Biotechnology organized by Biotech Research Society of India, at Le Meridian, Pune from 25-27 November 2013.
Dr. Rebecca Thombre	Best Research Paper award	National	National Conference on e-Waste Management, PES, Modern College from 23-24 December 2013.
Dr. Rebecca Thombre	Best Research Paper award	State	Indian Convention of Food Scientist and Technologist (ICFOST, CFTRI, Mysore) organized by AFSTI, Yashada, Pune. (24 Feb 2012)
Dr. Rebecca Thombre	Best Oral Presentation	State	National Symposium on Life Sciences, Elphinstone College, Mumbai. (7 Jan 2012).
Dr. Rebecca Thombre	Best Oral Presentation	National	International Conference on Biodiversity and its Conservation organized by Modern College, Pune, Jan 2011.
Dr. Rebecca Thombre	Best Oral Presentation	National	National Seminar for women , WE-MEET organized by College of Engineering, Pune.(2010)
Dr. S. K. Rahane	Best Teacher award	Society	Progressive Education Society (2014)
Dr. R. S. Zunjarrao	Best Principal award	University	SSPU, Pune (2014)
Dr. Neeta M. Patil	Best Teacher Award	Society	Progressive Education Society (2015)
Dr. K. D. Gopale	Best Poster presentation award	Conference	International Conference on Biodiversity and its Conservation organized by Modern College, Pune, Jan 2011.
Mr. Ravi Dabhade	Best Poster presentation award	Conference	National Conference on Perspective of Chemical Sciences organized by Dept. of Chemistry, Modern College of Arts, Science, and Commerce, Shivajinagar, Pune. (2012)
Miss. Radhika Oke	Gold medal for paper presentation	Conference	National Conference on dynamic of Microbes: Role in Human welfare organized by dept. of Microbiology, Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005.
Dr. Shilpa Mujumdar	Best Poster presentation award	Conference	National Conference on dynamic of Microbes: Role in Human welfare organized by dept. of Microbiology, Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005.
Miss. Sheetal Pardeshi	Biotechnology for better tomorrow	Conference	Department of Microbiology, Dr. Babasaheb Ambedkar University, sub campus Usmanabad 2011.
Prof. Kalyani Salla	Best Paper Award	International	2 nd World Conference on Soft Computing, Baku, Azerbaijan (2012)
Prof. Kalyani Salla	Best Poster award	Conference	Fuzzy Logic in EIA", National Conference on Soft Computing
Prof. Madhuri Ghanekar	2 nd best paper award	Conference	Management of e-Waste: A case study of Pune

3.5 Consultancy

Synoptic View:

- The institution publicizes the expertise available for consultancy services.
- The institution renders consultancy services to industries.
- The institution renders consultancy services to Government / Non- Government organizations/ community/ public.
- Resources financial and material) are generated through consultancy services of the institution.
- Mutual benefits accrued due to consultancy.
- The institution has an official policy for structured consultancy.

3.5.1 Give details of the systems and strategies for establishing institute–industry interface?

The college has established Industry-Academia collaboration committee as part of quality improvement strategy. It frequently organizes Industry-Academia meets. The syllabi of the courses are discussed with experts from industry. The placement cell publishes placement brochure in print form as well as digital form. Some of the departments organize weekly interactive sessions of industry experts with students and teachers. The activities like mock interviews, group discussions, aptitude tests, on-campus interviews, etc. are also regularly organized every year. Students of M.Sc. Computer Science go for full time industrial training. Add on courses viz. Pharmaceutical techniques, Seed technology, Vermiculture, Analytical Techniques, etc. are conducted in collaboration with respective industries.

Most of the Commerce and Science subjects have industrial visits and internship training in various industries. Such visits are arranged for the UG students at the end of the second year and the PG students at the end of the first year. On the completion of the training, they have to submit the detailed report on the training programme. Most of the departments have signed MOUs with reputed companies and industries for the academic benefits to the students, teachers and researchers. Some members of the staff are appointed as members of panel of consultants of industries.

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The policy for consultancy as stated in Resolution No. 97 and Dated 7th November, 2015. is as follows:

CONSULTANCY POLICY

1. A teacher/researcher should take prior written permission of Principal and Local management Committee for consultancy.
2. When consultancy is given without directly using the resources and infrastructure of the college, out of the consultancy amount deposited in the college account, 60% of the amount will be paid to concerned teacher/ researcher and remaining 40% will remain with the institution.
3. When the teacher/ researcher uses infrastructure and resource of the college, in his/her consultancy work , out of the total consultancy fees

deposited in college account , 50 % or the actual amount of recurring expenses whichever is higher, will remain with the college and remaining amount will be paid to concerned teacher/ researcher.

4. *If in case of litigations/ legal matters arising out of consultancy if any, it will be the sole responsibility of the teacher/ researcher.*

PATENT POLICY

1. *A teacher/researcher should take prior written permission of Principal and Local management Committee for consultancy.*
2. *Concerned teacher/ researcher should submit copies of three quotations of estimated expenditure incurred for patent filing, along with the application addressed to the Principal for patent filing.*
3. *In order to encourage patent filing, by teachers/ researchers on behalf of the college, the entire amount of patent filing will be initially paid by the institution subject to the approval by Local Managing Committee.*
4. *The patent charges paid by the college will be reimbursed from the funds raised through technology transfer from concerned patent.*
5. *The financial support to number of patents to be filed per year will be the sole discretion of the Local management committee.*
6. *In case of litigations/ legal matters arising out of consultancy, if any, it will be the sole responsibility of the teacher/ researcher.*

3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

The institution encourages the staff especially those having expertise in their area for consultancy services. The college has seven recognized research centres. The facilities in research centres are made readily available for the teachers and researchers to enhance their expertise. The norms of remunerative consultancy are framed and approved by Local Management Committee as well as Parent Body. The laboratory facilities have been upgraded through the funds received from UGC-BSR, DST-FIST, DBT-STAR and UGC-CPE as well as through college funds. Such up gradation accelerated the process of acquiring and enhancing the expertise for the consultancy services. The patent policy of the institution has been framed. The teachers and researchers are encouraged to file the patents of their inventions. The process of providing information of the patents filed by them in college prospectus, college magazine and on college website has been initiated.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue during the last four years.

The broad areas of expertise available for offering remunerative consultancy services are as follows:

Table 3.19 Areas of expertise available / provided for consultancy

Sr. No.	Department Name	Broad Areas of Expertise available/provided for consultancy
1	Biotechnology	Nano-biotechnology, Animal tissue culture, Stem cell technology, Protein chemistry, Diabetes, Clinical research, Medical microbiology, Opportunistic infections, Biochemistry, Enzymology, Photochemistry, Microbial biotechnology, Extremophiles, Zoology, Animal developmental biology, Cell-biology, Molecular biology, Plant biotechnology, Plant breeding and Floriculture.
2	Botany	Plant tissue culture, Biodiesel, Plant stress physiology, Seed physiology, Secondary metabolites through PTC, Plant biotechnology, Plant physiology, Plant biotechnology, Plant taxonomy, Mycology, Genetics and Plant biotechnology, Algology, Digital herbarium.
3	Commerce	Accountancy, Banking and Finance, Business Administration and Marketing, Business Law Management faculty: Banking and Finance, Business Administration and Marketing
4	Chemistry	Organic chemistry, Catalysis, Chemicals with anticancer properties, Analytical chemistry, Physical chemistry
5	Computer Science	Fuzzy sets and fuzzy logic, Applications of Computer Science and fuzzy logic in gynecology, Applications of Computer Science and fuzzy logic in environmental science, Computer networking, e-waste management
6	English	Dalit literature studies, Poetry, Pragmatics, East-Asian literature
7	Economics	Banking and Finance, Agricultural Exports, International Economics, Economics and Social Welfare,
8	Electronic science	Embedded System, Digital Electronics, Quantum Mechanics, Power electronics.
9	Fashion Technology	Pattern making and stitching, Pattern grading, Indian traditional embroidery.
10	Geography	Economic Geography, Population Geography, GIS
11	German	History and Civilization of Dach Laendern German Speaking Countries , Genre, Poetry, Philosophy
12	History	Traditional knowledge of India (Indology)
13	Mathematics	Algebra, Analysis, Discrete Mathematics, Number Theory, Operations Research
14	Marathi	Linguistics, Drama, Modern Marathi literature, (Poetry)
15	Microbiology	Microbiology, Microbial Biotechnology, Extremophiles, Biodegradation and bioremediation.
16	Physics	Material Science, Nanotechnology, Energy studies, Quantum mechanics, Electronics.
17	Physical Education	Handball, Netball, Korfball, Cycling, Hockey, Softball, Baseball, Basketball.
18	Psychology	Emotional intelligence, Aptitude testing, Psychological wellbeing, Career Counseling, Family counseling, Sport Psychology, Parenting and HIV counseling.
19	Statistics	Survival Analysis, Statistical Quality Control, Logistics regression.
20	Zoology	Taxonomy- especially related to entomology, Developmental biology and Vermi-technology, Freshwater zoology, Ecology and biogeography of freshwater vertebrates, Hydrobiology and zooplankton culture.

In the last four years, the revenue generated through remunerative consultancy is Rs. 36, 200/- as follows:

- Department of Botany: Rs. 15,000/-
- Department of Biotechnology: Rs. 10,000/-
- Department of Psychology : Rs. 11,200/-

3.5.5 What is the policy of the intuitions in sharing the income generated through Consultancy (Staff involved: Institution) and its use for institutional development?

The norms of consultancy framed and approved by the institution vide its resolution No. 97 dated 7th February, 2015 are as follows:

- *If the teacher has not used the laboratory facilities of the college, for developing the technology to be offered as consultancy, the share of income generated through consultancy should be 60:40 (Staff involved: Institution).*
- *In case, the teacher has used the laboratory facilities of the college, for developing the technology to be offered as consultancy, the share of income generated through consultancy should be 50:50 (Staff involved: Institution).*
- *The income generated by the institution through consultancy services will be utilized exclusively for up-gradation of existing facilities and creation of new facilities for enhancing the consultancy services in future.*

3.6 Extension Activities and Institutional Social Responsibility

Synoptic View:

• The conduct of extension activities is promoted by the institution. • Need-based extension programmes are organized. • Students and faculty participate in extension programmes. • NSS/NCC activities are organized. • Awards and recognitions have been received for extension activities. • The impact of extension activities on the community goes through a cycle of evaluation, review and upgrading the extension programmes. • Partnerships with industry, community and NGOs for extension activities are established. • The institution has a mechanism to track the students' involvement in various social movements / activities, which promote citizenship roles. • The institution is cognizant of its Institutional Social Responsibilities (ISR). • All constituents of the institution are made aware of its ISR.

3.6.1 How does the institution promote institution-neighborhood community network and student engagement, contributing to good citizenship, service orientation and holistic development of student?

Following activities highlight the promotion and institutional neighborhood community network and student engagement, contributing to good citizenship:

- Prof. R N Ingle from the Department of Botany conducted three free of cost workshops on preparation of 'Herbal Cosmetics' for women.
- Prof. Narendra Naidu from the Department of Zoology has conducted a series of workshops on 'Vermiculture Technology' for college students and people from neighborhood communities.
- Financial literacy campaign was conducted for the students, staff, neighbouring community and schoolchildren on Friday 17th Jan 2014. The

aim of the campaign was to create awareness about Banking functions, services and techniques. About 130 students participated and shared their knowledge with the parents, neighbouring society women and young school children on the subject like functions of bank, types of accounts, types of cheques, various currencies of the world, RBI policy, insurance policies, Maha Bank, NABARD, Stock Exchange, etc.

- Dr. Sudhir Ujalambkar conducted a special workshop on ‘preparation of home based products’ such as phenyl for cleaning floor. This training was offered free of cost. About 200 women participated in this workshop.
- College Playground is made available on the weekdays to the students from neighborhood communities.
- Health awareness camp and hemoglobin (Hb) checking camps were held for women from Police Colony and other nearby places.
- The department of Psychology conducts Counseling Camp for the neighborhood community to eliminate/reduce the psychological distress. The M.A. Part II students in collaboration with the Pragati Foundation Group Testing and Career Awareness provided psychological testing and career awareness sessions to the children of brick-kiln laborers.
- The Department of Botany had undertaken the activity of naming the roadside trees and fixed the nameplates on the trees along Modern College Road and Ghole Road in the years 2013-14 and 2014-15 respectively.
- The NSS volunteers of our college actively participated in the clothe sorting activity organized by Anandvan Mitra Mandal at Kesari Wada. These clothes were distributed to the needy people in the city.
- Our NSS unit under the banner of ‘Drushti’ conducted few workshops for blind students for making them aware of various schemes by the state government. A workshop on mathematics was also conducted for the blind students preparing for competitive examinations.
- Dr. Shubhangi Puranik and the students of NSS unit collected the used clothes and toys, which were distributed to various NGOs working for the welfare of poor and needy people.

3.6.2 What is the Institutional mechanism to track student’s involvement in various social movements /activities which promote citizenship roles?

NSS and NCC units of our college organize following social activities every year. Most of the students enrolled for NSS and NCC participate actively and voluntarily in such activities. These activities are as follows:

- Tree plantation activity undertaken
 - At adopted village
 - In response to Municipal Corporation and NGOs
- Blood donation camps in college campus
- Writer group to assist blind students in the examination and workshops for these students

- Participation in HIV/AIDS awareness campaign
- Participation in Road Safety Awareness Programme
- Participation in Pulse-Polio dose drive
- Participation in Rice plantation

At the end of every academic year, the felicitation of the students is done by conferring the 'Best Student trophy' to encourage them and to appreciate their efforts. Under the leadership of NSS and NCC unit, the other students of college are also involved in such programmes e. g., Participation of students and staff in rice plantation for the farmers who are in need of manpower at critical time.

- Every year after the NSS special camp, a parent's meet is held where, the parents give feedback about the activities held in camp and its impact on their son /daughter.
- From last three years after the rice plantation activity, the farmers have been giving feedback about student's behavior and their efforts in this activity.
- Every year at the end of semester, the feedback form is filled by the third year students for evaluation of teacher's performance in the respective subjects.
- Employers feedback is obtained through placement cells (inviting remarks and performance of the students selected) and industry academia meet
- Parents also give feedback when they attend certain functions in college e.g. prize distribution.
- Alumni meets of various departments are held. In such meets, the performance and progress of the institution is discussed.

3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

Feedback from students is taken which indicates institutional performance. It helps in assessing the quality of academic inputs for all programme. Apart from this, students are offered an open platform to express their views in all the activities of the college. This has helped in planning and reorganizing the activities from time to time.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

Budgetary provision is made for execution of different activities as follows:

Table 3.20 Budgetary provision for execution of different activities

Department	Activities	Impact	Budget (Approximately)
NSS	Participation in activities related to social cause	Numbers of activities are increased. The Mayor of Pune appreciated the work and promised to help for more activities.	10000/- p.a.

Department	Activities	Impact	Budget (Approximately)
NCC	Participation in social activities, NCC day celebration	Creating awareness in cadets, Cadets are felicitated for their Outstanding performance.	35000/- p.a.
Sports	Guidance of top level sportsmen	Improvement in their sports performance and won championship in some games.	10,00,000/- p.a.
Science Association	Lectures of various scientists to UG students	Created science awareness in the students	10,000/- p.a.
Commerce Association	Tally training, Vyapar Mela, wallpapers, poster competition, industrial visits, etc.	It is useful for their placements	15000/-p.a.
Art Circle	Lectures/Guiding sessions of artists to Promote the inbuilt talents in art and culture, Workshops for dance, drama etc. for students.	More students get attracted and they enroll their names in Art circle. Scope for their talent is made available.	250000/-p. a.

3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National / International agencies?

At the beginning of each academic year, the programme officer(s) of NSS unit and NCC officers brief the students about the aims and objectives of their activities and subsequently students are enrolled for these units.

Academic and career benefits are also discussed with the students who wish to participate in these activities. Financial assistance/allowances are given to the students and teachers participating in the extension activities.

- Necessary adjustments are made to accommodate them in respective units. Students are given choice to have participation in extension activities. Special consideration is given to these students.
- The students get the advantage of additional five marks in their University examination for participation in NSS and NCC as per Ord. 163.
- The interested staff members are invited to accept the responsibility of NSS and NCC activities.
- The additional support is given to such staff members by forming the committees to shoulder additional responsibilities.
- **NSS:** The college has very active NSS unit with the membership of 250 students. Various programmes and special camps are organized by NSS unit with the focus on initiating social sensitivity and leadership qualities amongst students. The activities organized under NSS are as follows:
 - In the academic year 2013-14, 600 students including NSS and 10 teachers actively participated in Paddy cultivation activity at Village Vinzar, Tahsil Velha, Dist. Pune.
 - In the academic year 2012-13, 250 students and 8 teachers participated in similar activity.
 - Organized 'North-East States Students Cultural Fest' in the year 2012-13, as a part of National Integration activity.
 - Blood donation camp is organized every year.
 - Five hundred students worked as *Police-mitra* and helped the Police in

maintaining discipline during Ganesh-festival, in academic year 2013-14 and 2012-13.

- Construction of 5ft tall 'Vanrai Bandhara' at the village Ghotawade in the academic year 2010-11.
- Road construction in the adopted villages Kule, Phulgoan and Ghotawade in the academic year 2014-15, 2012-13, 2011-12 and 2010-11 respectively.
- Preparation of 400 pits and plantation of 400 saplings in the adopted village Ghotawade.
- For health awareness, conducted 'Health Check-up Camp' in the adopted villages Ghotawade and Kule.
- Written a history of adopted village Ghotawade and Kule.
- G.I.S. mapping of Ghotawade and Kule Villages and completion of survey of both the villages.
- Planted 250 plants in the village Phulgaon in the year 2011-12.
- Organized value education workshops for College students every year.
- Organized Personality Development Programme for College students every year.
- Organized voting awareness camps and participated in rally, in the academic year 2013-14.
- Organized 'HIV /AIDS Awareness' rally in collaboration with Red Cross Society, Pune Division, in the year 2011-12.
- Awareness programme was held on the theme "Save Girl, Save Earth" and "Green Earth" in the village Kule, in the year 2012-13.
- Organized street plays for awareness about Swine-flue, in various places, in Pune city, in the year 2010-11.
- Eye check-up camp, Haemoglobin Check-up and General medical check-up camps for Senior citizens were organized in the adopted village Ghotawade.
- Rangoli Competition was held on the theme 'Save Girl Child' in Ghotawade.
- Participated in 'Samarth Bharat Abhiyan' of University of Pune, in the year 2010-11 and conducted all the concerned activities.
- E-waste management awareness campaign is organized by NSS unit in adopted village Khude.
- NCC: The NCC has two units – Army and Naval Wing
 - Army Wing NCC: Capacity of enrolment of students is 50 every year. Various camps are organized by these units like Republic Day camp, Army Attachment camp, Tracking camps, National Integration camps. Thal Sainik camps, Mountaineering camps, Snow skiing camps, cycle/ motorcycle expeditions, annual training camps, scuba diving camps, camel safari camps, Service selection boards (SSB Camps), leadership camps, Advanced leadership camp and Personality Development camp.

- Naval wing NCC: Capacity of enrolment of students is 50 every year. Various camps are organized by these units like Republic Day camp, Trekking camps, National Integration camps. Nausainik camps, Ship attachment camp, Snow skiing camps, cycle/ motorcycle expeditions, annual training camps, scuba diving camps, Service Selection Boards (SSB Camps), leadership camps, Advanced leadership camp, Personality Development camp.

Following activities were conducted by NCC students:

- In the academic year 2013-14, 600 students including NCC cadets and 10 teachers actively participated in Paddy cultivation activity at Village Vinzar, Tehsil Velha, Dist. Pune.
- In the academic year 2012-13, 250 students including NCC cadets and eight teachers participated in similar activity. Organized Blood Donation Camp every year.
- Participation of five cadets in RD parade in last five years, and one cadet Kaustubh Bhake was honoured as ‘All India Best Cadet’ by Hon. Prime Minister Dr. Manmohan Singh, in the year 2009-10.
- Anti-drug rally was organized last two years by NCC cadets.
- Participation in traffic awareness campaign last two years.
- Participation of NCC cadets in Pulse-Polio drives every year. Cadet Sneha Sapkal of Air Wing, participated in drill squad and Cultural programme in RDC 2011.
- Collecting clothes and Grocery for donation to ‘Sparsh Balgram and Saraswathi Anathalaya’ Dapodi, Pune.
- Ten cadets and Officer participated in disaster management training camp (AVHAN, 2009), held at Aurangabad.
- Fifty cadets participated as volunteers in ‘Pune Bus Day’ organized by ‘Sakal News Paper Group’ on 1st November 2010.
- Organized ‘Environmental Awareness’ poster exhibition on 14th September, 2012 in College campus.
- One cadet joined defense services at OTA Chennai through NCC direct entry.
- Three cadets participated in Thal Sainik Camp (TSC).
- Twenty cadets participated in Nau Sainik Camp (NSC).
- Cdt. Dhammasagar Ujagare participated in Nau Sainik camp held at New Delhi and Tamilnadu in the year 2011-12. He won Gold medal and two bronze medals in ship modelling at the National level.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

The issues taken up for the projects and surveys deal with the lives of the underprivileged section of society. In addition, students belonging to vulnerable sections of society are involved in all the activities. Some of the initiatives in this regard are as follows:

Table 3.21 Social initiatives

Sr. No.	Type	Description
1	Survey	HB checking camp is held every year for girls, lady teachers and women from neighborhood communities.
2	Rally	NCC and NSS units of the college in collaboration with Pune Police organize anti-drug rally every year.
3	Safety	Karate training course was held for girls in the college.
4	Awareness	- To create awareness about functioning of a Police Station, students are allowed to work in groups in the various Police Stations. Such students give assistance to police officer during Ganesh festival in Pune and Pune Police Marathon . - The college has participated in the activity 'Shasan Aplya Dari', organized by Pune Municipal Corporation and Supriyatai Sule foundation. - The faculty members of the department of Zoology guided the slum area school students about health and hygiene with the help of posters. - The students of F.Y.B.Sc. Zoology and the staff members explained about food, health, water etc. to the schoolchildren of Yelse village. - Teaching and non-teaching staff members actively participated in the 'Pune Bus Day' on 1st November, 2012 drive organized by 'Sakal News Paper Group' - The Department of Microbiology created awareness about health and hygiene at 'Apang Kalyankari Sanstha'
5	Financial assistance	- Students from the financially weak background are allowed to pay the college fees in installments suitable to them. - Needy and deserving students are allowed to work in 'Earn and Learn Scheme'. - Needy Students are given financial assistance through Students Aid Fund. - The special help is given to the students from socially and economically weak sections under the special resolution of Progressive Education Society. - Some members of staff have occasionally offered substantial financial assistance to the needy students for prosecuting their studies. College has constituted a committee, which exclusively looks after welfare of reserve category students. - For displaying notices about scholarships and free-ships, one dedicated notice board is kept available near administrative office. - Advertisements, Notifications, Circulars, Articles, etc. about scholarships and free-ships, published in newspaper are displayed on dedicated notice board. - Remedial Coaching Scheme of UGC is very effectively implemented in the college. - College has formed 'Equal Opportunity Centre' under UGC funds, to deal with the welfare of reserved category students. - Priority is given to reserve category students in the activities of Competitive examination guidance centre. - NET/SET guidance activity is conducted with special preference to reserve category students. - Earn and Learn Scheme of University of Pune is very efficiently implemented. - As a special case, concession in fees is given to economically weak students. - Financial help is given to needy students, through 'Student Aid Fund' of the College. - Efforts are made to effectively communicate to economically backward students about EBC scholarship, Leela Poonawala Scholarship, Weikfield Scholarship, etc.
6	Donation/ fee concession	- NCC students of our college donated clothes and food grains to 'Orphanage'. - Teaching and non-teaching staff members contributed their one-day salary to the Chief Ministers Relief Fund, for Uttarakhand natural disaster in the academic year 2013-14. - Few students and staff members actively participated in the 'Joy of Giving' activity organized by NGO called 'Sampark'. Clothes, Food grains, etc. contributed by students and staff members were given to nearby <i>Anathalayas</i>. - UGC book bank scheme is effectively implemented by College library for poor students. - Efforts are made to provide accommodation facility to needy students in '<i>Vidayarthi Sahayak Samitee</i>'. Special consideration in refund of fees against admission cancellation to poor students. - The Department of Microbiology has donated grocery and toys to <i>Sarvesha Seva Sangh – an orphanage and rehabilitation centre for single parent children and prostitute's children</i>.
7	Efforts to bring communal	Organized 'North-East States Students Cultural Fest' in the year 2012-13, as a part of Communal Harmony and National Integration activity.

Sr. No.	Type	Description
	harmony, addressing issues of diversity	- Participated in Sadhu Vaswani Mission's Global Forgiveness Campaign, organized for promoting harmony and peace, in the academic year 2012-13. - Salutation to National leaders on the occasions of anniversaries. - Guest lecturers and street plays are organized on National integrity, Social problems, etc. - College students and staff members participated in 'Shantidoot Cycle Yatra' activity of Prajapita Brahmakumari's Ishwariya Vishvavidyalaya.
8	Environmental : problems, water harvesting, Green clean campus	- Integrated Vermiculture training course conducted by Dept. of Zoology - Botanical garden and canteen waste are used as substrate for Vermicomposting unit of our college - Two students went on 26th Nov. 2013, Berman, Germany to present their environment project on "Hotel waste management" in the international conference. - Students from Earn and Learn Scheme maintain Vermicomposting unit of the college. - College has rainwater-harvesting facility. - College has installed solar energy based campus lights. - Landscape gardening of the college campus has been done and maintenance contract has been given to one garden landscape agency. - College is recipient of 'Clean and Beautiful College Campus Award' of Progressive Education Society and 'Beautiful Landscaping Award' of Pune Municipal Corporation. - Housekeeping annual contract of Rs. 8,40,000/- has been given to professional housekeeping agency for maintenance of clean campus. - Energy Audit of College has been done in academic year 2013-14.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized values by the institution, comment on how they complement students academic learning experience and specify the values and skills included.

- Social outreach is an integral part of college educational programmes, which inculcates a sense of social responsibility amongst students. These programmes engage students in meaningful social service that meets community needs. The college takes several steps towards making classroom learning more effective, enduring and meaningful. Working with civil society helps link classroom learning to the real world outside.
- Students also develop several skills like organizational skills- (from planning, execution to evaluation); interpersonal skills, teamwork cooperation; communication skills (Oral, written, report writing).
- College students realized and appreciated heavy working schedule of Police Department and also got ideas about diverse issues the Police Department handles simultaneously. They became aware of the concept of 'patrolling the area'.
- With the help of karate technique skills, girl students felt more confident while dealing with different incidents in day-today life.
- Students became aware of various schemes of government for the citizens.
- Students develop certain skills such as communication skills, Interaction skills, Leadership which are quite complimentary to their academic progress.

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the development? Detail on the initiatives of the institution that encourage community participation in its activities?

- The college believes in working with the people and not for the people. Participation of people is ensured at all levels of planning, implementation and follow-up of our activities. Programmes are worked out keeping in mind people's needs, concerns and aspirations. Which programmes will be undertaken and how will those be implemented is decided democratically along with the community. Care is taken not to impose our ideas and methods on the community.
- Dr. Sudhir Ujalambkar conducted a special workshop on 'preparation of home based products' such as phenyl for cleaning floor. This training was offered free of cost. About 200 women participated in this workshop.
- Prof. R. N. Ingole from the Department of Botany conducted three free of cost workshops on preparation of 'Herbal cosmetics' for women.
- Prof. Narenrdra Naidu from the Department of Zoology conducted a series of workshops on '*Vermiculture Technology*' for college students and people from neighborhood communities.
- The students of '*Vidyarthini Manch*' and '*Yuva Manch*', along with the staff members conducted a workshop on National Integration, Women Empowerment, Personality Development, and Youth Education.
- The activities of '*Vidyarthini Manch*' such as: street play on 'Save Girl Child', 'Anticorruption awareness', HIV/AIDs rally etc. also help in reach out activities.
- T.Y.B.Sc. and M.Sc. Botany students identified and listed roadside trees on two nearby roads. Nameplates were prepared and displayed for the benefits of knowledge of the common people.
- Rally about *e-waste awareness* was organized in a village adopted by our college.
- In view of the problem of e-waste management, the college has taken lead in establishing *e-waste management centre*.
- National level conference on the theme of e-waste management was organized on 23rd and 24th December 2013.
- College adopts village and undertakes socially relevant activities.
- The college students have also participated in the campaign undertaken by Mayor of Pune City River cleaning under '*Youth for Environment Awareness*'.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

Table 3.22 Relationships with other institutions

Name of Collaborating Institution/NGO/Others	Type of Activity
Lokayat	The college in collaboration with Lokayat group has organized cultural programmes to create awareness in the masses on different social issues such as 'Save Girl Child', Corruption, anti-drug movement, etc.
Praj Foundation	Prof. N. M. Naidu from the Department of Zoology in collaboration with Praj Foundation conducted an awareness programme on 'Waste Management'.
Pune Police	NCC and NSS units of our college support different activities organized by Pune Police, e.g. Anti-Drug Movement, Road Safety Awareness, etc.
Red Cross Society, Pune	NSS Unit of our college is a member of Red Cross Society, Pune, and supports them in various activities like HIV /AIDS awareness programme.
Pulse -Polio activity	NSS and NCC students actively support Police Hospital in Pulse -Polio activity.
Durga Sawardhan	An event to protect and conserve the forts of Maharashtra state called "Durga Samwardhan" was organized where film actor Dr. Amol Kolhe worked as a brand Ambassador for this activity. 400 students participate in this activity on 18 th July, 2013.
Vanrai Foundation	Rice plantation programme was organized at Vinzar and Velhe Districts of Maharashtra, where 500 students from the college participated along with NSS Officers. Students helped the local farmers in rice plantation every year.
Prajapati Bramhakumari Vishwashanti, Kendra.	Shantidoot Rally was organized by NSS unit of our college in association with Prajapati Bramhakumari Vishwashanti Kendra. The main aim of this rally was to pass the message of Vishwa Shanti or World Peace.
KEM Hospital, Pune	Blood Donation Camp and NSS day was celebrated on 24 Sept 2013 where 105 student volunteers donated blood for KEM Hospital, Pune.
Pune Police	Road Safety Awareness Programme was organized to emphasize the importance of Road safety in Pune city. This function was inaugurated by Dy. Regional Transport Officer of PCMC, Shri Jitendra Patil on 2 Oct 2013.
Drushti group and Sparsh Group	Workshop on Mathematics for Blind students studying in different colleges was organized by the college where 35 blind students benefitted and this activity was supported by Drushti group and Sparsh Group.(11 Jan 2014)
Green campus Initiative	Conducting energy, Biodiversity, Green audit of Modern College, Promoting eco-friendly practices on campus and organizing campaigns E-Waste awareness and collection drive.

3.6.10 Give details of awards received by the institution for extension activities and /contributions to the social/community development during the last four years.

The college has been awarded 'Best NSS Unit' award and the staff is recipient of 'Best NSS Officer' award.

The College, teachers and students have received number of awards from various government and non-government agencies. These awards are enlisted as follows:

Table 3.23 Awards received by the institution for extension activities

Name of Teacher/Unit/Students	Title of Awards/Honor	Level	Constituted by
Parent body Progressive Education Society	CSR (Corporate Social Responsibility) award	National	IBN Lokmat and Maratha Chamber of Commerce
NSS Unit	The Best NSS Unit of Pune District (Urban)' award for the academic year 2012-13	University	Shri Savitribai Phule Pune University, Pune
Prof. P. S. Varade	Best Programme Officer of Pune District (Urban) Award for the year 2012-13	University	Shri Savitribai Phule Pune University, Pune

Name of Teacher/Unite/Students	Title of Awards/Honor	Level	Constituted by
Dr. R. S. Zunjarrao	Best Principal Award	University	Shri Savitribai Phule Pune University, Pune
Capt. B. B. Yenage	Outstanding Performance award for the year 2012-13.	NCC Pune Unite	NCC GP Commander, Pune Group
Capt. B. B. Yenage	Outstanding Performance award For the year 2015-16.	NCC Pune Unite	NCC GP Commander, Pune Group
CDT Ankit Mode	Participated in Republic Day Parade held at New Delhi on 26th Jan 2012.	National	NCC, India
SUO Bela Deshpande	Participated in Republic Day Parade held at New Delhi on 26th Jan 2014.	National	NCC, India
SUO Keshav Turkunde,	Participated in Republic Day Parade held at New Delhi on 26th Jan 2014.	National	NCC, India
SUO Kapil Sable	Participated in Republic Day Parade held at New Delhi on 26th Jan 2014.	National	NCC, India

3.7 Collaboration

Synoptic view:

- The institution has linkages for various activities such as student placement.
- The linkages established by the institution have enhanced its academic profile.
- Specific examples of linkages to promote curriculum development, internship, on-the-job training, faculty exchange and development, research, etc.
- The institution has MoUs with institutions of national/ international importance/other universities/ industries/ corporate houses etc.
- Institute-industry interactions have resulted in the establishment / creation of highly specialized laboratories / facilities.
- The impact of the institutional collaborations are formally reviewed.

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

All departments have developed linkages with institutes, laboratories and industries. Over a period of years, these efforts have helped in student projects especially for postgraduate students. Students get an opportunity to work with industries and work on 'live project' in subject like computer science. College has initiated the process of collaboration with research laboratories, institutes in following ways:

- By working as a co-guide with the research scientist working in other research institution.
- By helping the research students in their research work, working in other institutes.
- By way of officially sending our research students to different laboratories/ institution for training and interacting with the research students/staff of concern research institution.
- By way of working in same research project.
- Students carry out the research projects to partially fulfill their master degree in

renowned institutes like National Centre for Cell Science (NCCS), National Chemical Laboratory (NCL), Agharkar Research Institutes (ARI), Indian Institute of Science Education and Research (IISER) Pune, Vasantdada Sugar Institute, IRSHA, Quick Heal, PubMatic, Persistent, TCS etc.

3.7.2 Provide details on the MoUs/ collaborative arrangements (if any) with institutions of national importance/ other universities/ industries/ Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The college has entered into collaborative arrangements with 25 institutions and has signed formal MOUs. These collaborative arrangements programmes have benefited the college in the following ways.

The collaborative programs have benefited the college in the following ways:

Table 3.24 Benefits of collaborative programs

1	Curriculum Development	The experience gained through interaction and feedback form, academic, research and outreach activities helped in identifying the new emerging and job oriented areas, which could be included while updating the curriculum.
2	Internship	Students of biotechnology, microbiology, professional courses like M.Sc. Computer Science, BBA and BCA gained hands on experience of real life situations through internship in various organizations/ industrial establishments.
3	On the job training	Students in Biotechnology, Microbiology, Botany undergo summer training in research institutes and industries related to the respective subjects. This provides an opportunity for students to know more about advanced laboratory techniques.
4	Faculty exchange and development	The university and other institutes like DAAD Germany have helped in arranging faculty exchange and academic development. The faculty exchange also involves arranging guest lecturers of renowned scientist/industrialist/socialist on specialized topics.
5	Research	Joint Research Programmes with Research Institutes has helped the faculty and students in researching diverse areas like conservation of biodiversity, biofuel technology, nanotechnology, pharmaceuticals, embedded systems, counseling of students, etc.
6	Consultancy	The collaborations with local bodies, NGOs and other institutes have helped us in identifying our strength in various areas. These are useful in enhancing competency and expertise in faculty and students.
7	Extension	An association with various GOs, CSOs, and NGOs help in strengthening our network with community and also fulfills our social responsibilities.
8	Publication	Joint Research Publications with universities and research institutions have enhanced academic standard of faculty and students. This has resulted in a wider academic recognition to the college.
9	Student Placement	The number of industries visiting the college for campus interviews has increased due to linkages with industries. A large number of students has benefitted in getting placement offers through on-the-job-training and internship programmes. The M. Sc. Computer Science students have secured about 100% placement.

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/ creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/ library/ new technology/ placement services etc.

The college has a well-established 'Industry-Academia Cell'. This cell acts as a facilitator between students and Industries. It also provides a platform for student-industry interactions to identify the requirement of industry, placements and changing needs of the industry.

- Department of Biotechnology has Industry Collaboration and Consultancy with Germ Busters Inc., Powai w.e.f. 2013 and The Leela Kempinsky Hotel, Powai w.e.f 2013.
- Department of Biotechnology organized Industry: Academia Meet (Industrialist and students interaction) for providing opportunities to the students for training and research in industry environment and for collaborative research in renowned institutes.
- Campus interviews are conducted for Post Graduate students in Biotechnology.
- Several visits are arranged for Undergraduate and Post Graduate students to different industries.
- Several guest lectures are conducted for upgradation of academic knowledge.

3.7.4 Highlighting the names of eminent scientists /participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

The college has organized International/ National/ State level seminars/ workshops during which eminent scientists of International and National level were invited to present their talk on themes.

Table 3.25 Eminent scientists

International Conference on Biodiversity and it's Conservation (2011)
Dr. T. R. Sahu , Department of Botany Dr. H.S. Gaur University, Sagar, M. P. India
Dr. Erach Bharucha Director, Bharti Vidyapith Institute of Environmental Education and Research, Pune, MS. India.
Dr. R.M. Sharma Deputy Director, Zoological Survey of India, Pune (MS) INDIA
Dr. P. Tetali , Naoroji Godrej Centre for Plant Research, Lawkim Motors Group, Shirwal, Pune, Maharashtra, INDIA
Dr. Joachim Chmerbeck . DAAD, TERI University, 10, Institutional Area, Vasant Kunj, New Delhi 110070 INDIA
Dr. Yogesh Shouche . Scientist 'F', National Centre for Cell Sciences, University of Pune campus, Pune INDIA
Dr. D. S. Pokale , Ex. Prof. and HOD, Botany, B. A. M. U., Aurangabad 431004, Maharashtra, INDIA
Dr. Anil Gore Member, National Statistical Commission, New Delhi
Dr. Mrs. Sunita Garg , Scientist G, Head, Wealth of India, New Delhi 110012
Dr. G.S. Yeragi K.J.Somaiya College of Science, Vidyavihar, Mumbai, MS., INDIA
Dr. S. R. Yadav Department of Botany, Shivaji University, Kolhapur Maharashtra, INDIA
Dr. P. P. Kanekar Scientist 'G', Agharkar Research Institute, Pune MH, India
Dr. Renu Bharadwaj Head, Department of Microbiology, BJMC, Pune, MH, India
Dr. Renu Bharadwaj Head, Department of Microbiology, BJMC, Pune, MH, India
'Business opportunities in life sciences' (2012)
Dr. Sushil Shah Metropolis Health Services Pvt. Ltd, Mumbai, India
Dr. Prabhat Arya Chemical Biology Program Institute of Life Sciences, Hyderabad, India.
Dr. R. M. Dhere . Vaccine. Serum Institute of India Ltd., Pune, India
Dr. G. M. Bhogle . Managing Director. Microbax (India) Ltd, Hyderabad, India
Dr. Sneha Limaye . Department of Clinical Trials, Chest Research Foundation, Pune, India.
Dr. Tommy Sopwith . Chairman and Managing Director, Thomas Bio Creation India Pvt. Ltd. London, England
Dr. A. G. Deshpande . Deputy General Manager, Quality Control, Ventri Biologicals Vaccine division of Venkateshwara Hatcheries, Pvt. Ltd Pune, India.
Mr. Girish Chitale . Director, Chitale Agro Industries, Bhilawad, Sangali India
Dr. S. V. Bawaskar . Chairman and Chief Mentor,

Mr. Ameya Budukh. and Vijendra Agarwal, AmVi Consultants, Pune, India
Dr. Abhijeet Shirke. Biocare Life Sciences, Pune, India
Dr. Sanjeev Patankar, Gurunanak College, Chandrapur, India
Dr. Hemant Bedekar. Founder Member, Bamboo Vishwa, Pune, India
Ms. Manjushree Tadwalkar. CEO, Institute of Natural Organic Agriculture, Pune, India
Dr. Priyadarshini Karve. Founder Director Samuchit Enviro Tech Pvt. Ltd., Pune, India.
Dr. Milind Phatak. Director, Maharashtra state agri and rural tourism, cooperative federation Ltd. (mart), Thane, India.
Dr. Digambar V. Gokhale. Scientist in-charge, NICM resource centre, NCL campus, Pune, India.
Mr. C. B. Chandraden. Chandwad Chairman and Managing Director, Marigold Pharmaceuticals Pvt. Ltd. Pune, India.
Dr. Prabhat Arya. Chemical Biology Program Institute of Life Sciences, Hyderabad, India.
Dr. Prasad Thakurdesai. General Manager, Nager
Ms. Sandeepa Kanitkar. Managing and Technical Director, Kan biosys, Pune, India
Dr. Chanda Nimbkar. Director ,Animal Husbandry Division, Nimbkar Agricultural Research Institute, Phaltan ,Satara, India
Dr. Avinash Dandekar. Consultant Glass house
Dr. Vivek Ghaisas. Senior General manager, VIBHA Seeds, India
Mr. Devenora Jagtap. Chief Executive Officer, Jagtap Horticulture Pvt. Ltd, Pune, India
Mr. R. S .Kate Director .Kate Dairy farm Pvt. Ltd. Pune, India.
Dr. Rajan Naik. Director Ross Life sciences, Pvt. Ltd., Pune India
Dr. A. O. Kulkarni. Principal Technical Officer, Division of NCL NCL Innovation Park, Pune, India
Dr. Ashok Budhkar. Director Finance, Maratha Chamber of Commerce Industries and Agriculture MC CIA Pune, India
T. Sudhkar. Scientist in-charge, NICM Resource Centre, Agricultural and Processed Food Products Export Development Authority (APEDA), Government of India, India
'Enhancement through Proficiency in Indian and Foreign Languages' (2013)
Dr. Roger Nunn. Chief Editor, Asian Journal, Petroleum Institute, Abu Dhabi
Mr. Sandip Nulkar. chairperson, SITS, Pune
Dr. Dhirawit Pinyonattthagam. School of Foreign Languages, Institute of Social Technology, Suranaree University, Thailand
Dr. Anagha Bhat. Dept. Of Russian, SPPU
Dr. Sumedha Desai. Dept. Of German, SPPU
Ms. Pratibha Gopujkar. Orient Black Swan, Mumbai
Dr. Rajul Bhargava. Head, Dept. Of English, Rajasthan University, Jaipur.
Dr. Makhdooma Saadat. Head, Dept. of English, Integral University, Lucknow
Dr. Triveni Goswami. Freelance Writer
Dr. Mrunal Dhongde. Tatsam Linguistic Services, Pune
Dr. Sameeran Walwekar. Dept. Of Mass-Media, SPPU
Dr. Anil Sarwal Chairperson DAV College, Chandigarh
Ms. Anjaleena Soni. Kohinoor Business T Developing Speaking School, Pune
Mrs. Janaki Waldruff- Narkar. Pasch Max Mueller
Col. Y. B. Umbralkar. Director, Serum Inst.
Mr. Rajeev Devasthali. Deputy General Manager, IT enabled services. RBEI
Dr. Sunita Dalvai. Director, Communication Studies, Mahadik Inst. Kolhapur.
Mr. Anthony Thomas. Director, English Academy, Pune
Mr. Abhiraj Purandare. Language Trainer, Max Mueller Bhavan, Pune
Mr. Makarand Pandit. Director, Technowrites
Ms. Leah Guren. COWTC, Israel
Mr. Abijeet Wakhare. Technical Writing Technowrites
Ms. Jagori Mukherjee. The Road Taken: Technical Writing
Dr. Swati Acharya. Dept. of German, University of Pune
Dr. Makhdooma Saadat. Head, Dept. Of English, Integral University, Lucknow
Ms. Christina de Coursey. Head, Dept. of English, Hong Kong University, Hong Kong
Dr. Anil Sarwal. Head, Dept. of English, DA V College, Chandigarh
Conference on Environmental Conservation by Adopting New Technologies (ICECANT 2014)
Mr. Scot Wrighton. City Manager, Lauasa. Corp. Ltd. Pune, India
Mr. Keith Zendler. Chief Executive Officer and Founder, Cspace, Inc. and Recyclemax.com; Founder, Environmental Services of North America
Prof. Anand Karve. Director, Samuchit Enviro Tech Put. Ltd., Pune, India
Prof. Rama Chandra. Dean and Head, Environmental Microbiology, School for Environment Sciences, BBAU, Lucknow, India

Dr. Siddhant Pai. Chief Executive Officer, Protoprint solutions Pvt. Ltd., Pune, India
Mr. Manish Kharwade. General Manager, Prey Industries Ltd, Pune, India
Mr. Anuj Nigam Director. Startling Solar Pvt. Ltd., Mumbai; India
Mr. Harshal Gunjal. Sr. Executive, Water and Waste Solutions, Thermax India Ltd., Pune, India
Dr. Nutan Khalap. Scientist, Bhabha Atomic Research Centre, Mumbai, India
Dr. Nilima Rajurkar. Professor, Department of Chemistry, University of Pune, Pune, India
Prof. Anand Karve. Director, Samuchit Enviro Tech Pvt Ltd. Pune, India
Prof. Ramesh. Bhonde. Dean, Manipal Institute of Medicine, Bangalore, India
Application of advanced technology to improving quality of Science Education.(2015)
Dr. Vijay Bhatkar. Padma Vibhushan, Government of India.
Dr. Christoph Senft (Germany). Hon. Director, German Academic Exchange Service (DAAD)
Dr. K. C. Mohite. Dean, Faculty of Science, Savitribai Phule Pune University, Pune-7
Dr. Anjan Banerjee. Scientist, Indian Institute of Science Education and Research, Pune
Dr. Deboshish Das. Digitech Solutions, Kolkata

3.7.5 How many of the linkages/ collaborations have actually resulted informal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated.

The college has made efforts to establish linkages with university, national institutes, industries and international universities for academic and research purpose. Details of such type of linkages are as follows:

Table 3.26 Formal MoUs and Agreements with the College / Departments

	Name of the Institute/ University/ Department/ Agency /Industry	Level	Department	Purpose
1.	PASCH, Goethe Institute, Germany	International	German	Students' Exchange and Faculty Empowerment
2.	Deenanath Mangeshkar Hospital, Pune-07	National	Biotechnology	for molecular biology analysis of miscarriage foetus samples
3.	Malkolam Knowledge Centre Hyderabad	National	Biotechnology	for molecular biology analysis of miscarriage fetus samples
4.	Microsat Biolabs (Mumbai based Biotechnology Industry)	National	Biotechnology	For Academic and research collaboration
5.	NCCS, Pune	National	MCC (Dr. Yogesh Shouche, Director)	ISRO Project of Dr. Rebecca Thombre -related collaboration for 16 s Sequencing of Bacteria
6.	Agharkar Research Institute, Pune	National	Microbiology Div. (Dr. P.K.Dhakephalkar, Scientist F)	ISRO and BCUD Project of Dr. Rebecca Thombre -related collaboration for 16 s Sequencing of Archaea
7.	DELNET: Developing Library Network	National	Library	Resource Sharing : online database-3000000 e-books
8.	Door-Step NGO	State	Psychology	Consultancy
9.	Pragati Foundation	State	Psychology	Consultancy
10.	Equip-Kids, Thane	National	Psychology	Research and Training
11.	Modern College of Pharmacy, Nigdi, Pune	State Level	Pharmaceutics	PG Research Project

	Name of the Institute/ University/ Department/ Agency /Industry	Level	Department	Purpose
12.	Satara College of Pharmacy, Satara	State Level	Pharmaceutics	PG Research Project
13.	Quick Heal Technologies (QH Connect Program)	Intercollegiate	Computer Science	Main purpose of the Quick Heal Connect program is to guide students in C and C++ and also Prepare them for campus recruitment program. Quick Heal conducts training sessions for the students and after training, they again conduct test and interview the students. Depending on their performance they recruit the students in Quick Heal Technologies
14.	TOEFL/GRE Quiz (Satan Paradise)	Intercollegiate	Computer Science	This event was arranged for Graduate and Post Graduate students in order to generate awareness of future career prospects abroad and highlight the significance of
15.	WordPress Community (Word Camp, 2013,2015)	International/ National	Computer Science	Technical Talk on customized websites and blogs development using 'WORDPRESS' – A Content Management System
16.	Evolve Excellence (Academic Career Excellence)	Collegiate	Computer Science	Benefits everyone who needs to communicate effectively. Most widely used global language. Opens the door to multidimensional careers. Students and professionals are better equipped to deal with international challenges
17.	TOEFL/GRE Quiz (Satan Paradise)	Intercollegiate	Computer Science	This event was arranged for Graduate and Post Graduate students in order to generate awareness of future career prospects abroad and highlight the significance of GRE/TOEFL
18.	WordPress Community (WordCamp,2013,2015)	International/ National	Computer Science	Technical Talk on customized websites and blogs development using 'WORDPRESS' – A Content Management System
19.	Mahatma Gandhi Institute, Mauritius	International	Marathi	Interdisciplinary Research/Conference
20.	Manipal University, Dubai	International	Marathi	Interdisciplinary Research/Conference
21.	Arya Samaj, Thailand	International	Marathi	Interdisciplinary Research/Conference
22.	Shejwalakar Education Institute, Pune	State	Marathi	Interdisciplinary Research/Conference

Table 3.27 Formal linkages/collaborations with various department and institutes

Departments	Name of the Institute /University /Department /Agency /Industry	Nature of Linkage/ Collaboration
Biotechnology	Modern College of Pharmacy Nigdi	M.Sc. Research Projects
	Tilak Maharashtra University , Pune	Research
	Department of Chemistry and physics SPPU, Pune	M.Sc. Research Projects
	Bharati Vidyapeeth Pune	Academic Programme, Skill development course
	NCCS, Pune	M.Sc. Research Projects
	Serum Institute, Pune	Summer training and placement
	NCL, Pune	M.Sc. Research Projects, Research Fellows
	Agharkar Research Institute, Pune	M.Sc. Research Project, Research Fellows

Departments	Name of the Institute /University /Department /Agency /Industry	Nature of Linkage/ Collaboration
	IISER, Pune	M.Sc. Research Project, Research Fellows
	MUHS-regional centre	M.Sc. Research Project
	Evolvus system	Student placement
	Optra systems	Student placement
	Persistent Systems	Bioinformatics lecture, Student placement
	N-CORD	Student placement
	Premiere Biosoft	Student placement
	Thyrocare	Student placement
	Microsat Biolabs (Mumbai based Biotechnology Industry)	For Academic and research
	Agharkar Research Institute, Pune	Research
	SVRTM University, Nanded	ISRO-related collaboration for Microgravity related experiments
	SVRTM University, Nanded and HV Desai College, Pune	Collaborative BCUD proposal sent in 2015
	Rangoonwala Dental College, Pune.	Worked as a Co-Guide for MD project of Dr. Simrata Aijrawat (MD student)
	Deccan College, Pune	Collaborative Proposal related to study of Haloarchaea from ancient rocks of India
Botany	Agharkar Research Institute, Pune	Research Project
	Botanical Survey of India , Western Circle, Pune	Research work
	Central Marine Fisheries Research Institute, Cochin, Kerala	Student Training and Research Work.
	Department of Botany, Agriculture College of Pune	Student Training and Skill development course
	Central Research Facility, of SPPU, Pune	Research Work
	Department of Botany, of SPPU.	Research Work
Chemistry	Centre for Materials for Electronic Technology, Panchawati, Pashan, Pune-411008	M. Sc. Research projects
	Department of Chemistry, SP Pune University, Pune.	M. Sc. Research projects
	Physical and Material Chemistry Division, CSIR-National Chemical Laboratory, Pune 411008.	M. Sc. Research projects
	Chief Scientist, Physical and Material Chemistry Division, CSIR-National Chemical Laboratory, Pune 411008.	M. Sc. Research projects
	CEPD Division, CSIR-National Chemical Laboratory, Pune 411008.	M. Sc. Research projects
	Catalysis and Inorganic Chemistry Division, CSIR-National Chemical Laboratory, Pune 411008.	M. Sc. Research Project
Economics	Gokhale Institute, SSPU, Indian Economics association, MP Economics association, Marathi Artha Shastra Parishad, Indian Association of Social Science and Health, Family Planning Association, Vidya Sahakari Bank	Conferences, Training, library and project work
Electronics	IIT Mumbai, Centre for Materials for Electronics Technology (C-MET) Scientific Society, Department of Information Technology Panchawati, Pashan Road Pune - 411 008 , IGATE, DOES SPPU, VSI Pune, PC Smile Industries, Dynolog systems, MEDA Pune, BINIX Electronics Pune. Prowiz enterprises Pune.	M. Sc. Student Project and Research Project
English	BCL, Centre for post-colonial study Nottingham Trent University UK, BITS private Limited Pune, Technoknit Pune,	Library, Organising Workshops, International Resource Person, Pilot Course-Blended English, Research work, Placements

Departments	Name of the Institute /University /Department /Agency /Industry	Nature of Linkage/ Collaboration
German	Max Mueller Bhawan, Delhi, IGS Garbsen, Germany Department of Foreign Languages, SPPU	Students' and Teachers' Training, Student's Exchange, Youth Camps in Germany and India, collaborative work ., international resource persons
History	Students informally visit to Kelkar museum, Mahatma Phule museum, Bhandarkar Research Institute	Academic
Library	British Library, F. C. Road, Pune	Online Resources – 85000 e-books/14000 e-journals And We can borrow total 14 items from Books, CD's, Periodical's, DVD's, Films, Children's Section and access to 4000+ Newspapers on Smart Card Provided by BL
Marathi	Jaykar Library, SPPU, Pune	Book borrowing and reference reading facility
Mathematics	Gokhale Institute of Politics and Economics, Pune	Book borrowing and reference reading facility
Microbiology	INFLIBNET-NLIST, Gujarat	online database-6000+ e-journals and 97000+ e-books
Physics	Deccan College, Pune	book borrowing facility
Psychology	Kaivalyadham Yoga institute, Lonavala., Manashakti Kendra, Lonavala, Regional Mental Hospital, Ratnagiri, Walawalkar Trust's hospital, Derwan, Christian Counselling centre, Vellore, Tamil Nadu, Rotary club, Schizophrenia Awareness Association, Muktagan De-addiction centre, Prasanna Autism Centre, Kripa Foundation de-addiction centre, Samparca Balagram orphanage	Field based activities, Teacher Training programme, PG Research Project, Visiting faculty, Social work, PG Research Project, Social work
Zoology	IISER, Pune, Garware College, Pune, Chief Eng. (Rtd.), Pune, ELA Foundation, Pune, Pugmarks Pune, Garware College, Pune, Dept. of Environmental Science, SPPU, Pune,	Field based activities, Teacher Training programme, PG Research Project, Visiting faculty, Social work, PG Research Project, Social work
IQAC	German Indian Business Centre, GIBC Hannover, Bussardweg, 31-30880, Loatzen Germany.	Indo-German Exchange and Collaborative Initiative

3.7.6 Details on the systematic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

An 'Industry Academia Collaboration Committee' is formed. Every year meetings have been organized in order to get placement opportunities and guidance to the students from industry sectors. The college organizes programmes to facilitate interactions with academicians/scientists and experts from the industry in formal as well as informal ways. Formal meetings are organized especially in case of international linkages. Visits are organized and tentative areas/subjects for collaborations are discussed.

□□□

Criterion IV: Infrastructure and Learning Resources

4.1 Physical Facilities

Synoptic view:

- Adequate facilities of traditional and digital classrooms and laboratories are available.
- Infrastructural facilities are frequently augmented and utilized optimally.
- Additional facilities for sports, co-curricular and extra-curricular activities are provided.
- Health services are provided to the stakeholders.
- Necessary facilities are made available for physically challenged students.

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitates effective teaching and learning?

The institution has a policy to provide best infrastructure and facilities in accordance with the courses and programmes introduced from time to time for effective teaching and learning. It is elaborated as follows:

- Management has always been in favor of offering need based new courses and programs out of the courses introduced from time to time by affiliating University. Accordingly, it makes provisions for increase in infrastructural facilities.
- Departmental meetings are conducted in presence of Vice-principals of respective faculty and detailed discussions are held during the meeting about effective implementation of curriculum. Heads of the departments and staff members make suggestions with respect to departmental infrastructure and facilities to be created. Accordingly, steps are taken from the procurement point of view. Purchase committee procedure is followed while developing and upgrading laboratories and classrooms. Continuous additions, refinements and improvements are made in the infrastructural facilities and learning resources so as to cope-up with the changing demands of academic field.
- The college has initiated a process to make all laboratories and all classrooms ICT enabled. There is one Virtual Classroom, five Digital Classrooms, one Virtual Laboratory, Digital Library, one Digital Language Laboratory and a Digital Record Room. Intranet based e-learning facility is also available.
- Budgetary provisions are made well in advance for the necessary infrastructural facilities and for the upgradation of the existing ones.

4.1.2 Detail the facilities available for: Curricular and co-curricular activities: classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

Table 4.1 Facilities available

Sr. No.	Category	No. of facilities up to 2010	No. of facilities up to 2016	Particulars
1	Classrooms and tutorial rooms	53	83	Classrooms with ICT facility well-furnished benches, blackboards, dais, podium etc.
2	Laboratories	43	48	All the laboratories are well equipped and are under annual maintenance contract. Institute purchases latest equipment every year. LCD Projectors in most of the laboratories
3	Technology Enabled Learning Spaces	5	53	LCD projectors are installed in classrooms / laboratories for effective classroom teaching.
4	Auditorium	0	1	Well-equipped fully air conditioned auditorium with generator backup, makeup room, VIP lounge, ante room, LCD projector and audio-visual aids is developed. The Seating capacity is 517.
5	Assembly Hall	1	1	Well-equipped fully Air conditioned hall with generator backup, attached VIP room, LCD projector, internet facility, audio-visual facilities hall with 430 seating capacity is developed and well maintained for co-curricular activities like guest lectures, workshops, symposia, exhibitions, students activities, etc. The area under construction is 2400 sq. ft. Elevator facility is also available.
6	Seminar Halls	2	2	Well-equipped seminar halls with audio-visual facilities to conduct interactive training sessions.
7	Botanical Garden	1	1	Well maintained Botanical Garden. Departmental Herbarium is maintained. Ready to use Digital Herbarium.
8	Digital Language Laboratories	1	1	The laboratory is well equipped and annual maintenance contract is given. Institute purchases latest equipment every year. Both the laboratories are equipped with LCD projectors.
9	Specialized facilities			
	Digital Classroom	0	5	The classrooms with Audio-Visual and Digital Boards
	Virtual Classroom	0	1	Interactive Video lectures / Sessions
	Virtual Laboratory	0	1	Interactive experimentation with remote access
	Digital Library	0	1	e-learning, e-referencing
10	Equipment for teaching, learning and research			
	Desktops	304	574	Desktops are made available to staff and students for online demonstrations, practicals, assignments and projects.
	Laptops	14	54	Laptops are provided to each department.
	Laboratories with ICT facility		20	LCD projectors are fixed in 10 laboratories. Every department has one movable projector.
	Class Rooms with ICT facility		33	LCD projectors are fixed in 33 Classrooms. Every department has at least one movable projector.
	Internet facility	2 mbps speed	10 mbps speed	Leased line Internet facility with leased line connected by optic fiber is provided in all departments with 10 mbps speed
	Wi-Fi facility	In some departments	All departments	Wi-Fi facility is provided in all Departments.
	Presenters	-	25	For the ease of presentation to teachers, presenters are provided to each department.
	Online demonstration kits	-		Virtual Classrooms, Virtual Laboratory, Central Computing Facility is provided which is used for online demonstrations. Under UGC major research project, department of Botany has developed and has stored digital images of about 500 plants, which are made available to botanists.

Sr. No.	Category	No. of facilities up to 2010	No. of facilities up to 2016	Particulars
				Department of Zoology has developed Digital Dissection Kit and is stored on CDs, which is given to students on demand. Whole campus is being made Wi-Fi enabled.
	CD/DVD/Pen Drives			Each department is provided with certain number of CD/DVDs and pen drives to keep the data storage. External hard disks are provided to every department. All the past data related to office from last several years is stored at central place especially developed as Digital Record Room.
11	Examination Control Room	0	1	A separate Examination Control Room is provided with adequate facilities like Computer, printer, internet connection, latest fast speed reprography machine, and strong room is also set up from security and safety point of view.
12	Administration Building	0	1	A separate administration building of 6000 sq. ft. is available for office and is in use for Office Administration purpose. Each staff is provided a computer with latest configuration and “Vridhhi” office automation software installed on it. Adequate equipment like Scanners, Digital Copiers, and Network Printers are installed in the office.

• **Extra-curricular activities: sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.**

- **Sports:** Physical Education facilities have been strengthened. The college has developed basketball ground of international standard. The playground is developed and maintained as per National Level Standard for the games like volley ball, handball, kho-kho and kabaddi. The college has provided separate slots in gymnasium for staff members. Staff members and students get a membership in a badminton hall of international standards. The college has total four playgrounds.
- **Outdoor games:** College ground is maintained and made available for the games like Volley Ball, Handball, Basket Ball, Kho-Kho, Kabaddi, Netball and Ball Badminton. For certain games like Football, Softball, Baseball, the college has made tie-up with other institutions like SPPU, Pune, Agricultural College, and Fergusson College etc. for the ground facilities. The college has tie-up with Pune Municipal Corporation, Pimpri Chinchwad Municipal Corporation for Swimming Pool and Hockey play field respectively.
- **Indoor games:** The facility of Badminton Hall of international standards is available to students and staff of the college. College also provides facilities for Table Tennis. Along with these games, some indoor games such as Carrom and Chess are also available for students.
- **Gymnasium:** A well-equipped Gymnasium for the benefit of students and staff members is available. Total expenditure on Equipment and ground maintenance is Rs. 74,14,572/-. Some of the equipment are - Wrest Curling, Leg Extension, Peck Deck, Smith Machine, Angular Leg Press, Cross Over Pulley, Jogger, Fat Testing Machine. A desktop

with a pair of speakers and a printer is available for gymkhana department. T.V., videos, sports channel, live matches are shown to students.

- **Auditorium:**
An auditorium with state of art facilities is available for the college with seating capacity of 507 for co-curricular activities like Conferences, Cultural Activities, Guest Lectures, Workshops, Symposia, Exhibitions etc. The area under construction is 2400 sq. ft. with elevator facility.
- **Assembly Hall:**
Well-equipped fully air conditioned assembly hall with generator backup, VIP lounge, LCD projector and audio-visual aids has been developed by the college. The Seating capacity is 430 and area under construction is 3000 sq. ft.
- **National Service Scheme (NSS):**
A separate furnished office has been allotted to NSS unit. Desktop, Laptop and LCD projector are provided to the NSS students. The NSS unit has been provided with all the necessary amenities and facilities required for NSS camps. The number of students enrolled for NSS is 250. Every year seven-day residential camp is organized at the village adopted by the college.
- **Other Social and Community oriented activities:**
The students of the college undertake various social activities such as:
 - Cleaning of the river
 - Cleaning of the Khadakwasla Dam so as to increase its water storage capacity.
 - Helping the Street Children
 - Helping the social agencies in the distribution of clothes and other items.
 - Collecting the clothes and helping the NGO's to distribute them to the needy people.
 - Joy of Giving Week, Social Week, etc.
- **National Cadet Core (NCC):**
A separate NCC office and NCC store are available. The necessary facilities like desktop with printer are made available to the NCC office. The college has two wings of NCC units viz., Naval and Army. The intake capacity of each wing is 50 cadets.
- **Cultural Activities:**
Different cultural activities are conducted by college to encourage students in the respective fields. College students have formed a musical band and a Ladies *Dhol-Tasha Pathak*. The necessary musical instruments, drapery, furniture, stage, projector, sound system, technical and financial support etc. are provided to the students. The students participate in the inter-collegiate, state and national level cultural events and competitions.

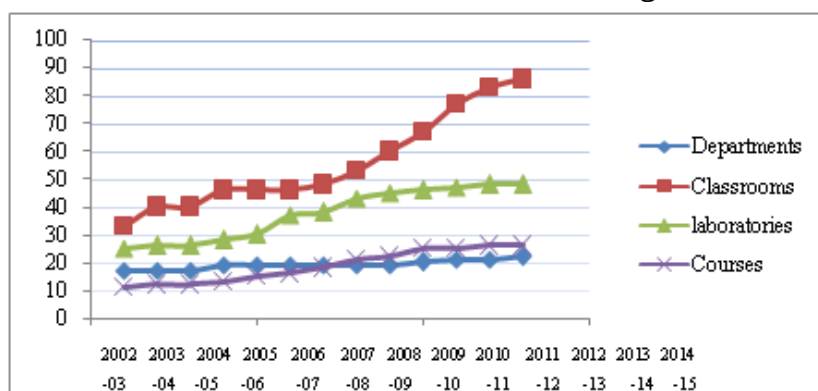
- **Public Speaking:**
Students are encouraged to participate in debating and elocution competitions.
- **Communication skill development:**
Soft skill development programs are arranged for the effective communication and personality development of students. A special laboratory is developed which also contains 12 desktops with Internet facility. Separate trainers are appointed for the coordination of this programme. Under this scheme different sub-modules like physical fitness, communication skills, stress management, visualization techniques, goal setting techniques, creative thinking, and interview techniques are covered. Eminent personalities from respective fields are invited to guide the students. Institution provides financial support for the scheme. As a part of future development of communication programme, a separate well-equipped hall is proposed. An independent language laboratory with desktops, internet facility has been established to help the students for their overall improvement.
- **Yoga:**
 - A room for Meditation and Yoga is provided with necessary facilities.
 - Stress management workshops for students and staff are organized by PG Association, Staff Academy and Value Education Committee.
 - National conference on 'Role of Spirituality in Education' was organized in 2012.
- **Health and Hygiene:**
 - Tie up arrangements are made with Kamat Clinic and Ekbote Hospital, which are located within 300 meters from college. Medical help is made available to the students and staff.
 - O.P.D.s of Dr. Ekbote Hospital, Modern College of Physiotherapy and Dr. Kamat are available for staff and students.
 - The daily cleaning of campus, classrooms, pavilion, playground, toilets is outsourced. The employees of the agencies clean the entire campus regularly.
 - A separate committee is constituted for Housekeeping and Campus Beautification.
 - The work of cleaning of laboratories, offices and cabins is done daily by college non-teaching staff.
 - Fume hoods are installed in the Department of Chemistry.
 - Exhaust fans are installed in all the departments.
 - To prevent the injuries caused by chemicals, a separate shower bath, eyewash, safety goggles, gloves and other safety equipment are provided in the respective departments as a precautionary measure.
 - Pest control in office, library, record rooms, and other relevant places is done regularly with the help of external agencies
 - Canteen Management Committee, under the expert guidance of

members of Microbiology Department, monitors the ambience, cleanliness of the canteen as well as the quality of food items available in college canteen.

- Water Purifiers / Filters are installed to provide clean and filtered drinking water for the students and staff on the campus. Annual Maintenance Contract of all the Water Purifiers is signed and Filters are cleaned / replaced regularly.
- The college Canteen Management has been instructed to prepare and serve the food in Hygienic Environment. Regular check-ups and surprise visits are made to maintain the hygiene in the canteen. A separate Food Committee is constituted to look after the health and hygiene of the college canteen.
- In each department, ladies common room, boys common room, staff common room, first aid boxes are made available and maintained.
- The Health Insurance and Mediclaim scheme has been introduced by the management for the staff and is being made applicable gradually to all the members of the staff.
- Medical checkup camp is conducted every year for first year students of Bachelor Degree.
- Physical Education course is regularly conducted for the first year students.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

- **Growth in infrastructure is in line with academic growth:**



In keeping with the policy of management, there has been an adequate growth of infrastructure in line with the academic growth during the period 2002 – 2016. The graph given below indicates that there has been proportionate growth in infrastructural facilities to accommodate the increase in number of courses and students.

- **Optimal Utilization of available infrastructure:**

- **Classrooms:** For optimal utilization of the classrooms, the institution runs in three shifts as follows:

Arts faculty :	7.15 am to 12.20 pm
Science faculty :	10.50 am to 2.55 pm
Commerce Faculty :	7.00 am to 11.00 am
Number of class rooms:	83
Student strength :	
Under Graduate Section:	5697
Post-Graduate and Research Section:	1444
Total :	7141

- **Laboratories:** The laboratories also work in three shifts. Laboratories are made available to students at 7.25 a.m. till 8.00 p.m. Continuous allocation of different batches to laboratories is scheduled according to lecture timings of students. Lectures and practical sessions are arranged in such a way that the student do not waste their time. The students are allowed to use laboratories for extra hours if the laboratories is free. As an example, for computer laboratory, some of the desktops are free for some particular batch. Student who have free time can reserve the desktop for that batch and can take advantage of using the laboratory during their free time. Laboratories are also made available during vacation and on Sundays.
- **Library:** Library is open from 09.00 a.m. to 06.00 p.m. on all weekdays. The library is also made available to students on weekly and public holidays. The students issued two books for home lending on the library cards provided to them. They are also allowed to get a book on their identity card while they are using the reading hall facility.
- **Reading Hall:** The Reading Hall is open from 08.00 a.m. till 07.00 p.m. and the facility is also made available to students on weekly and public holidays. During examination period, the reading hall is made available for late hours. Seating capacity of reading hall is 400. There is a separate reading section for college staff.
- **Internet facility:** The Library provides internet facility that can accommodate 24 students/staff. They can take the prints of the material they have downloaded. Online journals, subscriptions are also made available. Digitized material in the form of lecture notes, question papers, presentations, project reports etc., is made available in the digital library. Wi-Fi connectivity is being introduced in the college. Every department has 10 mpbs leased line connection.
- **Sports:** The college provides a playground for various intercollegiate sports events like basketball, football, baseball, kabaddi, kho-kho etc.
- **Assembly Hall:** College has an Assembly Hall that is used for a variety of co-curricular and extra-curricular activities. Reservation of the hall is centrally monitored to avoid overlap of events. For Post-

function maintenance, a separate housekeeping team is permanently appointed.

- **Examination Section:** A separate, spacious and well-equipped Examination Control Room has been developed to monitor and control the overall examination activities of the college. A separate College Examination Officer (CEO) is appointed to ensure the appropriate planning, control and conduct of all examinations.

Recently, the university has adopted a policy of sending the question papers on line. For smooth conduct of examinations, the college has provided necessary equipment in the Examination Control Room.

- **Academic calendar:** The institution has its academic calendar. Based on this calendar, all the staff members prepare their personal timetable, academic planning, teaching plan, planning of duties for different events etc.
- **Budget:** At the end of each academic year, the heads of the departments hold departmental meetings to discuss the budgetary requirements for the next academic year and the same are reported to the Principal. The college authorities take into account the academic and infrastructural requirements and finalize the budget allocations which is finally approved by the management. The disbursement of the budgetary provision is as per the norms laid down by the authorities. The revised budget which takes care of the changes in the budget allocations required by the department is prepared after the completion of nine months.

- **Infrastructural Facilities Developed during 2010 -2016.**

Table 4.2 Facilities developed

Sr. No.	Academic Year	Facility
1	2010-11	Well-equipped Examination Control Room with additional Store Room Facility.
		Well-equipped Language Laboratory with 14 desktop computers, printer.
		Establishment of research Centres in Commerce Department
		Development of new laboratory for BCA
2	2011-12	Newly constructed Administrative Office of 6000 sq. ft. in separate building.
		Accounts section is separately developed in administration section.
		Installation of 32 CC TV cameras in the campus with control at two different places.
		Renovation of Statistics Department.
3	2012-13	Development of new laboratory for B.Sc. (Animation).
		Inauguration of Virtual Classroom at the hands of Hon. Shri. Vilasrao Deshmukh, Minister for Science and Technology, Government of India.
		Inauguration of Digital classrooms at the hands of Hon. Shri. Vilasrao Deshmukh.
		Installation of Virtual Laboratory in collaboration with IIT Powai.
		Increased use of ICT in classrooms.
		Renovation of Computer Science Department.
		Development of new laboratory for B.C.A.
		Installation of additional Water Filters and Water Coolers.
		Additional overhead Water Storage Tank and Water Cooler are installed.
		Laptops, Internet connection/facility to all departments
		Establishment of research Centres in Electronics, Economics and Marathi departments.

Sr. No.	Academic Year	Facility
4	2013-14	Development of Digital Library, inauguration at the hands of Hon. Governor, Orissa State, Padmshree Dr. D. Y. Patil
		Development of Digital Record Room, inauguration at the hands of Hon. Governor, Orissa State, Padmshree Dr. D. Y. Patil on 31 st July 2013.
		Extended use of ICT in laboratories.
		Establishment of Competitive Examination Centre.
		Development of Digital Herbarium by Botany Department.
		Up-gradation of Psychological Counseling Centre
		Development of Career / Aptitude Guidance Centre. College has purchased software of career guidance and necessary computers.
		Renovation of NSS office.
		Renovation of Mathematics Department.
		Installation of Solar Water Plant, Solar Based Distilled Water System and Solar Based Water Pump
		Upgraded Leased Line connection of 10 Mbps.
		Upgraded Intranet connectivity through Optic Fiber.
		Development of Hostel Facility and Guest House.
		Development of Non-Resident student Centre through SPPU, Pune funds.
5	2014-15	Meditation room with relevant furniture and facilities.
		Establishment of Research Centres in Chemistry Department, Biotechnology Department and Microbiology department.
		Renovation of Canteen.
6	2015-16	Renovation of Economics, Marathi Departments, NSS office, Gymkhana, language laboratory, Principal cabin, Vice-Principal cabins, admin section, Water fall, car parking area, BBA-BCA section (Office, library, classrooms)
		Development of LMC Chairpersons cabins, Board room, History Museum, enter for Promotion of Research, Centre for Teaching and Learning, Physics Research Centre, Vidya Seminar hall,
		Installation of centralized server in DRR, up-gradation of antivirus software
		Increase in number of CCTV cameras.
		New lift in BBA/BCA section
		Renovation of Botanical Garden
		Increase in examination control room area, additional store room, Increase in facilities at examination control room
		Fixing of paving blocks at main entrance area
		Restructuring of Meditation room to develop Meditation and Yoga Centre

• **Amount spent during last six years :**

Table 4.3 Amount spent in Rs. during last six years

Category / Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Equipment	1,19,11,230/-	45,03,603/-	30,07,303/-	36,70,453/-	55,03,310/-	81,54,170/-
Gymkhana	5,36,977/-	3,26,543/-	5,13,514/-	7,27,087/-	11,90,546/-	5,05,537/-
Total	1,24,48,207 /-	48,30,146 /-	35,20,817/-	43,97,540/-	66,93,856/-	86,59,707/-

• **Infrastructure :**

The details of detailed expenditure on maintenance of infrastructure are as follows:

Table 4.4 Expenditure in Rs. on maintenance of infrastructure

Category / Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Repairs and Maintenance	40,71,735/-	40,56,113/-	26,13,883/-	50,72,434/-	45,36,650/-	30,52,276/-

- **Maintenance :** The details about maintenance are as follows : The institution has done Annual Maintenance Contract (AMC) for : Computers, Laptops, Network administration, Elevators, ,Generators,

Pest Control of Library, Administrative Office, Laboratories, CCTV, EPABX system, Air Conditioners, Water Purifiers, Fire Extinguishers, Biometric Attendance Machine, Reprographic Machines, Transformer, Induction Gas Stove, Vehicle Maintenance, Water Tank Cleaning.

- **Building Maintenance:**
 - Structural Audit done by the Civil Engineers at regular intervals.
 - Energy Audits are also conducted by Electrical Engineering Experts.
- **Furniture fixtures:**
 - Maintenance of furniture is done regularly.
 - The college makes provision for the insurance of college building, furniture and other assets every year.
- **Books maintenance:** The library does the exercise of stock verification and upkeep and maintenance of library books.
- **Ground maintenance:** The gymkhana department looks after the regular maintenance playground as per the national standard norms.
- **Master Plan :** The college has the Master Plan as given below and the enlarged version of the same is given in Annexure VII.



- **Future planned expansions :**
 - The college proposes following courses: Bachelor of Fashion Designing (BFT), B.Sc. Nanotechnology, B.Sc. (Blended), B.C.A. (Science) and M.A. (Political Science), for which the management has allocated 13000 sq. ft. area above auditorium and management building.
 - The management intends to redevelop the college building so as to increase infrastructural facilities by the year 2020.

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

- Institution has installed two elevators so that physically challenged students can reach to any classroom in the college.
- Institution has built wheel chair ramps at the respective places to enable these students to move around in the campus and visit different sections.
- Walkers and wheel chairs are provided to physically challenged students.
- Audio cassettes and CD's are provided to visually challenged students to help them in their studies.
- Digital Braille e-book reader is provided to visually challenged students.
- Library provides following facilities to visually and physically challenged persons –
 - Audio books and their software are made available for such persons.
 - The relevant books are also made availableThese facilities are separately arranged in the library.

4.1.5 Give details on the residential facility and various provisions available within them: • Hostel Facility – Accommodation available • Recreational facilities, gymnasium, yoga center, etc. • Computer facility including access to internet in hostel • Facilities for medical emergencies • Library facility in the hostels • Internet and Wi-Fi facility • Recreational facility-common room with audio-visual equipment • Available residential facility for the staff and occupancy • Constant supply of safe drinking water • Security

- **Hostel Facility:** Girls' hostel: The accommodation for 120 girl students is available. At present 43 girl students availing this facility. Total 27 rooms are available in two-storied building.
- **Recreational facilities, gymnasium, yoga centre, etc.:** Color TV, gymnasium, indoor game like basketball, Carom board, chessboards are available for girl students.
- **Computer facility including access to internet in hostel:** One desktop with multimedia facility and internet facility is made available in the hostel recreation hall.
- **Facilities for medical emergencies:** Qualified doctor is made available on call to hostel students. It is proposed to establish a Health Care Centre. At present, the arrangements are made with Kamat Clinic and Ekbote Hospital, which are located within 300 meters from college. Meditation facility and Medical help is made available to the students and staff with this provision.
- **Library facility in the hostels:** Library facilities are available.
- **Internet and Wi-Fi facility:** Internet and Wi-Fi facility is available on the hostel campus.

- **Recreational facility- common room with audio-visual equipment:** A separate TV room is provided to the students. Desktop with internet facility is made available in the common room.
- **Constant supply of safe drinking water:** Purified drinking water facility is available.
- **Security:** Security guards are deputed from external agency on 24 x 7 basis at prominent places in the campus. Regular checkup and control on trespassers is done by the security personnel. CCTV cameras are installed at appropriate places.

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

- Medical health arrangements for students and staff are made with Kamat Clinic and Ekbote Hospital that are located within 300 meters from the college. Meditation facility is also provided.
- The college canteen management has been instructed to prepare and serve the food in hygienic environment. Regular check-ups and audits are made to maintain the hygiene in the canteen. A separate food committee is constituted to monitor hygiene related issues.
- In each department, ladies common room, boys' common room, staff common room, first aid boxes are made available and maintained.
- Water Purifiers / Filters are installed to provide clean and filtered drinking water for the students and staff on the campus. Annual Maintenance Contract of all the Water Purifiers is signed and Filters are cleaned / replaced regularly.
- Regular cleaning of campus, laboratories, classrooms, staff rooms, ladies and boys common rooms is done by external agency twice a day.
- All the toilets in the campus are cleaned daily by external agency.
- Fire extinguishers are installed and are refilled at regular intervals.
- Overhead water storage tanks and ground level water storage tanks are cleaned and maintained through Annual Maintenance contracts.
- Medical health checkup of first year undergraduates is done every year by a team of doctors. The major observations about the health of the students are noted and communicated to them.

4.1.7 Give details of the common facilities available on the campus – spaces for special units like IQAC, Grievance Redressal unit, Woman's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium etc.

- **IQAC Cell:** A separate room is available on campus for IQAC Cell, for which the college has received Rs. 3 lakhs from UGC. This room is well equipped with computer, printer, LCD projector and Wi-Fi connectivity.

- **Grievance Redressal Unit and Woman's Cell:** The College has 'Women Grievances Redressal Committee' constituted as per Government guidelines. In addition to this, College has constituted 'Staff and Students Grievances Redressal Committee' located in the Department of Geography.
- **Counselling:** The college runs counselling Centre for Psychological Counselling, Career Counselling etc. A separate room is made available as a Counselling Cell where the counselling is done on personal level to students, staff and to the community. Personal level guidance, career related counselling, student level counselling, academic problems, pre-marital counselling, deaddiction counselling, counselling for neighbourhood community, counselling related to relationships etc. are focused in the counselling sessions by experienced staff members.
- **Career Guidance:** The college has established Career Guidance Centre in the Department of Geography. Separate space is allotted for the activity. Students from all the faculties take advantage of the activity. Under this activity, career guidance workshops are organized.
- **Placement Unit :** College has an active Placement Cell conducted by the Department of Computer Science for undergraduate and postgraduate departments of all faculties. Various renowned companies visit college for the placement of students.
- **Health Centre:** It is proposed to establish a Health Care Centre. At present, the arrangements are made with Kamat Clinic and Ekbote Hospital, which are located within 300 meters from college.
- **Staff room:** Separate staff rooms for ladies and gents staff members are available. A Staff Tea Club activity is conducted by the staff members.
- **Common Rooms for Students:** There are separate spacious common rooms for boys and girls. A separate lady staff has been appointed on full time basis as a care-taker in Girls' Common Room.
- **Drinking Water:** Purified drinking water facility is available at different places in the college. Hygiene care professionals regularly clean the water storage tanks.
- **Vehicle Parking:** Separate well-constructed parking facility is available for two wheelers as well as four wheelers. Separate arrangements are made for parking of the vehicles of students and staff.
- **Canteen:** The facility is available for students and staff. Separate seating arrangements are made for ladies and members of the staff. Menu items and their rates are decided by the college authorities. It is also ensured that hygienic foods are served in the canteen.
- **Transport:** College owns two vehicles that are made available for the staff and students for the official visits. Additional vehicles (Mini Buses) owned by *P. E. Society*, Pune, are also available on request for college study visits, camps and tours.

- **Internet facility:** This facility is available in library, central computing centre and Department of Computer Science.
- **Auditorium:** An auditorium with state of art facilities is available for the college with seating capacity of 507 for co-curricular activities like Conferences, Cultural Activities, Guest Lectures, Workshops, Symposia, Exhibitions etc. The area under construction is 2400 sq. ft. with elevator facility.
- **Central Computing Facility:** A separate Common Computing Centre is developed for the students and staff members. It is equipped 20 computers, printers, scanner, reprographic facility, internet and Wi-Fi connectivity. It is available for all from 8.00 am to 6.00 pm.
- **Credit Co-operative Society:** A Credit Co-Operative Society is run as a social activity by the teaching and non-teaching staff members. It offers facilities like recurring deposits, fixed deposits, instant loan sanctioning, etc. The yearly dividend is distributed among the members.
- **Recreational Spaces for Students:**
 - Separate Boys' Common Room and Girls' Common Room are provided.
- **Recreational Spaces for Staff:**
 - Separate staff rooms for ladies and gents staff members are available and an attendant is available.
 - The College has a well-equipped air-conditioned Assembly Hall of 400 seating capacity that can be provided for the recreational and welfare activities of staff members.
 - Auditorium with all modern facilities is available for recreational and welfare activities of staff members.
 - A committee of Staff Secretaries is constituted to organize recreational activities and special occasions of achievements by the staff members.
 - Birthday Greetings are extended to the staff members via SMS.

4.2 Library as a Learning Resource

Synoptic view:

• Adequate physical facilities (reading room, reprography, internet). • Huge numbers of books for students. • Adequate number of journals, periodicals, and other library resources (CDs, cassettes, Braille language software etc.) • The library services and support are effective and user friendly. • The functioning of library is monitored by Library advisory committee. • The library functionality is enhanced as per the feedbacks taken from stakeholders. • Digital Library is developed. All library transactions are computerized.

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, library has a **Library Advisory Committee**. The composition of the Committee is: Principal (Chairperson), Librarian (Secretary), Vice-Principal (Members), Management Representatives (Member), and Library Expert (Member).

Library Advisory Committee meeting is arranged twice in a year, at starting of every academic year for yearly planning and at the end of academic year to take the review. If needed, additional meeting is called for other than routine issues. Library automation, development of Digital Library, increase in number of e-resources, availability of modernize infrastructure are some of the issues taken up by Library Advisory Committee.

Library also has **Library Committee**, representing the stake holders as : Principal (Chairperson), Librarian (Secretary), Faculty Representatives (Members), Parent Representatives (Member), Student Representatives (Member), Alumni Representative (Member).

Significant initiatives taken by the committee are as follows:

- Establishment of Digital Library with internet facility.
- Purchase of revised version of Library software with Web OPAC facility.
- Renovation of entire staking area.
- Subscription of new journals, e-resources.
- Institutional membership of other libraries viz. Deccan College, Jaykar library, Gokhale Institute, British Council Library, etc.
- Reprographic facility
- Rendering of plagiarism services to students, teachers, researchers from the college as well as other institutes.
- Display of new arrivals of books, CDS and other reading material in the library.

4.2.2 Provide details of the following

- **Total area of the library (in Sq. Mts.)**
 - **Total Seating capacity**
 - **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**
 - **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**
- **Total area of the library: 634.30 Sq. Mts. (6825.05 Sq. ft.)**

Table 4.5 Total area of Library

	Main campus	BBA/BCA campus	Competitive Exam Centre	Total
Area of library	503.59sq. Mts. (5418.62 sq. ft.)	94.24 sq. Mts. (1014.50 sq. ft.)	47.85sq. Mts. (514.86sq. ft.)	645.68 sq. Mts. (6947.98sq.ft.)
Seating Capacity	202	35	70	307

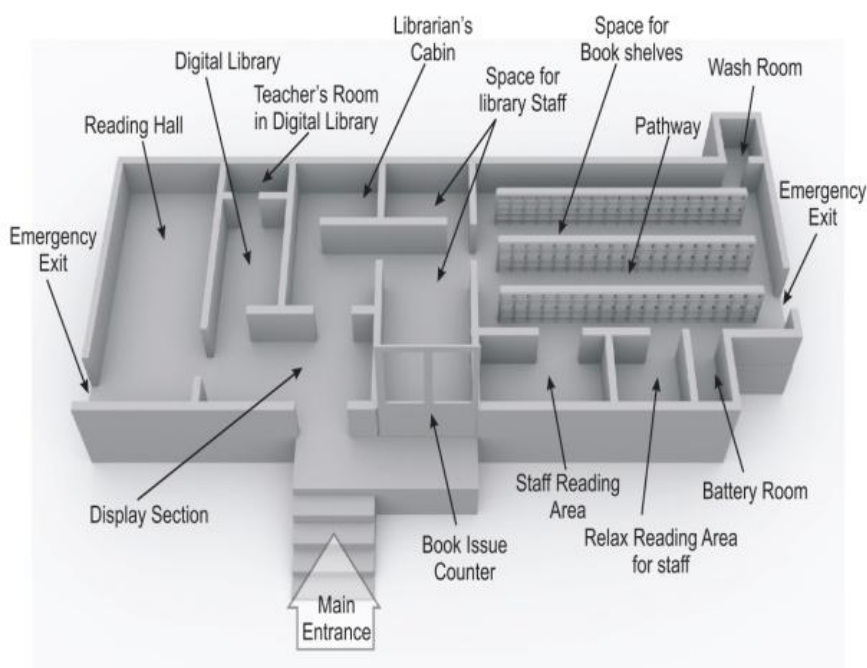
- **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**

Table 4.6 Working hours of library

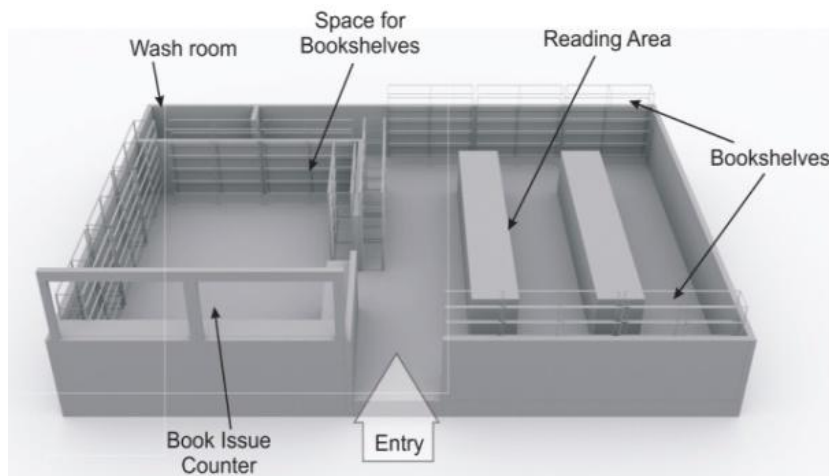
Sr. No.	Days	Period	Timing	Total Hours
1	Monday to Saturday	Regular	8.00am to 6.00pm	10 hrs.
2	Monday to Saturday	During Examinations	8.00am to 8.00pm	12 hrs.
	Sunday		9.00am to 5.00pm	8 hrs.
3	Competitive Examination Guidance Centre (In Separate Hall)	Regular	4.00pm to 11.30pm	7.30 hrs.

- **Layout of the library**

Main Campus Library



Commerce (Self-Financed) Unit Library



4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Purchasing is done as follows:

- The price lists and catalogues received by the Principal and Librarian are placed before Heads of the Departments in the meetings held for selecting the books for approval.
- The recommendation register is maintained in the library, in which, students note their recommendations. The lists are prepared based on the recommendations.
- The consolidated list of the books to be obtained on approval is prepared and sent to the approved publishers/ suppliers.
- Orders are placed on the basis of the lists of finally selected books submitted by the HODs.
- The Library completes the processing of books so purchased and then the books are available at the respective places for the readers.
- The bills duly scrutinized by the Library staff and the accounts staff are finally sent for payment by cheque.
- The general books and the books of special significance recommended by staff / students are considered for approval at various levels such as HOD, Librarian, Principal, Library Committee and Library Advisory Committee.

Table 4.6 Library Book Details

	Text Books		Reference Books		Total		Periodicals (print Format)		Any Other (CDs)	
	No.	Cost (Rs.)	No.	Cost (Rs.)	No.	Cost (Rs.)	No.	Cost (Rs.)	No.	Cost (Rs.)
Upto 2010	Number of Books : 87683									
2010-11	1670	2,07,459/-	2720	8,53,665/-	4400	10,61,124/-	118	1,68,718/-	94	18,077/-
2011-12	595	77,124/-	2851	8,70,044/-	3446	9,47,168/-	119	1,07,202/-	24	21,634/-
2012-13	1373	2,00,655/-	1805	6,87,843/-	3178	8,88,498/-	103	1,05,909/-	30	3,872/-
2013-14	1782	2,47,920/-	1521	4,89,387/-	3430	7,37,307/-	116	1,15,598/-	7	1,355/-
2014-15	1623	2,21,653/-	1312	6,44,695/-	2935	8,66,348/-	118	1,22,342/-	51	32,520/-
2015-16	1795	2,60,180/-	1508	6,34,076/-	3308	8,94,256/-	132	1,41,332/-	5	Complementary

Table 4.7 Library e-resources

Year	2010-11 to 2014-15			2015-16		
Details	Name	Resources	Price In Rs.	Name	Resources	Price in Rs.
	NLIST	6000+ e-journals and 97000+ e-books	5,000/-	NLIST	6000+ e-journals and 97000+ e-books	5,000/-
				DELNET	15000 e- journals + 3,00,000 e-books and 1000 full text dissertations and Theses	16,500/-
				British Library	1400 e-journals and 85000 e-books	10,693/-
	Number		Total Cost (Rs.)	Number	Total Cost (Rs.)	
	1		5,000/-	3	32,193/-	

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- OPAC • Electronic Resource Management package for e-journals
- Library Website • In-house remote access to e-publications • Library automation • Total number of computers for public access • Total numbers of printers for public access • Internet band width/speed 2 mbps 10 mbps 1GB • Institutional Repository • Content management system for e-learning • Participation in Resource sharing networks/ consortia (like INFLIBNET)

Table 4.8 ICT related details

Sr. No.	Headings	Details
1	OPAC	- Adequate provision of computers has been done to refer OPAC with proper instructions. Students extensively use this OPAC to locate the required book and they do not require any manual help. It saves their time. Web-OPAC is also available which can be referred 24×7 from any location and is available on college website.
2	Electronic Resource Management Package for e-journals	The e-journals and e-books are available through databases of NLIST, British library, DELNET
3	Federated searching tools to search articles in multiple database	Internet connection is provided and federated searching is done through Google.
4	Library Website	The college developed separate Library website in 2013-14. It was inaugurated by His Excellency, Governor of Tripura, Dr. D.Y. Patil. Revival and Updating of the website is in process to include Web-OPAC, Online Literacy Program and e-bulletin. The link is provided to library website through college website.
5	In house remote access to e-publications	The college has subscribed for institutional membership of DELNET, NLIST, and British Council Library (BCL), Pune. Staff and students can access these resources from departments also with Login Id and Password
6	Library Automation	“AutoLib” library software is used for automation of library transactions. - All computers in the library are connected through LAN. - Power backup is provided
7	Total number of computers for public access	Twenty four computers for public access.
8	Total Number of printers for public access	Three printers + one Photocopier
9	Internet bandwidth/ speed	- Wi-Fi facility is provided 10 mbps leased line

- **Institutional Repository:** Institutional Repository includes:
 - College magazines in digital form since college establishment.
 - Theses and dissertations of Staff members.
 - College question papers.
 - Proceedings of conference/seminar organized in the college.
 - Research Articles of staff members.
- **Content management system for e-learning:** The proposal of Content Management System is under active consideration of the management.
- **Participation in Resource sharing networks/ consortia (like INFLIBNET):** We are members of following online resource networks by which we get access to online resources.
 - Developing Library Network (DELNET)
 - Information and Library Network (INFLIBNET)
 - British Library

4.2.5 Provide details on the following items : • Average number of walk-ins • Average number of books issued / returned • Ratio of library books to students enrolled • Average number of books added during last three years • Number of information literacy trainings organized • Details of “weeding out” of books and other materials

Table 4.9 Library details

Sr. No.	Description		Details
1	Average number of walk-ins		
	Reference Reading		90-100
	Reading Hall		123-130
2	Average number of books issued / returned		100-125
3	Ratio of library books to students enrolled	Print Books	15:1
		e-books	69:1
4	Average number of books added during last three years		1655
5	Average number of login to OPAC		75-100
6	Average number of login to e-resources		38-40
7	Average number of e-resources downloaded / printed		10:1
8	Number of information literacy trainings organized		4/5 Every year

- **Details of “weeding out” of books and other materials:** Books are withdrawn after taking proper approval of library committee and Local Managing Committee. Details of the books written off during last 5 years:

Table 4.10 Number of weeding out books (year wise)

Sr. No.	Year	No. of Books
1.	2010-11	305
2.	2011-12	369
3.	2012-13	1041
4.	2013-14	2837
5.	2014-15	653

4.2.6 Give details of the specialized services provided by the library • Manuscripts • Reference • Reprography • ILL (Inter Library Loan Service) • Information deployment and notification • Download • Printing • Reading list / Bibliography compilation • In-house / remote access to e-resources • User Orientation and awareness • Assistance in searching Databases • INFLIBNET / IUC facilities

Table 4.11 Services provided by the library

Sr. No.	Headings	Details
1	Manuscripts	We have taken Institutional Membership of Deccan college library, Pune, which is famous for its archival collection on linguistics, history, anthropology etc. Staff and students can avail reference facility or even borrowing facility in some cases
2	Reference	- References from books, journals, online databases are provided to staff and students. - Newspaper clipping files are maintained for reference. - Orientations on use of reference collection are organized by library
3	Reprography	Photocopy facility is available in the library.
4	ILL (Inter Library Loan Service)	- Books are issued under ILL to schools and colleges run by Progressive Education Society. - Books are borrowed from Gokhale Institute, Jayakar Library and Deccan College Library under institutional membership.
5	Information Deployment and Notification	- Rules, timings, new arrivals are displayed in the library. - Notices are displayed for staff and students - Demonstration on “use of OPAC”, “Use of Library” are conducted for staff and students. - Book exhibitions, International Book Day, 14 hours reading, Important Days and birth anniversaries of National Leaders are organized in the library to promote reading.
6	Download	Internet connection is provided for downloading
7	Printing	Printing facility is available in the library.
8	Reading list/bibliography compilation	Reading lists and bibliography are generated through <i>Autolib</i> software
9	In house / remote access to e-resources	Both in-house and remote access for subscribed databases is provided.
10	User Orientation and Awareness	Demonstration, visits, lectures are organized for staff and students to promote library use. Online Information Literacy Programme will be made available for entry-level students through Library web site.
11	Assistance in searching databases	Assistance is provided for OPAC and searching subscribed databases.
12	INFLIBNET/IUC facilities	Other databases are also subscribed with INFLIBNET.

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college

Library provides support services to the students and staff members in the form of issue/return of books, photocopying, display of new titles, referencing, and shelving of books, etc. Additional services given by library staff are in the following ways:

- Orientation for entry-level students.
- Distribution of college magazines.
- Arrangement of book exhibitions.
- Guidance in the use of e-resource and OPAC
- Maintenance of newspaper clipping files.
- Celebrating important days, birth anniversaries of national leaders in the library.

- Book bank facility.
- Refund of deposit receipt procedure.
- Handling of periodicals, institutional membership subscriptions.
- Orientation for entry-level students.
- Participating as well as arranging workshops, seminars, training programmes.
- Withdrawal of books
- Anti-plagiarism software Service is provided to staff and students.
- Guidance in the use of e-resource and OPAC

4.2.8 What are the special facilities offered by the library to the visually / physically challenged persons? Give details.

The library provides following facilities for **physically challenged** persons.

- Wheel chair
- Ramp at the entrance.
- Easy access to library
- Special reading arrangement on demand

For **blind/Visually challenged** persons the library has purchased:

- Angle Pro: Talking digital pocket daisy player, e-book reader, music player, radio cum voice recorder fully talking and specially designed for the visually challenged person.
- We have 'JAWS' software for visually challenged person.
- Audio books are downloaded for visually challenged students.
- The Braille books are made available in college library.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services (What strategies are developed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

In the feedback forms designed for stakeholders' feedback, the aspect of feedback on library services is included and is analyzed regularly. Feedback is also obtained from following sources:

- Suggestion Box
- Application forms
- Forms designed by the library
- Feedback from NSS students
- Note from Head of the Departments and Staff members.
- Visitor's book
- Feedback form about College facilities is made available on College website, which contains feedback about the library.
- Note from Head of the Departments and Staff members.

The feedback obtained through above sources is analyzed and is used for further improvement of library facilities.

4.3 IT Infrastructure

Synoptic view:

● Up-to-date and advanced IT facilities are adopted by the institution. ● All faculties are inspired and facilitated with the use of ICT for effective teaching learning. ● The institution is connected with National Knowledge Network, 10 mbps leased line and whole campus is Wi-Fi enabled. ● Appropriate budgets provisions for purchase, upgradation and maintenance of computers.

4.3.1 Give details on the computing facility available (hardware and software) at the institution ● Number of computers with Configuration (provide actual number with exact configuration of each available system) ● Number of Laptops ● Number of Multi-facility printers ● Number of Colour Printers ● Number of Laser printers ● Number of Dot Matrix printers

Table 4.12 Details of Computing Facility

Sr. No	Name of the Department	Desktops	Laptops	Multi-facility printers	Color printers	Laser printers	Dot Matrix printers	LCD
1	Computer Science	201	6	1	1	2	18	5
2	Biotechnology	15	2	1	0	4	1	4
3	Microbiology	4	1	1	0	1	0	2
4	Geography	12	1	2	1	0	0	3
5	Psychology	7	2	0	0	0	0	0
6	Chemistry	4	2	0	0	0	0	0
7	Electronics Science	40	2	0	0	2	1	2
8	Physics	18	1	0	0	1	1	5
9	Botany	6	2	0	0	3	0	3
10	Zoology	4	1	1	0	0	0	2
11	Statistics	18	3	1	0	4	0	3
12	Mathematics	14	1	0	1	1	0	4
13	Commerce	15	1	0	0	2	0	0
14	Digital Language Laboratories	11	1	0	0	1	0	0
15	Library	35	1	1	1	2	0	1
16	Office	25	2	2	0	6	0	0
17	Gymkhana	2	1	0	0	2	0	1
18	Examination Cell	1	0	0	0	1	0	0
19	IQAC Room	1	0	0	1	0	0	0
20	Economics	1	1	0	0	1	0	0
21	BCA+BBA wing	87	15	0	0	11	9	15
22	NSS, NCC Office	2	3	0	0	1	0	0
23	VP Office	5	1	5	1	0	0	0
24	Principal Office	1	1	0	0	0	0	0
25	Digital Record Room	2	0	0	0	1	0	0
Total		531	51	15	6	46	30	50

- Number of Scanners : 04
- Special Printer: 02 (To print identity card in Digital Record Room and another to print result sheets in office)
- Photocopiers : (05)

- Computer-student ratio : 1 : 11
- LAN facility : At seven places separately
- Internet Facility : Available in all departments + Library + Office + Digital Language Laboratory
- Wi-Fi facility : Available in the entire campus
- Licensed software :

Table 4.13 Licensed software

Sr. No.	Particulars	Qty	Sr. No.	Particulars	Qty
1	Visual Basic A.E	1	16	Quick Heal Enterprise Edition	1
2	Visual C++ A.E	1	17	Quick Heal Desktop Edition	5
3	Windows for Workgroup	1	18	Quick Heal Novell Edition	1
4	MS office 4.2 with FoxPro	1	19	Quick Heal Dos Edition	1
5	Lotus 123 upgrade to 3.4	1	20	MS windows NT workstation 4.0 AE	22
6	Sco-unix 16 users cross upgrade	1	21	MS windows 98 SE	5
7	Quick Heal	1	22	MS windows 2000 server	1
8	Novell Netware 25 users 4.11	1	23	MS Windows 2000 cal AE OLP	22
9	Novell Netware 25 users Small business	1	24	MS Windows Office XP Pro OLP	22
10	Quick Heal Antivirus 3 yrs	100	25	Ms Visual Studio 6.0 Ent Olp	22
11	Quick Heal Antivirus 3 yrs	20	26	Oracle 7.x on Novell Platform	1
12	Microsoft Windows XP Professional	1	27	Developers 2000 Enterprise	1
13	Red Hat Enterprise Server Edition	1	28	Power Builder 5.0 Desktop	1
14	Red Hat Client	1	29	Novell Dos 7	1
15	Quick Heal Antivirus 3 yrs	5	30	Sybase NLM 8 users	1

- **Number of nodes / computers with internet facility:** Each department is provided a 10 mbps leased line Internet connection.
- **Number of Servers :** LAN server (7) , Windows NT server (1), LINUX server (2).

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- **Laptops:** Each department is provided a laptop and broadband internet facility of 10 mbps. (Refer Table 4.14).
- **Desktops:** Desktops are made available for staff as well as for students in the college. (Refer Table 4.14)
- **Library:** In Library 24 nodes are connected to internet and are available for use to staff and students.
- **Digital Language Laboratories:** There are total 10 computers in Digital Language Laboratory.
- Internet connection is made available in Computer science department 50on desktops and in Digital Language Laboratories 40 on desktops.
- The whole campus is Wi-Fi enabled.

- Leased line of 10 mbps capacity is installed by the institution for faster internet connections.
- Installation of Intranet in the campus using optic fiber network.
- Dongles are provided for office use, conference activities by the college.
- High-speed Internet facility is provided for Virtual Classroom, Virtual Laboratory, Digital Library, Digital Classrooms and Digital Record Room.
- Off-campus access through personalized and institutional websites. Access to authorities through official e-mail id.
- Mass Communication from college to students and staff through SMS software

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- Computer systems are upgraded every alternate year. Provision of Rs. 25 lakhs is made in the annual budget for update, deployment and maintenance of the computers.
- Digital classroom, digital laboratory, virtual classroom, digital library are newly developed for the benefit of students and staff members.
- Braille e-book reader in the Braille library section is provided.
- The strategy of the institution is to enhance the quality of education through upgradation of the ICT and other technology used.
- The up gradation is sought through the purchases made during the last five years.
 - LCD and DLP video projector 53 (2200 Lumens).
 - Dial up internet connection has been upgraded to broadband at seven Places. Leased line of 10 Mbps is installed in the campus.
 - Some of the Dot Matrix printers are replaced by inkjet/laser jet.
 - New scanners and multi-facility printers are purchased.
 - Copies of Licensed software are purchased. As per the University guidelines open source software are made available in the departments.
 - Replacement of 100 KVA high-tension transformer with 320 KVA transformer.

4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years).

Following are the details of department wise average budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution:

Table 4.14 Department wise average budget

Year	Budget for Procurement	Budget for Upgradation	Budget for Maintenance
2010-11	6,00,000/-	1,50,000/-	15,000/-
2011-12	6,52,000/-	1,63,000/-	20,000/-

Year	Budget for Procurement	Budget for Upgradation	Budget for Maintenance
2012-13	5,44,000/-	1,36,000/-	25,000/-
2013-14	4,20,000/-	1,05,000/-	3,15,900/-
2014-15	6,48,000/-	1,62,000/-	3,35,000/-
2015-16	8,19,871/-	2,04,967/-	3,85,000/-

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching / learning materials by its staff and students?

- Each department is provided a separate laptop, LCD projector, presenter, CDs, DVDs, which are used by staff and students for effective use of teaching /learning.
- Use of Digital classroom, digital laboratories, virtual classroom lead to effective teaching – learning style.
- The process of making all classrooms and laboratories ICT enabled has been initiated and is expected to be complete within few months.
- Use of Digital Library, online e-journals, e-subscriptions also helps students and teachers for the teaching-learning process.
- Use of audio-visual aids, film club activity, online teaching aids, online tests, use of model charts is promoted for effective classroom teaching.
- Online examinations are conducted in the college.
- Project presentations are organized for students. Students are also encouraged to use ICT in their presentations.
- Library section is upgraded with Digital Library.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

- Online teaching learning resources
 - **Digital classroom:**
Five digital classrooms are developed to promote interactive elaborative lectures in the college. They contain digital board to store the data written on the board while delivering the lectures. The lecture recording facility is also available in the digital classroom.
 - **Virtual classroom:**
One virtual classroom is established having the facility to connect to the remote places and make the lectures of eminent personalities available for students in the college campus.
 - **Virtual laboratory:**
The institution has tie up with IIT Powai to set up the virtual laboratory in Electronics department. Some of the electronic instruments are costly or require mega set up. In such cases, the laboratory, which has

the setup, is connected to the institution laboratory virtually via internet and the instrument is made available at the requesting site. The requesting site has to develop the program for the current application in hand.

- **Online demonstrations:**
For more impact, visual methods are more effective. Delivering the lectures in classrooms for some of the subjects, topics is less effective than if explained via some live demonstrations. Some of the electronics concepts, life science theories, computer programs, Geographic maps etc. can be well explained through online demonstrations.
- **Online test facilities:**
The aptitude tests, placement related question banks, assignments, tests are made available to students in their respective user spaces on the server so that they can avail them as per their convenience.
- **Online lectures:**
Teachers arrange the lectures to give online demonstrations of the educational concepts to students using different audio-visual techniques, ICT methods etc.
- **Digital Language Laboratories:**
Two separate Digital Language Laboratories are developed for the students and staff members. They contain 40 computers, printers, scanner, reprographic facility, internet/Wi-Fi connectivity. It is available from 8.00 am to 6.00 pm for all.
- **Digital library:**
Well established digital library with services like 24 desktops with internet facility, access to e-journals, e-periodicals, e-magazines to students and staff, the library has its own online bulletin is published named *modlib*, the library has well designed and up to date website which is also linked to college official website.
- **ICT enabled classrooms/ learning spaces (Laptops, LCDs):**
Laptops and LCDs are provided to each department so that teachers can make use of them for ICT enabled teaching and learning.
- **Internet facility in library, assembly hall, auditorium, some of the classes:**
College has provided Wi-Fi internet facility in library, assembly hall, auditorium and in some of the classed for students and staff to make use of knowledge bank over the internet.
- **Communication through e-mails, SMS, and notices on website:**
All the students and staff members are kept in communication through the communication services like – emails, e-notices and sms. To deliver the sms, a separate sms service pack is acquired by the institution.
- **Public addressing system:**
To facilitate the effective communication for the larger number of students, a public addressing system has been installed.

- **Film Club activity:**
The institution runs Film Club activity for the benefit of staff and students. Different informative programs from television channels like National Geographic channel, Discovery channel, BBC science etc. are shown to students and staff.
- **Independent learning**
 - Budget analysis, bulletins, live discussions.
 - TVs in some departments.
 - Well-equipped seminar hall to conduct different sessions.
 - Career guidance workshops.
 - Home assignments.
 - Conduct of seminars on recent trends, topics.
 - Organization of Project competition, Power Point Presentation.
- **Teacher as a Facilitator:** Because of extensive use of online resources and independent learning methods, the students are always at the centre of teaching-learning experience and the teacher plays the role of a facilitator.

4.3.7 Does the institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

- The college is availing of the facility of National Knowledge Network connectivity through Human Resource Development Ministry and SPPU, Pune. The National Knowledge Network is made available by BSNL and is in use.
- Virtual classroom set up is installed through which it is possible to get the connectivity at university level, at national level, and receive the knowledge base, lectures, and data from the connected network.
- Efforts are being made to install leased line connection of 10 Mbps capacity.
- A separate internet connection is provided to each department.
- The digital library section makes available under “ENLIST” programme 3,00,000 e-books and more than 6000 journals.

4.4 Maintenance of Campus Facilities

Synoptic view:

- Adequate budget provisions for physical and academic support facilities are made.
- Standard procedures are laid down for maintenance and utilization of physical and support facilities.
- Proper utilization of funds allocated for maintenance of infrastructure for planned activities.

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing

details of budget allocated during last four years)?

A	Building
B	Furniture
C	Equipment
D	Computers
E	Vehicles
F	Any other

The institution allocates the budgets for equipment (laboratory equipment for departments like – Botany, Zoology, Chemistry, Physics, Microbiology, Biotechnology, Electronics, and Computer Science

The details of budgets for maintenance and upkeep of various facilities:

Table 4.15 Details of budgets for maintenance and upkeep

	2010-11 (Rs.)	2011-12 (Rs.)	2012-13 (Rs.)	2013-14 (Rs.)	2014-15 (Rs.)	2015-16 (Rs.)
Equipment	2,25,000/-	30,88,000/-	24,95,000/-	17,76,000/-	25,40,000/-	36,94,535/-
Furniture	2,45,000/-	15,05,550/-	17,17,500/-	13,16,000/-	19,39,500/-	24,78,030/-
Gymkhana	2,30,000/-	4,32,000/-	4,45,000/-	6,86,000/-	9, 25,000/-	3,20,040/-
Repairs and Maintenance	6,82,300/-	1,83,500/-	1,60,000/-	50,000/-	20,70,100/-	11,51,678/-
Total	13,82,300/-	52,09,050/-	48,17,500/-	38,28,000/-	74,74,600/-	76,44,283/-

The details of department wise actual expenses for equipment for last four years are:

Table 4.16 Department wise actual expenses

Department / Year	2010-11 (Rs.)	2011-12 (Rs.)	2012-13 (Rs.)	2013-14 (Rs.)	2014-15 (Rs.)	2015-16 (Rs.)	Total (Rs.)
Microbiology	-	93,750/-	5,77,201/-	1,84,833/-	94,313/-	2,68,164/-	12,18,261/-
Botany	15,412/-	91,092/-	20,593/-	2,71,625/-	-	26,100/-	4,24,822/-
Statistics	33,405/-	1,23,368/-	-	-	59,900/-	5,96,000/-	8,12,673/-
Biotechnology	22,275/-	1,17,299/-	-	96,972/-	2,73,173/-	-	5,09,719/-
Physics	60,494/-	29,084/-	-	-	-	13,36,815/-	14,26,393/-
Computer	10,73,755/-	5,99,108/-	32,350/-	1,65,370/-	13,23,264/-	10,99,658/-	42,93,505/-
Chemistry	-	23,700/-	-	-	2,31,250/-	41,175/-	2,96,125/-
Gymkhana	82,312/-	62,581/-	39,990/-	-	-	1,04,112/-	2,88,995/-
Zoology	-	-	3,786/-	11,419/-	4,20,868/-	2,36,700/-	6,72,773/-
Psychology	21,362/-	-	-	-	-	1,75,028/-	1,96,390/-
Electronics	58,425/-	53,944/-	-	-	-	4,05,250/-	5,17,619/-
Geography	-	-	-	-	4,15,169/-	1,34,625/-	5,49,794/-
Mathematics	-	-	-	-	-	71,140/-	71,140/-
Office	-	-	-	-	23,25,040/-	31,34,114/-	54,59,154/-
Total	13,67,440/-	11,93,926/-	6,73,920/-	7,30,219/-	51,42,977/-	76,28,881/-	1,67,37,363/-

The college provides for AMC for Computers, Maintenance, Cleanliness of the campus, CCTV, Pest Control, elevators, AC, Generator and Security. The amount of expenses incurred for maintenance and upkeep is about Rs. 27,26,894/- for the year 2014-15.

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

- The institution has signed Annual Maintenance Contract (AMC) for the following:
 - Computers, Laptops, Network administration
 - Elevators
 - Generators
 - Fire extinguishers
 - Pest control of library, administrative office, laboratories
 - Biometric attendance machine
 - CCTV , EPABX system
 - Reprographic machines
 - Transformer
 - Air conditioners
 - Induction gas stove
 - Water purifiers
 - Vehicle maintenance
 - Computers, Laptops, Network administration
 - Water tank cleaning
- **Building Maintenance:** Periodical structural audit is conducted by civil engineers to measure the strength of building columns.
- **Energy Audits:** Energy Audits are conducted to measure the total consumption of existing transformers and electrical appliances like tubes, halogen, LEDs etc.
- **Furniture fixtures:** Maintenance of furniture like benches, tables, cupboards, stools and other wear and tear material is done regularly. The scrap is disposed off.
- The types of insurances covered by the institution include - Cash insurance, Building Insurance, Health insurance for students, vehicle insurance, Garden insurance etc.
- One staff member is assigned the duty of Building Supervisor.
- Building Maintenance Committee has been constituted. Peons and attendants having experience of maintenance are made members of this committee.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment instruments?

- Well before the beginning of new academic year, the heads of the departments arrange to repair and calibrate the scientific instruments and equipment and ensure that they are readily available for the use of the students.
- All heads of departments and the Principal conduct frequent meetings of laboratory assistants.
- Training programs of laboratory safety are organized for laboratory attendants.
- Safety equipment like fire extinguishers are refilled as per the guidance.
- LPG regulators and tubes are frequently checked.

- Proposals received from department heads about maintenance of laboratory equipment are immediately approved and the work is got done in time.
- Funds received from government funding agency, particularly for the purpose of equipment maintenance are utilized exactly as per concerned guidelines.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (Voltage fluctuations, constant supply of water etc.)?

- Every department is provided with voltage stabilizers to take care of stable electric supply.
- Electrical maintenance and replacement of old wiring is done periodically.
- Energy audit has been done in academic year 2013-14.
- To take care of increase in number of students and increased demand of water, Pune Municipal Corporation was requested to provide additional quantity of water to the institution. This has been done in the academic year 2013-14.
- Two bore wells are made to take care of increased water requirement.
- By installing additional overhead tanks and ground water tanks, it is ensured that adequate quantity of water is supplied.
- Rainwater harvesting system is installed. A waste water treatment plant of 20000 lit capacity is installed for recycling and reuse of water.
- Two separate electricity generators have been installed at suitable and safe locations to ensure the continuous electricity supply.

□□□

Criterion V: Student Support and Progression

5.1 Student Mentoring and Support

Synoptic View:

• Adequate student welfare measures (scholarships, freeships, insurance, etc.) are provided by the institution. • Personal enhancement and development schemes –coaching classes for competitive examinations, career counseling, soft skill development, etc. are available to the students. • Information about the institution is publicly accessible. • Student participation in co-curricular and extra-curricular activities is encouraged. • The institution has a placement cell which helps to identify job opportunities and develop entrepreneurship skills. • The Alumni Association contributes significantly to the development plans of the institution. • The institution has a mechanism for timely redressal of student grievances. • The institution has an anti-ragging committee, which monitors student interactions effectively. • Specific student support is provided for SC, ST, OBC, and economically weaker sections of society. • The institution has a mechanism for prevention of sexual (gender) harassment.

5.1.1 Does the institution publish its updated prospectus / handbook annually? If ‘yes’, what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

- College publishes its updated prospectus of about 88 pages, to give first-hand information of the college. Course wise separate prospectus for professional courses like B.B.A., M.Sc. (Computer Science), B.Sc. and M.Sc. (Biotechnology) is made available. The copy of prospectus is also made available on website of college. Permanent display boards about the available courses are fixed at prominent places.
- **Shiksha.com:** Shiksha.com is an educational portal. By subscribing to it, college has made information available about courses offered, eligibility norms, fees, infrastructural facilities and photographs, contact details and salient features, etc. to students and parents.
- **Epraves.com:** Epraves.com is an educational portal, which supports and promotes pre and post admission process of various courses conducted in the college. The college has obtained assistance of ePraves for conducting entrance examinations of M.Sc. (Computer Science). Enquiries related to admissions, registrations of entrance examinations, online payments, email communications, admit cards, merit lists, schedules for admissions are routed through this portal to increase transparency.
- **Information given to students:** Prospectus includes information such as:
 - College profile, brief information about the courses offered in Science faculty (UG 11, PG 10 subjects), Arts faculty (UG 10, PG 5 subjects), Commerce faculty (UG 3, PG 2), Research Centre (7 subjects) and Diploma course in PGDBF under SPPU and Diploma in Dress Designing and Tailoring under Community College Scheme.

- Prizes, general facilities and the facilities for physically challenged, disabled students.
- List of 28 skill development courses, which support students' all round development. It covers wide range of areas to enhance employability.
- College profile, mode of admission, facilities and support available to the students.
- **Commitment and accountability**
 - Detailed notices are put up on notice boards and on websites about the implementation of courses and the availability of facilities. These are also scrolled on electronic display board.
 - Through regular meetings, follow up activities and facilities provided are reviewed regularly by Principal, Vice-Principal, Heads of the departments, Chairpersons of different committees, Librarian, Director of Physical Education and Registrar.
 - Special efforts are taken for needy and economically poor students to enrol in *earn and learn* scheme.
 - Remedial coaching is given to academically weak students.
 - Activities are channelized through departmental academic planner.
 - Students are informed about scholarships, financial assistance made available by private organizations, trusts and NGO's.
 - The prospectus includes Code of Conduct, undertakings about anti-ragging and prevention of sexual harassment. It also provides list of office bearers and office and library working hours.

5.1.2 Specify the type, number and amount of institutional scholarships / freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

- The college has made sufficient provision for the welfare of students by offering number of facilities and financial assistance.
- Financial aid in the form of scholarships and free ships is made available to the students every year. State government scholarships (for SC, ST, OBC, SBC and NT students), open merit scholarships are sanctioned to eligible students who apply for the scholarships.
- Data regarding number of students receiving the scholarship and year wise amount disbursed in last five years is shown in following table.

Table 5.1 Students' scholarship received

Year	State Government scholarship for SC, ST, OBC, SBC and NT students		Freeship	
	Number of students	Amount (Rs.)	Number of students	Amount (Rs.)
2010-11	357	24,76,111/-	129	13,99,586/-
2011-12	388	33,20,263/-	191	10,21,123/-
2012-13	667	43,86,166/-	363	39,77,106/-
2013-14	895	96,71,247/-	401	44,30,142/-
2014-15	842	77,73,555/-	326	26,17,200/-

- Some students receive EBC, primary and secondary teachers' ward concession, DST Inspire Scholarship etc.
- Students also receive Sakal Foundation Scholarships.
- The scholarships by NGOs and other institutions are:
 1. Malhotra Weikfield foundation scholarship.
 2. Leela Poonawala foundation scholarship.
 3. L'OREAL India foundation scholarships.
 4. Kartikeya Rindani (Alumni) scholarship.
 5. Krantijyoti Savitribai Phule scholarship (by SPPU).
 6. Single girl child scholarship (by Central Government).
 7. Scholarship to sports students (by College).
 8. Cytel Statistical Software services, Pune scholarship. (CSR)
 9. Stipend to Ph. D. students.
 10. Two hundred endowment prizes (by the well-wishers and alumni).
- The notices are displayed and students are encouraged to apply every year.
- The Government Scholarships is disbursed immediately after its receipt from respective authorities and the amount is directly credited to the bank account of the student.
- The college has constituted 'Equal Opportunity Committee' to monitor the disbursement of scholarship amount in time.
- College gives scholarships and concession in fees for students who excel in sports. Moreover, TA as well as DA is also provided to sportspersons for participating in various competitions.
- Staff members also give financial assistance to the needy students.
- The number of students getting scholarships is increasing every year.
- Help is also given through 'Board of Students Welfare' and 'Students Aid Fund'.

5.1.3 What percentage of students receive financial assistance from state government, central government and other national agencies?

- State Government gives scholarships to all SC, ST, OBC, SBC and NT students. College puts up notices and ensures that eligible students apply for these scholarships. These scholarships are granted to all eligible students. Among these, nearly 100% applications receive the financial assistance. In all, approximately 20% students receive financial assistance.
- There is an 'Earn and Learn Scheme' of SPPU implemented effectively. College offers matching grants to fulfil the needs. The scheme also helps in inculcating the culture of dignity of labour among students. The amount spent by this college is the highest amount among all colleges affiliated to SPPU, Pune.
- There are few students facing severe financial problems. In such cases, college allows the fees to be paid in instalments. In some deserving cases, the exemption in fees is also granted. Concession in fees is given to meritorious and sincere students. e.g., in 2013-14, fee concession was given to Mr. Sagar Shinde, a PG student of Computer Science. His

financial background was very weak. Because of continuous support of the college, Sagar achieved distinction every year. Moreover, he bagged almost 30 prizes in various intercollegiate programming and quiz competitions.

- Financial assistance is also provided from Students' Aid Fund and Board of Students' welfare to the needy students for purchasing books, payment of fees, participating in study tours, seminars, conferences, research activities, patent filing, etc.
- International students get financial assistance from their respective embassies on the basis of expenses certified by the college and disbursed by the International Centre for Cultural Relations, ICCR.

5.1.4 What are the specific support services/facilities available for

- **Students from SC/ST, OBC and economically weaker sections**
- **Students with physical disabilities**
- **Overseas students**
- **Students to participate in various competitions / National and International**
- **Medical assistance to students: health centre, health insurance etc.**
- **Organizing coaching classes for competitive examinations**
- **Skill development (spoken English, computer literacy etc)**
- **Support for slow "learners"**
- **Exposures of students to other institution of higher learning / corporate/business house etc.**
- **Publication of student magazines.**

The college provides adequate welfare measures and development schemes for the students.

- **Facilities for students from SC/ST, OBC and economically weaker sections**
 - Competitive exam coaching (Under UGC Scheme)
 - Counseling for SET-NET examinations
 - Government scholarships and freeship
 - Financial help through Students' Aid Funds
 - Earn and Learn Scheme
 - Concession/ installments in fees
 - Financial help by well-wishers for economically weak students
 - Staff members give monetary help and help in kinds from time to time to needy students
- **Facilities for students with physical disabilities**
 - Digital Braille e-book reader and JAWS software for visually challenged students
 - Audio CD's of text books
 - Head phone, CD player, angel e-book reader are available for visually impaired students
 - Facility of writer during examination and grant of extra time as per university rules.
 - Ramp at the entrance and elevators
 - Separate library entrance for physically challenged.

- Separate vehicle parking area
- **Facilities for overseas students**
 - International Students Cell looks after the welfare and wellbeing of overseas students
 - Free spoken English programme for students who are weak in English communication
 - Hostel facility
 - Cultural programmes during Annual Social (Traditional day programme)
 - 'International Students Fest' for strengthening brotherhood among overseas students
 - Personal counseling
 - Concession and installments in fees
 - Remedial coaching
 - Liaison with Police department
- **Facilities for students to participate in various competitions / National and International**
 - Registration fees, travelling, lodging and boarding expenses (TA and DA) for out station participation
 - Provision of rescheduling of examination, if such students miss their examination
 - Special coaching and orientation for competitions and tournaments
 - Track suits, blazers, T-shirts and refreshments to the sports persons.
- **Facilities and medical assistance to students: health centre, health insurance etc.**
 - Group health insurance scheme for every student
 - Emergency medical help through Kamat Clinic and Ekbote Hospital which is in the vicinity of the college
 - O.P.D. of Modern College of Physiotherapy and ambulance service on the campus.
 - Medical check-up of first year students
 - Reimbursement of medical expenses for injured players
 - First aid boxes at prominent places
 - Lectures, seminars and guidance on 'Health and Nutrition'
 - Psychological counseling, Jeevan Prerana Yojana
- **Coaching for competitive examinations**
 - Guidance and counseling for various examinations such as U.P.S.C/ M.P.S.C
 - Separate centre for competitive examination guidance
 - Guidance on Aptitude Test and Test of Reasoning
 - Lectures by experts
 - Additional Library books for competitive examination
 - Availability of a separate reading hall for late night hours
 - Software for competitive examinations and self-evaluation

- **Skill development (Spoken English, Computer Literacy etc.)**
 - Almost all departments run skill development programmes to enhance the employability
 - Following are some of the Skill Development Programmes: Tissue Culture (Plant and Animal), Computer Awareness, *Modi* Script, ERP Tally Accounting, Foreign Languages, Vermicomposting Technology, Seed Technology, Translation, Spoken English, Embedded Systems, Soft Skills, SAS (Statistical Software), Personality Development, Interview Techniques etc.
 - All post-graduate students are required to earn credits on some skill-based courses.
 - Presentation skills get enhanced through poster and project competitions.

While performing in groups, students learn team spirit, decision making in democratic way, to respect others opinion etc.
- **Support for slow “learners”:** Individual counseling is done by the respective subject teacher for slow learners. Remedial coaching facility is provided for such students.
- **Exposures of students to other institution of higher learning / corporate/ business house etc.**
 - Students are taken to various institutions such as IUCCA, NCL, NIC, Pune University’s various departments, Indian Meteorological Department, Serum Institute, Maratha Chamber of Commerce, Banks, Industries, Pune Municipal Corporation, insurance companies, INORA, Stock Exchange, RBI, CIFEL Hyderabad, IISER Pune, Agricultural College, Deccan College, Vasantdada Sugar Institute, CCMB Hyderabad, Zoological Survey of India, Pune, CFTRI Mysore, CMFRI Cochin, ICRISAT Hyderabad, NSSO Pune, etc.
 - Purpose of visit is to enable the students to understand the functioning of the institution and get practical knowledge and also to seek guidance for completing the project as a part of curriculum.
 - Students of Statistics participate in internship programmes for 2 months, organized by Government of India at National Sample Survey Office (NSSO) and one-week training program of National Statistical Systems Training Academy (NSSTA) at Delhi.
- **Publication of student magazine:** Students publish their literature of the following types in the College Annual Magazine.
 - Essays
 - Poems
 - Popular articles
 - Interviews of great personalities, articles based on seminars, study tours, competitions, puzzles, posters, cartoons, drawings etc.
 - Reports of their projects
 - In-house Magazine is published by following departments: Commerce, Psychology and Economics

- Articles by students are put up on wall magazine
- Statistics department conducts a special activity called 'Problem Corner'. In this activity, the best answer given by student is displayed.
- Students are encouraged for preparing e-journals to publish the reports of their projects.
- Wallpapers, student forum, Zaroka- the desktop activity etc., are promoted amongst students.
- Electronics department publishes e-journal by students.
- The abstracts, full length papers, posters are published in conference brochures and/or research journals.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills among the students and the impact of the efforts.

- Number of departments of the college conducts activities to develop entrepreneurial skills among the students through various activities.
 - Eminent entrepreneurs are invited to guide and inspire the students
 - A course on Integrated Vermitechnology which deals with Urban Waste Management
 - The college has formed Industry Academia Collaboration Committee.
- Seminars on communication skills and entrepreneurial skills are conducted in order to help and benefit the students to establish a relationship between college and industries. A lecture series was arranged by Computer Science Department with the help of eminent personalities from I.T. field and alumni. This activity proved beneficial to the students as well as teachers in the respective departments.
- Variety of contests are held for students viz., letterhead designing competition, M³ (Mad ads, Management Quiz, Magazine) event. The 'Dare to do it' contest turned out beneficial for all participants in developing entrepreneurial skills. National seminar on 'Emerging trends in Indian Commerce and Industry' was organized.
- A course in 'Basics of Stock Trading' was conducted for B. Com. students. It focused on Basics in Stock Trading Investments in mutual funds and online trading. It was aimed at providing basic knowledge, creating awareness and interest to develop careers in stock trading. A delegation of staff from department of Commerce visited Shriram College, New Delhi to study the best and innovative practices followed by the college for the benefit of the students.
- Study tours, interaction with the senior entrepreneurs, interview of successful entrepreneurs, meeting with successful entrepreneurs (particularly who are past students of the college), Industry academia meet all these events help in motivating and developing entrepreneur skills.
- Autobiography of eminent entrepreneurs is made available to students.
- Interviews and articles of eminent entrepreneurs from different magazines and newspapers are displayed on the notice board to get inspiration.

- Industry academia meet facilitates the effective dialog with entrepreneurs.
- Field visits and study tours are conducted with a view to create awareness about entrepreneurship.
- ‘Vyapar Mela’ (Trade fair) is organized where students set up their stalls for selling items like food, handicrafts, greetings, gift articles etc. which in turn help them to learn entrepreneur skills.
- Interviews of successful entrepreneurs such as Mr. Rajiv Bajaj (M.D. Forbes Motors), Mr. D. S. Kulkarni (Well known Promoter and Builder), Mr. Sanjay Katkar (CTO, Quick Heal Technologies), Mr. Krishkumar Goyal (Chairman, Cosmos Bank) were conducted.

5.1.6 Enumerate the policies and strategies of the Institution, which promote participation of students in extracurricular and co-curricular activities such as Sports, Games, Quiz Competitions, Debate Competitions, Discussions, Cultural Activities etc.

- **Additional academic support, flexibility in examinations**
- **Special dietary requirements, sports, uniform and materials.**
- **Any other**

Students are encouraged to participate in extracurricular and co-curricular activities to nurture their talents, develop their skills and excel in order to achieve their goals in respective fields.

• **Policies :**

The college has a policy to give scope to the inherent qualities of students by motivating and directing them to participate in relevant activities in addition to their regular curriculum. Guidance sessions are held at the beginning of the year for first year students. The teacher-in-charge of such activities gives detailed information to the students (NSS program officer, NCC Officer, Chairpersons of Art circle, Science Association, Commerce Association and Planning forum etc). With the help of these activities, students get opportunity to nurture their talents, inculcate their skills and excel in order to achieve their goals in respective fields.

A cultural week is celebrated in the third week of January. Youth Week is organized between 12th January to 19th January every year, which contains activities like critical review of motivational movies, art and craft exhibition for entrepreneurship development.

Social awareness week is organized by BBA students. Cultural-technical activities like ‘Aarohan’ are conducted every year.

Workshops are organized by Arts Circle for theater performance, dance, script writing, music, photography, creative writing etc.

Students participate in ‘Vidyawani’ broadcasting programmes for radio station of SPPU.

Exhibition and competitions of various types are organized department wise. Students participate in the following fields – Intra-class, intercollegiate, state and national level workshops

- **Strategies :**
 - Class advisors and members of Student Council search for the students having aptitude and interest in various activities such as sports, debating, singing, cultural activities etc.
 - During Principal's address and guidance session, information regarding such activities is provided and students are encouraged to participate in all activities. Notices regarding such activities are displayed in the college time to time.
 - If students miss the internal tests, practicals due to sports tournaments, Arts Circle competitions and Republic Day Parade, the college conducts the examination of such students later on.
 - Class-wise Annual Social Gathering provides opportunities to talented and skilled students to participate in different cultural activities and competitions. Students actively participate in Traditional day, Dance competitions at various levels, '*Firodiya Karandak*', prestigious '*Purushottam Karandak*', which has produced many well-known, **stage artists who are our alumni.**
 - Annual Sports Events: Inter-class tournaments, 'Modern Shree' and 'Progressive Shree' (Body Building), 'Harmony Twelve' competitions are organized.
 - Members of committees regularly invite experts to provide training to sharpen the skills of students. In support to this, activity-wise funds are allocated to cater to the needs like computers, LCD projectors, sound systems, etc.
 - Science, Commerce and Arts Associations organize various competitions such as Quiz, Debate, Essay, Seminars and Projects. Students are encouraged to actively participate in these competitions.
 - Students participate in Inter-college competitions, state level science project competitions like AVISHKAR, etc.
 - Variety of workshops based on curriculum, symposiums, field visits, industrial visits, Environmental Awareness Programmes etc., are also regularly organized by the college to upgrade the students.
 - College encourages students for participation in zonal, national and international tournaments to increase their competency.
 - Sportsmen are guided about their diet and dietary habits.
 - Sportsmen are given uniforms, travel assistance and special coaching.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for competitive exams, give details on the number of students appeared and qualified in various competitive examinations such as UGC-CSIR-NET, UGC-NET, SLET, ATE/ CAT/ GRE/ TOEFL/ GMAT/ Central/ State services, Defense, Civil Services etc..

- The college provides access to Library, Departmental book shelves, Digital Library, Self-Assessment Softwares to the students. Study room

facility is made available up to late night hours. Language laboratory/ central computing facility are made available to students for the use of computers, internet and printing.

- Competitive Examination Committee arranges lectures for students aspiring for UPSC/ MPSC/ Civil Services examinations to create awareness among them. Various lectures are arranged to guide the students for competitive examinations such as NET, SET, GATE, IIT-JAM, etc.
- Faculty members guide the students by providing them study material required for such examinations.
- Few students pass UPSC, MPSC examinations ISI, Banking, CSIR – NET and SET examinations. Officers like Shri. Sunil Dadhe (IAAS), Avinash Dharmadhikari (IAS), Sadanand Date (IPS), Col. Dilip Pandey (OTS), Col. Swapnil Tribhuvan (OTS), Ms. Kirti Gaikwad (ISS), Prof. Mali – Director of Metrology Department of Pune, are our alumni.
- One of our past students Shri. Avinash Dharmadhikari (Ex-IAS) is running a prestigious academy ‘Chanakya Mandal’ for the preparing students for competitive examinations.

Table 5.2 Students’ qualified in examinations

Competitive examinations	SET	CSIR/ NET	GRE/ TOFEL	IAS/ ISS	MPSC/ UPSC	GATE	Defense /Civil services	NCBS	Others	Total
No. of Students Qualified	10	25	02	01	13	11	05	01	61	129

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc) ?

- **Academic Counselling:** Class advisors act as mentors for the students. They continuously monitor the progress of students, motivate and support weak students by directing them for remedial coaching and guide them to improve their study habits through counseling. Taking into consideration the increasing academic pressures and rising competition, college arranges a variety of lectures and workshops of eminent experts on topics such as Emotional Intelligence, Personality Development. Counseling is given on the basis of information and reports collected by the class advisors from subject teachers.
- **Career Counselling:** Career counseling is provided to the students in two stages: i. General counseling for all students ii. Subject/faculty wise counseling. Especially the college takes efforts on outgoing students. Career exhibitions are organized. Placement cell – provides guidance with reference to career building. Alumni help in this regard. The college provides counseling for various competitive examinations including GRE/TOFELL.
- **Personal Counselling:** Students facing problems in pursuing their studies are given family counseling. Financially needy students are advised to work in ‘Earn and Learn’ scheme. Difficulties such as hostel

accommodation, lack of concentration for studies, depression, emotional weakness etc., are resolved by counselor from Psychology Department who work for students. Students are advised to remain in a company of properly motivated group of students.

Mock interviews are conducted in Department of Computer Science by alumni.

DO's and DO NOT's types counseling is given to the students whenever group activities such as excursion Trips, NSS and NCC camps, study tours are conducted. Students are informed about Anti Ragging Act in order to maintain discipline, cordial atmosphere and harmony amongst the students.

Psychological counseling centres arrange counseling programs for students, staff and neighborhood community. Value Education committee and Department of Psychology organize workshops to provide guidance on Meditation.

- **Psycho-social Counselling:** The college has undertaken the survey of first year students w.r.t. Emotional Quotient (EQ). Based on information collected, the counseling is provided to the students and parents by the staff members of Department of Psychology. Recently, a major research scheme pertaining to EQ has been sanctioned by Indian Council for Social Science Research (ICSSR).
- **Aptitude Assessment:** The facility of aptitude testing is available at the department of psychology. The necessary software, equipment and expertise are available in the department.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes)

Yes, the college has a structured mechanism developed for career guidance and placement of students.

- **Career guidance:** Career guidance is available to all the students through their departments. The central placement committee has been constituted to provide job opportunities to all the students. The information about further education, entrance examinations, qualifying examinations of various institutes and Government and non-government bodies is made available to the student through notice boards and guidance sessions. Class advisors work as general mentors of the students.

The college has constituted competitive examination centre, which helps and guides the students in preparing for various competitive examinations by arranging lectures, guidance sessions, interview technique and group discussion sessions. This centre makes available the necessary books, journals and other literature for the students. The separate study

hall is also available for the students of competitive examination, which remains open for late night hours.

Guidance sessions are conducted by Alumni having such expertise in few departments.

Various departments in the college have prepared booklets and charts containing the detailed and up to date information about the careers in the respective subjects.

- **Placement Activity:** College has constituted a placement cell and has designated a placement coordinator. The cell helps the students to identify job opportunities. The coordinator approaches various companies. The cell displays relevant information on students' notice board. It guides the students regarding resume writing, interview techniques, soft skills and personality development. Students' information is compiled along with their achievements in a book as placement brochure. Some departments prepare placement e-brochure. It helps the job provider to match the skills required by company and the candidate.

Facility of career aptitude testing is available at psychology department. The facility is given free of cost.

Every year maximum number of computer science students in postgraduate wing (more than 90%) get placed through campus interviews. Other postgraduate departments like Statistics, Chemistry, Biotechnology, Microbiology, Commerce also help the students for placement. In last 5 years, about 170 companies all over India have recruited our students. Our recruiters are from the various sectors such as: IT, Banking and Finance, Research, Clinical and Pharmaceutical, Insurance, NGO's (mental health and social work) or, e-tutoring.

Following is the list of some of the companies that recruit our students: Infosys, Persistent Systems Ltd, TCS, Cognizant Technologies Solution Pvt. Ltd, HDFC Bank, TJS Bank, Vidya Sahakari Bank, Capgemini, IBM, Iflex, Kirloskar Oil Engines, KPIT Cummins, Microsoft, Tata Motors, Veritas, Quick Heal Tech Pvt. Ltd., Symantec, Sciformix, Technit, e-Solve, Premiere Biosoft, Cytel software, Serum Institute, Ventri biological, Riverside Multimedia, etc.

The percentage of students placed year wise is as follows:

Table 5.3 Placement details

	M.Sc. (Computer Science)
2014-15	99%
2013-14	92%
2012-13	94%
2011-12	91%
2010-11	92%

For other courses, the placement ranges between 10-25%.

5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Grievance redressal cell is in existence at college.

Minor Complaints : Minor complaints of students about the time tables, canteen rates and quality of food items, library services, office services were received and they were settled promptly within the existing rules laid down by University and the parent body (P.E. Society). The concerned authorities such as Head of the Department, Vice–Principal, Registrar, Physical Education Director, Librarian, Examination officers, Principal settled the grievances. Further, it is reported to the higher authorities and the action taken and the decision is communicated to aggrieved students.

Major Complaints: There were no major complaints received against the staff or college. If such complaints occur, Chairperson of local managing committee resolves such issues. If required an inquiry committee is set up and the matter is resolved.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

- There is a special committee constituted for prevention and action against sexual harassment of women.
- As per Government Resolution (dt. 19/09/2006) of the Department of Women and Child Development Mantralaya, Mumbai, Women Grievance Redressal Committee is constituted in the college.
- The committee notices are displayed in ladies common room and at prominent places for the information of all concerned. Preventive measures are taken to avoid the occurrence of such incidences. CCTV surveillance cameras are installed as safety measures. Awareness is created through various programs such as Vidyarthini Manch, Self-defense training, Gender Sensitizing and Women Empowerment workshops, etc.
- The committee meets at least twice in a year to settle the grievances, if any.
- The Committee members give the information about the cell during induction program for students and at Principals' address.
- Due to healthy atmosphere and the awareness of existence of cell, there are no grievances received so far.
- Prospectus contains the details about code of conduct addressing such issues.
- Counselling centres also address such issues for prevention.
- Vigilance committee is alert to prevent such incidences.
- During induction programmes, students are properly guided and are advised to refrain from such issues.
- Permanent displays about the prevention of such events are kept at prominent places with a directive of government authorities.

5.1.12 Is there an anti – ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

- The Anti-ragging committee and anti-ragging squad exist in the college as per the legal provisions.
- Wide publicity is given about the consequences of ragging and its penal actions. Especially during admissions and guidance sessions the information about the consequences of ragging and the legal provisions about the same are given. The posters and flex boards against the ragging are displayed at prominent places in college and hostel campus. The periodic information about the ragging incidences is required to be submitted by the college to the government.
- At hostel the senior students are well disciplined, they help us to maintain the anti-ragging activity. During picnics, tours and camps students are given counselling by staff members to avoid ragging. Some healthy practices such as welcome of the juniors and farewell to the seniors are encouraged which promote a healthy atmosphere among all students.
- Phone numbers of authorities such as Principal and all Vice-Principals and other officers are displayed for the information of students to get immediate help.
- The programs held under value education also help in avoiding ragging incidences.
- The college is very happy and fortunate that no ragging incidence took place in the institution.
- **Preventive Actions:** Students have open access via emails to Principal, suggestion/complaint boxes. Intimation regarding anti-ragging act is available on college website and college prospectus. The display boards placed at prominent places in college campus. The declaration that the students are aware of anti-ragging act is taken from students and parents at the time of admission.

5.1.13 Enumerate the welfare schemes made available to students by the institution.

A senior faculty is appointed as students welfare officer to conduct various welfare activities such as:

- **Insurance:** There is a group insurance policy for all the students, which covers accidental death or injury.
- **Canteen:** The college has canteen facility which provides snacks, tea, coffee, cold drinks, meals etc. at reasonable rates.
Hygienic food is being served. Canteen committee ensures the hygienic standard of the food is served at the canteen.
Water purifiers and water coolers are installed on each floor
- **Installments or waiver in fees, endowment prizes**
- **Counseling:** Academic, personal, career, psycho-social etc.

- **Student aid fund:** Financial aid to famine affected students is provided. Physically handicapped students are provided the text books and cash for conveyance for transportation (like bus pass, railway pass etc). Needy students are given financial help to attend the seminars, workshops and study tours.
- **Earn-learn scheme:** The college has “Earn and Learn” scheme is of great help to economically weak and needy students.

Table 5.4 Details of Earn and Learn Scheme

Year	Male	Female	Total	Rate of Remuneration Rs. / hr.	Total amount spent (Rs.)
2009 -10	35	45	80	20	2,25,000/-
2010 -11	50	60	110	20	3,67,000/-
2011- 12	48	77	125	20	4,13,197/-
2012- 13	57	78	135	25	5,31,500/-
2013- 14	42	50	92	25	6,21,908/-
2014- 15	52	49	101	30	8,79,580/-

5.1.14 Does the institution have a registered Alumni Association? If YES what are activities and major contributions for institution, academic and infrastructure development?

Modern Alumni Association is registered (Registration No. 945). Sports students have separately registered association as Modern Past Association in 1980.

- **Activities of past students association:** They help present students for
 - Placements
 - Software training
 - Projects
 - Internships and training to present students
 - Career guidance
 - Mock interviews
 - Industry academia association
 They help in the form of resource persons at workshops and seminars, Guest lectures and Judges for competitions.
- **Academic and infrastructure development:**
 - Past students have sponsored endowment prizes, scholarships, library books.
 - Some students are members of P. E. Society, which is parent institute of the college.
 - Seed money required for the construction of an auditorium was collected by past students.
 - Past students and parents of late Kartikeya Rindani provide financial assistance to needy students
 - Financial support is given to conduct Intercollegiate Kartikeya Rindani Programming Contest
 - Mr. C. E. Potnis, alumnus of Department of Statistics, donated Rs. 2,00,000/- for scholarship.

- Past students have donated books to departmental and central library.
- **Prominent positions achieved by some past students:**
 - Shri. Sadanand Date : I.G.P., CRPF
 - Shri. Dadhe S. S. Director General, International Centre for Environmental Studies and Research, Jaipur.
 - Shri. Pandey Dilip (Colonel) and Mr. Swapnil Tribhuvan (Colonel)
 - Ms. Kirti Gaikwad : Selected through U.P.S.C. as Indian Statistical Officer (Gazetted Class I officer)
 - Shri. Girish Desai : Has established software firm at Atlanta, U.S.A.
 - Shri. Rishikesh Khilare awarded by Melghat Mitra Puraskar (2011) by Govt. of Maharashtra for working towards well-being of tribals.
 - Shri. R. P. Bodas, a well-known industrialist, President- International Table Tennis Federation.
 - Ms. Gayatree Vartak : International badminton player, founder of Samiksha- sports counseling , working for enhancing performance in sports through psychological counseling.
 - Dr. Manohar Chaskar- Principal of B.R. Gholap college, Sangavi, Management Council member
 - Shri. Sanjay Katkar- CTO of Quick Heal Technologies, Ltd.
 - Prof. (Dr.) B. R. Shejwal, Head, Department of Psychology, SPPU, Pune, Senate member.
 - Mrs. Varada Dandekar: Ph. D. Scholar, Texas University.
 - Shri. Hrishikesh Sherikar: Vericlone tissue culture laboratory- Proprietor.
 - Mrs. Smita Chirputkar – Mehta, VP Microsoft, IBM, Intel
 - Sports : Rajendra Kadam ACP crime branch, Suresh Gaikwad- Chatrapati award, Jayant Gokhale – Grand master
 - Cultural : Shri. Gaganvihari Borate , Shri. Paresh Mokashi(Director), Ms. Vibhavari Apte-Joshi (Singer), Shri. Tyagraj Khadilkar (Singer) , Shri. Sachin Jambhekar (music Composer), Shri. Santosh Darewal (Film Maker), Shri. Makarand Tillu (Solo Performer), Shri. Amit Gorkhe
 - Politician : Shri. Shrikant Patil, Shri. Sanjay Balgude, Ms. Madhuri Sahasrabuddhe, Shri. Jalindhar Kamthe, Ms. Madhuri Misal -MLA
 - IT Sector : Shri. Anand Dass, Shri. Jitendra Kunte, Ms. Ritu Bhan, Shri. Amol Bramhe, Shri. Ajit Joshi, Shri. Omkar Damle, Shri. Navandu
 - Psychology: Shri. Sharmishtha Mathkar, Principal,
 - Government officers: Shri. Santosh Payas – Dy. Dir. Census.
 - Journalist : Shri. Mukund Sangoram, Shri. Mayuresh Prabhune

5.2 Student Progression

Synoptic View:

- The progression of students in various programmes of the institution is regularly monitored.
- The institution makes special efforts to reduce its dropout rate and increase its pass percentage.
- The institution has a successful track record of students appearing and qualifying in competitive examinations.

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

As per the information available with the respective departments, following trends are observed:

Table 5.5 Student's progression

Year	Faculty	UG to PG	P.G. to M. Phil., Ph.D. (%)	Employment*
2010-11	Arts	65	1	55
	Science	150	7	150
	Commerce	150	1	285
2011-12	Arts	72	1	60
	Science	200	8	180
	Commerce	170	1	290
2012-13	Arts	75	0	65
	Science	210	12	250
	Commerce	180	1	310
2013-14	Arts	80	0	72
	Science	220	13	340
	Commerce	190	1	320
2014-15	Arts	87	1	43
	Science	56	4.33	60
	Commerce	52	1	62

*As per the information available from the students

After graduation, substantial number of students join the professional courses such as CA, ICWA, CS, MBA, M. Tech, LLB, MSW B.Sc. Tech, etc. It is observed that

- There is growing percentage of students going from UG to PG.
- Percentage of students getting employed is also growing, employment through
 - Placement is also increasing.
 - Employment other than campus selected is also substantial.

5.2.2 Provide details of the program wise pass percentage and completion rate for the last four Years (cohort wise/ batch wise as stipulated by the University). Furnish program wise details in comparison with that of the previous performance of the same institution and that of colleges of affiliating university within the city/ district.

Programme wise details in comparison with the previous performance:

Under Graduate Courses:

Table 5.6 UG Result Analysis

Name of Course	% of Passing					% of students with First Class				
	10-11	11-12	12-13	13-14	14-15	10-11	11-12	12-13	13-14	14-15
Arts	82.82	87.84	90.22	89.02	87.10	30.03	23.16	28.26	31.10	33.33
Science	76.97	72.52	67.75	74.19	69.32	53.93	54.45	52.5	53.02	50.55
Commerce	86.00	78.50	71.39	71.17	67.67	31.23	24.93	21.88	25.60	21.87

Post Graduate Courses

Table 5.7 PG Result Analysis

Name of Course	% of Passing					% of students with First Class				
	10-11	11-12	12-13	13-14	14-15	10-11	11-12	12-13	13-14	14-15
Arts	79.56	92.57	86.95	90.69	83.87	22.62	27.42	26.70	21.70	35.48
Science	79.54	77.08	78.42	84.56	83.48	40.90	37.46	35.61	38.87	42.67
Commerce	45.94	80.39	75.00	80.00	67.67	10.81	19.60	30.20	27.00	29.29

5.2.3 How does the institution facilitate student progression to higher level of education and / or towards employment?

The institution consistently makes the efforts and guides the students to reach higher goals in their life to pursue either further education and/or jobs. The activities taken in this respect are as follows:

- Seventeen postgraduate programs and seven research centres are available on the campus.
- State, National and International level entrance examination guidance is provided to students.
- Career guidance is given by placement cell.
- Aptitude test and career counselling are arranged by Psychology department.
- Interaction between the representatives/experts of foreign universities and the UG-PG students of the college is arranged.
- Group Discussion activities are conducted by many departments.
- The visits to industries and other establishments are useful for the students to acquire first hand and practical knowledge required for various types of jobs.
- Industry academia meet and the discussions with alumni from industry enable the students to get the knowledge of job requirements. The add-on courses such as Animal and Plant Tissue Culture, ERP Tally, SAS etc. also increase the job opportunities for the students.
- Soft skill programmes are conducted in order to make the students aware of ethics in the respective professions before they are exposed to various professional sectors.

- The workshops are arranged to give an opportunity to students to interact with officers of institutes of higher studies and research areas focusing the topics such as mobile application development, Entrepreneurship development, importance of stock market, emerging trends in service sector etc.
- Counseling programs are organized for M.A. (II) students to develop skills for career as Psychologists and Counselors.
- Mock Interviews are regularly conducted during every academic year in order to groom the outgoing students to face the professional interviews.
- A workshop for careers in statistics was conducted. Eminent personalities were invited from industries such as Census, ISI, IISER, State Transport, clinical data analysis, agriculture etc.
- Success stories of successful entrepreneurs and the interviews of such entrepreneurs are conducted.
- Personality development, soft skills, interview techniques, manners, etiquettes, table manners, sessions/workshops are arranged to strengthen skills amongst students.

5.2.4 Enumerate the special support provided to students who are at risk of failure and dropout.

- The college first understands and analyses the reasons of the students who are at the risk of meeting with failures. The possible measures to resolve the problems of such students are taken. Financial assistance wherever required is also given. Hostel facility and other help are provided.
- We offer counselling about the study habits, and ask the students to complete the subject wise assignments and prepare effectively for the examination.
- The performance of such students is communicated to the parents.
- The college takes the responsibility of supporting the students who are at risk of failure in a positive way by conducting Remedial Coaching programme sponsored by UGC regularly. The departments conduct the respective programmes. The faculty members of the respective departments locate the weak students from the result analysis data. They communicate with the students, discuss the strategies to be carried out in the required time limit and guide them through remedial coaching and practice tests. Almost all the students enrolled for this activity are benefited.
- Efforts are taken to
 - Develop interest in the subject
 - Increase confidence level of students.
 - Change their approach from negativity to positivity
- Personal counselling is done to understand the problems of students and to resolve them. The students who are likely to drop out due to financial difficulties are given financial support.

5.3 Student Participation and Activities

Synoptic View:

- The institution has a range of games, extra-curricular activities that contribute to overall development of students.
- Feedback from students is used for planning and developing support services.
- Active student participation through Student Councils is encouraged.
- Students are represented on academic and administrative bodies of the institution.
- Institution facilitates for students to publish materials like catalogues, wall magazines, institution magazines, etc.
- Student participation in state, national and international level sports events is encouraged.

5.3.1 List the range of sports, games, cultural and other extracurricular activities available for students. Provide details of participation and program calendar.

- **Sports: Students** participate in in-all 26 games and sports from zonal to international level. The games are badminton, chess, cross-country, shooting, swimming, diving, ball badminton, baseball, basketball, cricket, cycling, kabaddi, football, handball, volleyball, hockey, boxing, softball, weightlifting, best physique, athletics, kho-kho, lawn tennis, korfbal, table tennis, and netball.

Table 5.8 Student's Sports Participation Details

Year	Intercollegiate/ District	Zonal /State	University /National	International	Total
2010-11	185	17	18	0	220
2011-12	199	19	21	2	241
2012-13	208	16	11	1	236
2013-14	192	9	19	0	220
2014-15	326	71	23	0	359
2015-16	411	53	37	0	501

- Program calendars are prepared for every year. e.g. Sports program calendar is as follows:

Table 5.9 Sports Program Calendar

Month	Activities
June	Purchases of sports equipment. Selection of Gymkhana Representative, ICSR (Intercollegiate sports representative), formation of Gymkhana managing committee.
July	Intercollegiate sports selection, coaching camp, and practice
August	Intercollegiate sports participation in various games.
September	Organization of inter collegiate, inter-zonal sports.
October	Organization of coaching camp, and practice
November	Organization of coaching camp, and practice
December	Physical education examination of first year students.
January	Organization of Seminars and workshops Organization of competitions like 1) Annual sports 2) Modern Harmony 3) Modern Shree 4) Progressive Shree 5) Volleyball 6) Football tournaments 7) Intercollegiate invitational events.
February	Annual sports prize distribution Final physical education examination of first year students.
March	Stock Verification of equipment and ground maintenance
April	Maintenance of equipment and maintenance of ground

- **N.S.S:** NSS Students participate in following activities:

Blood Donation	Tree Plantation	Rice Plantation
HIV-Aids Campaign	Road Safety	Anti- Drug Activity
e-Waste Management	North- East Cultural Fest	Literacy Campaign
Pulse-Polio Movement	Zero Garbage Campaign	Water Conservation Campaign
Help For Traffic Regulation	Shanti-Yatra	Sadbhavana Din
Vachan Prerana Din	Save-Girl Child Campaign	Donation In Kinds Camps
Exhibitions To Help NGOs		

The activities mentioned above help inculcate values among the students such as dignity of labour, patriotism, which leads to National Development. Students of different culture are enrolled in NSS, through which they learn to respect other culture, religion, concern for downtrodden class.

NSS unit has received **Best Unit Award, Best Volunteer award, Best Program officer award**. Students get opportunity to participate in National Integration Camps, R.D. parade etc. which boosts the unit to achieve excellence.

- **Cultural Activities :**

- Every year Arts circle organizes *Cultural Week* for identifying talents among students. The competitions organized during the week are: Rangoli, Mehendi, Solo-acting, Poetry reading, Elocution, Dance, Music, Poster making etc.
- ‘Aarohan’ Cultural fest, Social awareness week, and blood donation camps are conducted.
- ‘A donation in kinds camp’ is organized for the institutions like orphan schools, blind schools etc.
- Traffic awareness programmes, helmet awareness campaigns are organized.
- Various days are celebrated like ‘Vachan Prerna Deen’ on birth anniversary of Late Dr. A.P.J. Abdul Kalam, to inculcate reading habits amongst students, ‘Sadbhavana Deen’ is celebrated on 20th August.
- Students work as volunteers for Ganesh festivals, Ramdan Id.
- Eminent personalities from the field of acting, music etc., like Dr. Amol Kolhe (2010), Shri. Ajit Shirole (2010-11), Mrs. Lalan Sarang, Shri. Swapnilji Lele, Mrs. Ashwini Ekbote (2011-12), Shri. Siddharth Chandekar (2012-13), Hasyasamrat Shri. Deepak Deshpande, Shri. Banda Joshi, Mrs. Ila Bhate (2013-14), Saiee Tamhankar, Priya Bapat, Siddharth Jadhav, Atul Kulkarni, Makrand Anaspure, Neha Pendse, Sayaji Shinde, Chinmay Mandalekar, Jitendra Joshi, Shreyas Talpade were invited during various programs to guide our students in developing and nurturing talent among them.
- Arts circle in association with *Spic-Macay*, the institute for creating interest in classical music and art, organized Classical Musical Programs.

- Between 2010 and 2015 Arts Circle has organized the following workshops:

Table 5.10 Workshops organized by Arts Circle

Year	Type of workshop	Experts invited	No. of participants
2010-2011	Screen play writing	Mr. Kiran Yadnopavit, Mr. Sachin Kundalkar	30
2011-2012	i. Acting	Mr. Nipun Dharmadhikari	30
	ii. Classical music	Mr. Chaitanya Kunte	10
	iii. Classical dance	Mrs. Sharwari Jamenis	80
2013-2014	i. Drama	Dr. Pradeep Vaidya	25
	ii. Western dance	Mr. Tejas Shahane	80
2014-2015	Acting	Mr. Yogesh Soman (famous theatre actor, director, writer)	45
	Dance	Mujjaffar Mulla and Mrs. Gauri Adkar, Delhi (famous kathak duo Dancers)	60
2015-2016	Acting	Mr. Pankaj Nagpure Mr. Chaitanya Deshpande	78
	Dance	Mr. Abhishek Dhapte	35
	Vocal and Instrumental Music	Mr. Nitesh Aher	25
	Music: Dhol Tasha	Mr. Atmesh Borkar	25

- All the activities mentioned above enable the students to develop their all-round personality. They learn recent techniques with the help of instruments such as LCD. Better presentation is possible due to LCD e.g. backdrops on the stage can be replaced by LCD. The students address social issues through these programs. It inculcates values of national development; it leads to excellence and cultural integration.
- The students have participated in different competitions of action- drama and dance, singing and music and have won prizes. The details are as follows:

Table 5.11 Workshops organized by Arts Circle

Name of competition	Year of participation	Prizes owned by students
Acting, Drama		
Puroshattam Karandak	2014-2015	Consolation Prize For Direction Consolation Prize For Acting
Bharat Karandak	2014-2015	Consolation Prize For Acting Consolation Prize For Acting
Sarpotdar karandak	2014-2015	Third Prize For Team Second Prize For Acting Second Prize For Direction
Natyamaya Prayogshala	2014-2015	Selection In Final Round
Lokankika Karandak	2014-2015	Selection In Final Round
Pratibimba karandak	2014-2015	Second Prize For Team Second Prize For Direction
Puroshattam karandak	2015-2016	Consolation Prize For Acting
Bharat karandak	2015-2016	Second Prize For Team
DY Patil karandak	2015-2016	Second Prize For Team
Dance, Singing and Music		
MTV dance competition MOB	2014-2015	First Prize For Team
MITSOM	2014-2015	First Prize For Team
BMCC	2014-2015	Second Prize For Team
Vedant Karandak	2014-2015	Third Prize
Christ College	2014-2015	Second Prize

Dance, Singing and Music		
Mood Indigo	2014-2015	Semi Final
Malhar- Mumbai Music	2015-2016	Third Prize For Team
Vedant Music	2015-2016	First Prize For Team
Vedant Dance	2015-2016	Third For Team
Infinity Dance	2015-2016	First For Team
MTV dance	2015-2016	First For Team

5.3.2 Furnish details of major students' achievements of co-curricular and extracurricular and cultural activities at different levels University/ State/ Zonal/ National/ International etc. for previous 4 years.

• Sports

- **Achievements in Sports:** Total number of 'Shiv Chhatrapati' sports award so far tallies up to 36. The details of last six years are:

Table 5.12 Sports Achievements

Year	Shiv Chatrpati (State Level) awardee	Game
2010-2011	Mr. Sangram Chougule	Best physique Mr. Universe award winner
	Ms. Gayatri Vartak	International rank holder Badminton
	Ms. Komal Waghule	Handball
2011-2012	Miss Kiran Pethe	Judo
2012-2013	Viraj Dhokale	Swimming
2013-2014	Umesh Zirpe	Adventure Sports

○ National Awards:

Arjun Awardee : Mr. Shrirang Inamdar
Star of India awardee : Ms. Bharati Shah

○ Yearwise number of medals won by students :

Table 5.13 Medals won

Year	Intercollegiate /District			State / Inter-zonal			National / AIU			Total
	G	S	B	G	S	B	G	S	B	
2010-11	19	37	13	22	18	2	--	4	--	115
2011-12	48	19	18	14	14	11	1	3	--	128
2012-13	3	29	31	7	11	5	1	1	1	89
2013-14	16	8	25	16	9	2	1	1	--	78
2014-15	74	40	38	22	19	19	2	--	3	217
2015-16	76	67	56	55	33	7	--	4	--	298

*(G: Gold, S: Silver, B: Bronze)

• N.C.C.:

○ NCC Activities:

Table 5.14 NCC Activities

Year	Activities
2011-2012	CWO Chetan Bhosale of 2 nd year Air wing NCC participated in special NIC held at New Delhi and won gold medal.
2012-2013	- CDT Ritesh Agashe won gold medal in drawing competition at Annual camp held at Kanhe phata. - CDT Deepak Shende stood first in cross-country and won Gold medal. Modern college NCC unit won "Best division Trophy". - CDT Narendra Kuchekar won silver medal in ship modeling at Annual camp, Balewadi.

Year	Activities
2013-2014	CDT Pooja Nimbhore was selected for sailing camp at Chilka and earned 4 th position.
2014-2015	Blood donation Camp was held in college and 203 blood bags were collected by KEM hospital “Ek Divas Shetasathi Shetkaryancha Madatisathi” Project by Vanrai at Vinzar and Velhe (Paddy Crop Plantation) SUO Kapil Sable participated in the Republic Day Camp 2014 at New Delhi JUO Makarand Dhamale and CPL Rajat Ninave completed the Thal Sainik Camp upto the Inter Group Level held at Aurangabad in September 2014. SGT Abhijit Dhanedhar and CDT Onkar Jagtap completed all India Doon Treck held at Deharadun, Uttarakhand in September 2014.
2015-2016	“Ek Divas Shetasathi Shetkaryancha Madatisathi” guidance by Adv. Nandu Phadake of Vanrai Project.

○ **Students participated and awarded in RD parade :**

Table 5.16 NCC Activities

Year	Name of the student	RD parade
2011-12	CDT Ankit Mode	New Delhi
2012-13	CDT Bela Deshpande	New Delhi
	CDT Keshav Turkunde	New Delhi
2014-15	CDT Kapil Sable	New Delhi
	CDT Tabish Shaikh	New Delhi

● **N.S.S:**

- ‘Best N.S.S. Program Officer’ awarded by SPPU, Pune is bagged by Prof. P.S. Varade in 2012-2013
- N.S.S. Best College Award” awarded by SPPU, Pune in 2012-2013 to our college.
- Ms. Vaishali Makadi participated in state level “Republic Parade” at Mumbai, in January 2014.
- The total intake of NSS unit is increased from 200 to 250.

● **Arts Circle:**

Table 5.17 NCC Prizes won

Name of competition	Year of participation	Prizes
Purushottam Karandak	2010-2011 2012-2013 2013-2014	Consolation prize for acting Acting prize Reached in top 09 from 51 teams, and consolation prize for acting
Firodiya Karandak	2011-2012 2013-2014	Entered in primary level, and bagged First prize for face painting Reached in top 15, and bagged First prize for Deep Yoga, Warli Painting, Skipping
Bharat Karandak	2011-2012 2013-2014	Prize for Best drama (Group), Acting, Script writing, Best director, Best lights, Best Set 1 st prize for Music, Consolation prize for acting.
Raj Karandak	2010-2011 2013-2014	3 rd in first round, Prize for Best script, consolation prize for lights, Best acting, Best lighting. First prize for Music, Consolation prize acting.

5.3.3 How does the college seek and use data and feedback from its graduates and Employers, to improve the performance and quality of the institutional provisions?

- Feedback from students is taken formally and informally. Feedback forms are collected from final year students. The feedback form covers questions related to students’ opinion about the college facilities and assessment of individual teachers. The data are compiled and analysed at the department level. Concerned teachers are informed about the feedback.

- Similarly, self-assessment forms are filled up annually by all staff members. The head of the department gives his/her comments and finally these are scrutinized by Vice-Principal/Principal.
- Students give informal feedback through suggestion boxes kept in the college. Students can send e-mail to Principal to express their views. Last year, bandwidth for internet connectivity was increased on receiving suggestions from students.
- For newly recruited staff, feedback from students is taken regularly. Accordingly, suggestions are given to concerned staff members. Based on feedback, Principal gives suggestions in weekly meetings of office and library staff. Names of the teachers are nominated for various awards based on overall feedback from students.
- Based on the students' feedback, suggestions are given to the concerned office staff for improving their services to students such as issuing of bonafide certificate promptly, issuing of Transfer Certificate (TC) issuing of travel concession passes, verifications of students' academic record asked by employer. Use of digital record room facilitates quick disbursement of required documents.
- In response to the feedback from students, special coaching in sports is provided to sharpen the skills.
- The repeated placement interviews (every year) by some of the companies (employers) indicate that the said companies are satisfied with the performance of our students. The placement officer and other concerned staff also take informal feedback from the HR personnel of the companies at the time of placement interviews.

5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine and other material? List the publications/materials brought out by the students during the previous four academic sessions.

- **Wall magazines:** All departments encourage students to write articles for wall magazine. The nature of articles is: popular articles, literature, poems composed by students, information on current and social issues. Some departments conduct activity, '*problem corner*' that includes puzzles, difficult problems to encourage the students for independent thinking.
- **College magazine:** It is a good platform to explore the students creative by way of expressing their literary talent. Students also write articles on current issues, reports of their study tour, industrial visit, national integration camps, and interviews of eminent personalities, puzzles, poems and jokes to promote humoristic aptitude. Various associations organize essay competitions. The best essays and debates are displayed on wall magazine and published in college magazine. It also promotes scientific writing.

- **Others:** Students also write regularly in newspapers, magazines published by other publications in and around city.
- There is a provision of e-journal, which publishes reports, and findings of students' projects.
- Few students have published articles with the help of project guides in Peer reviewed journal.
- Workshops on 'creative writing skill' are organized by the college.
- Interaction with celebrity authors, poets from India and Abroad with the students are organized.
- Poster Presentation competitions are held, exhibitions are arranged to display the posters, models prepared by the students.
- Students are encouraged to present the research papers at different levels – college, university, state, national and international conferences
- Research students assist in publishing and compiling references. Research work done by some of the students has been filed for Indian Patent. e.g. Dr. Mrs. Rebecca Thombre and four students from Biotechnology department have filed Indian Patent.
- Students are motivated to take part in state level research competition like Avishkar, which help to nurture the hidden talents among the students and to imbibe the research culture in them. Following are the details of Avishkar research competition in last 6 years.

Table 5.16 Details of Avishkar

Year	Number of Research Projects Presented At		
	Zonal Level	University Level	State Level
2011-12	11	3	1
2012-13	8	2	2
2013-14	8	2	-
2014-15	15	5	-
2015-16	25	5	1

- The college promotes research amongst undergraduate and postgraduate students under 'Yuva Sanshodhak' scheme by funding the projects of the students under the guidance of faculty members.

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

- **Student Council Constitution:** Yes, College has student council. It is constituted as per University guidelines. Toppers from each class as a Class Representative (CR's) , representative of NCC, representative of NSS, representative of cultural programs along with NCC officer, NSS program officer, Physical Education Director, Principal, Principal's nominee, together constitute a student council.

University Representative (UR) is elected among them who represents University student council.

ICSR (Inter-Collegiate Sports Representative) a girl student and a gents student both are elected from amongst the sports representatives as ICSR.

- **Student Council Activities:** Student Council help to maintain discipline in college, council members locate students who are good in sports, cultural activities and help them to get involved in activities. They also help in organizing Annual Social Gathering, Republic day, Independence Day, class trips, tournaments, sports events, etc. Council takes a responsibility to report anything not in order or unhealthy that they observe. They help the college authorities in organizing and managing various activities of the college.

Student council takes responsibilities of the organization of Annual Social Gathering and sports events. Students under the guidance of senior teachers manage the events. Because of involvement of students in the various activities of the college, the promotion of leadership qualities is facilitated.

- **Funding:** Separate budget is allocated for student's council under gymkhana department.
- The monthly meetings of the student council are held to discuss various issues related to the students' activities.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The details of academic and administrative bodies having student's representation are as follows:

- **Gymkhana Managing Committee:** The committee of National, International players along with teachers, Vice-Principal, Physical Education Director, and Principal constitutes gymkhana committee. The players are given responsibility of the game in which they have achievements. The student volunteers do a great deal of job in:
 - Organizing sports events. They escort our team for state and national events.
 - Facilitate to keep good relations with staff and students
 - Search for sports talents
 - They also provide guidance and coaching.
 - Guide the players and help staff in maintaining the record of sports kit.

As per University norms, Inter Collegiate Sports Representative (ICSR) and Ladies Representative (LR) are nominated by the Principal from the excellent players. The U.R., I.C.S.R. and L. R. are considered prestigious positions for the students at the college level.
- **Annual Social Gathering:** The U.R., I.C.S.R. and L.R. are the key persons in keeping rapport with the student community for this mega activity. Each class has Class Representative who helps in planning and execution and also getting his/her classmate involved in Annual event of cultural programs and refreshment for students.
- **Science Association:** The team of students takes lead in conducting various activities like talks by eminent scientist, essay competition, Science quiz, wall magazine, seminars, etc.

- **Planning Forum:** It is a forum for various co-curricular and extracurricular activities for students like quiz competition, essay competition, guest lectures of eminent economists on current issues.
- **Arts Circle:** The students representative of Arts circle take responsibilities of the Arts form of their interest and expertise. They motivate their colleagues to participate or contest in such activities.
- **Arts Association:** Students representative provide a group of volunteers for various activities like talks, film shows, poster and other sites.
- **Astro club:** Students help the staff in organizing lectures and especially stargazing sessions in the college campus and other sites.
- **Vidyarthini Manch:** This forum is exclusively for girls. They run diverse activities. However, the noteworthy feature is an annual Personality Development workshop/ camp. In this workshop, various issues related to women folk are addressed and discussed. The Students representatives render full support to the teachers in conducting these activities. They also contribute innovative ideas each year.
- **N.S.S. Advisory Committee:** Students' representatives in this committee along with the program officers chalk out the calendar of activity for that academic year. In addition they are a part of the decision making team for selecting a village for adoption (for community development). They also help in strengthening bonds amongst enrolled volunteers.

5.3.7 How does the institution network and collaborate with alumni and former faculty of institution?

- The college has strong network of past students, they regularly hold the department wise meetings. The present students are benefited by interaction with alumni. They help in following ways.
 - Give lectures in seminars
 - Inform about job opportunities, placements and guide the current students
 - Donate books and equipment
 - Provide projects for current students
 - Inspire the current students
 - Sponsor the endowment scholarships and prizes
 - Training and Internship
 - Motivational talks
 - Sharing the experiences
 - Conduct mock interviews
- **Former faculty:** Management has adopted a policy to associate the retired teaching and nonteaching staff members who are willing to work in advisory capacities. The benefit of their experience and guidance is available to staff and students. The former faculty members and office bearers are also invited on various occasions in the college. They contribute by working as visiting staff, they guide in planning and

executing the various activities. They help researchers. They donate the books and other valuable material, instruments, computers after their retirement.

Any other relevant information regarding Student Support and Progression which the college would like to include.

- The college has a tradition of associating past students with various students' activities. The past students voluntarily offer their services to help guide and support the present students in different academic, social and cultural activities: placement, interviews, inter collegiate cultural competitions, sports competitions.
- Few past students join the departments in delivering lectures for the benefit of students. They share their field experiences with present students.
- Past students who were in NCC unit arrange NCC past students meet.
- The college has evolved the 'Tri-Sutri' formula for the development of talent and creativity among the students. The college gives *freedom*, *budget* and *expert coaching* to the students to participate in different activities. This has enabled the students to improve their performance and win different awards/prizes in the competitions.

□□□

Criterion VI – Governance, Leadership and Management

6.1 Institutional Vision and Leadership

Synoptic View:

- The vision, mission and goals of the institution are in tune with the objectives of higher education.
- The governance of the institution is reflective of an effective leadership.
- The institution practices decentralization and participative management.
- The institution formulates its strategic planning and interacts with stakeholders.
- The institution monitors and evaluates its policies and plans.
- The institution grooms leadership at various levels. All decisions of the institution are governed by management of facts, information and objectives.

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

- Vision Statement of the institutions is 'ज्ञानमयो भव' (Dnyanmayo Bhav), which means, "Be knowledge incarnate". It is inscribed on the top of the logo, which is given below:



- The initials P.E.S. i.e. *Progressive Education Society* (the parent body) are inscribed in the centre. The vision is to remain **Progressive** and **Modern**. Hence, names of all the institutions run by the Progressive Education Society begin with '**Modern**', e.g. Modern College of Arts, Science and Commerce, Modern High School, Modern College of Engineering, Modern College of Pharmacy, Modern College of Education, Modern College of Agricultural Biotechnology, Modern College of Physiotherapy, Modern Institute of Business Management etc.
- The word 'EXCELSIOR' at the bottom of the logo is an expression of incessant aspirations of higher attainment.
- Mission statement of the college is:
To create multidisciplinary best citizens to suit the local, national and international needs, having scientific temperament, moral, ethical, values, and multifaceted proactive personality by providing excellent education.
- The objective of higher education policy of the nation is to provide education to the students of all castes, creed, religion, and with different financial background as well. The institute provides education to student

community by keeping in mind the national policy and mission statement. The enrolment record shows that majority of the students are from middle class, lower middle class and even below poverty line. The number of the girl students enrolled is high.

- EXCELSIOR: Our College is a leading institution providing higher education over four decades. Started in 1970 with just three degree courses in Arts, Science and Commerce, intake capacity of 700 students, Modern College imparts degree in Science courses, such as Physics, Chemistry, Botany, Zoology, Mathematics, Statistics, Electronic Science, Computer Science, Biotechnology, Microbiology and Animation. In Commerce, B. Com., B.B.A., and in Arts B.A. with various languages, Economics, Psychology, Political Science, Geography, History. College also offers post-graduate courses in Commerce. In Science, Biotechnology, Microbiology, Electronic Science, Geography, in Arts, English, Psychology, Economics, Marathi, Physics and Zoology. The facilities for research in Botany, Zoology, Microbiology, Commerce, Electronic Science, Marathi and Economics leading to M.Phil. and Ph.D. are provided. In view of globalization, college offers certificate courses in German language. The intake capacity now has reached to 7141. Although the college primarily provides traditional courses in view of changing global scenario. It has also started professional courses catering the need of the modern technology, job-oriented courses, such as Diploma in Dress Designing and Tailoring under Community College Scheme of UGC, M.Sc. Mathematics, M.Sc. Physics and M.Sc. Zoology. The college, upon application to UGC, under Community College Schemes has been granted a course on 'Fashion Technology and Dress Designing. The college also intends to start various activities for the benefit of the students such as Industry-Academia Cell, Collaboration with renowned academicians, Research Institutes as well as industries to enhance the practical approach in education to meet the need of the society.
- College has prepared a 'Vision Document 2015-20' covering various aspects such as governance, infrastructure, research, library, gymkhana, extra-curricular activities as well as IQAC related activities and all administrative and academic departments of the college.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The management mainly consists of 'Teachers' who have vision and dedication. It consists of senior college teachers and educationalists, state and national award winning teachers, some are from industry and trade, some from medicine, law and social work. The management is committed to quality and it is also committed to provide education to meet the current local and national needs. It ensures that best of the staff, adequate infrastructure, equipment, etc. are available in the College. The members of the management are quite active and take keen interest in the development of the college. The senior members

are always available for guidance. They meet and interact with Principal and Vice Principals.

The management, through the Chairman provides very effective leadership. Our Chairman is a well-known educationalist. Although a surgeon by profession, he has over 25 years of experience of holding various important positions in SPPU, Pune and Maharashtra University of Health Sciences, Nasik. He also motivates the staff to undertake research activities, seminars, conferences and other relevant activities. He also encourages college teachers to take up different positions in the university.

The college is governed by the *Progressive Education Society*. The head office of PES and the college are on the same campus. The Chairman of Progressive Education Society (Parent body), Secretary and Principal are members of Business Council. Life Members, Local Managing Committee are also actively associated in day-to-day management of the college. The college now has 16 PG courses and 7 PG research centres, thanks to leadership provided by the management.

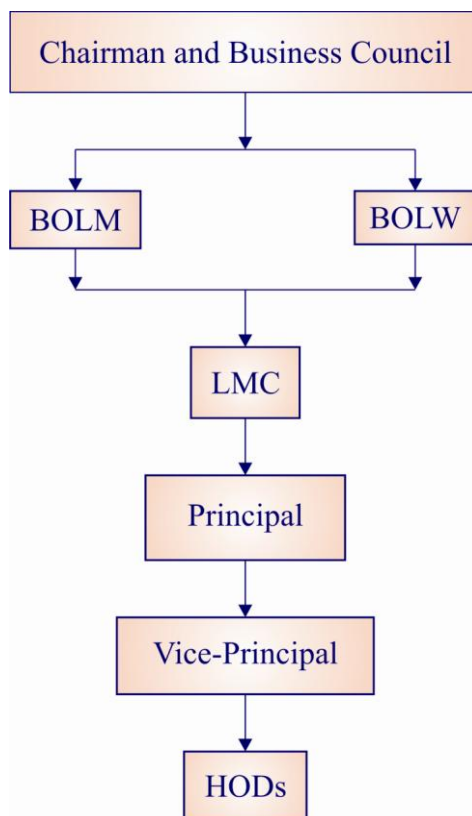
According to directives given by NAAC, college has established IQAC. The basic objective of this cell is to enhance the quality of education by providing practical approach in education, by arranging Pedagogy workshops, ICT, Motivating Lectures in International and National State level conferences, by applying innovative techniques in teaching and learning process. Staff members are also encouraged to avail the facilities provided by UGC faculty development programmes. The college has taken initiative in arranging the 'Hands on' Training programmes, Research schemes funded by different agencies such as UGC, DBT, DST, ICSSR, ISRO and BCUD of SPPU Pune, to accelerate academic growth and research interests of the students. The college frequently organizes academic visits of the faculties to renowned institutes such as Shriram College of Commerce, New Delhi, Christ University, Bangalore, for further faculty development and educational quality. The visits were also organized to Osmania University, CCMB, Hyderabad, University of Madras, Chennai and J.N.U., New Delhi. The college arranges assessment of the teachers through:

- The students' feedback mechanism
- Self-assessment form and confidential reports
- Participation in Career Advancement Schemes (C.A.S.) of SPPU and Government of Maharashtra also contributes in furthering the quality of the teachers.

4.1.3 What is the involvement of the leadership in ensuring:

- The policy statements and action plans for fulfillment of the stated mission
- Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
- Interaction with stakeholders
- Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders
- Reinforcing the culture of excellence
- Champion organizational change

- The college has been certified by BSI as ISO 9001:2008 institute.
- The college has well defined system, which ensures that the adequate information is available for management to review policy statements and action plan of the institution.
- The information flows from respective committees constituted by in the institution that submit periodic report to Heads of the Department (HOD) → concerned Vice Principal → Principal → Local Managing Committee (LMC) → Board of Life Members (BOLM) → Business Council (BC).
- The Principal takes review of the departmental activities through regular meetings, interacting with Vice Principals, HODs and members of teaching and support staff. The college Principal sends administrative reports and annual report to the Chairman of the Governing Body. Budgets and Audit Reports are routed through Finance Committee. The management takes the feedback of the activities through life members (who are the faculty members of the college), Secretary and Local Managing Committee members. In this way, there is a constant feedback to the management.
- The management is committed to create a highly conducive eco-system for research across all areas. It encourages both students and members of the faculty to identify challenging research problems in their respective specializations and making a strong conscious effort towards the resolution of the research problem. Participation in research platform like 'Avishkar' is encouraged by the management towards developing an environment a research excellence within the campus.
- The management gives special emphasis on the quality of the pedagogy and hence plays a key role in motivating and boosting the level of performance of the academia. On the foundation day of the institution, which is celebrated annually on a large scale, the teachers with excellent academic performance are felicitated with awards to honour their dedication and performance.
- Institute frequently organizes meetings with the stakeholders, Parent Teacher Association, Alumni meet, Counselling session for parents and students are held to discuss the issues concerning attendance, performance etc. of the students.
- The institutional functions are carried out at following level of management.



- The Principal acts as an Academic and Administrative Leader of the college. He plans the activities of the college and monitors them with the help of Vice-principals, HODs. He is ably offered support by the office and different committees.
- In routine work, Principal gives freedom to staff members in carrying out organizational tasks. The various motivational sessions are conducted by the Principal, viz. Brain Storming Session and General Think Tank suggestions sessions for achieving organizational task. As a result of continuous academic and administrative support and freedom by the Principal, the college has received various awards as follows:
 - Best College Award by SPPU (2008)
 - NAAC accreditation 2nd Cycle 'A' grade with CGPA 31.5 (2010)
 - College with Potential for Excellence (CPE) Status of UGC (2011)
 - DST-FIST Scheme (2012)
 - UGC-BSR scheme (2013)
 - STAR College Scheme from DBT (2014)
 - NSS Best College Award by SPPU (2014)
 - Best Principal Award by SPPU (2014)
 - ISO 9001:2008 Certification (2015)
 - Community College Scheme from UGC (2015)
 - Best College Award (Sports) by SPPU (2016)

- Dr. H.V. Ghate received ‘Sarpamitra’ Herpetological Society of India award in 2015, who is also a recipient of Best Teacher award by the Government of Maharashtra in 2010.
- Prof. Dr. S.D. Joag received first prize in BASF/ICT National Competition. She also is recipient of INSA Best Teacher Award 2015.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

- In addition to IQAC, the college forms various committees which are declared on the first day of the academic year for smooth conduct of academic planning, administrative programmes every year, viz. Academic Committees, Administrative Committees and other committees as under:

Academic Committees	Administrative Committees	Other Committees
Academic Planning Committee	Purchase Committee	Alumni Association
Commerce Association	Finance Committee	Prize Distribution Committee
Science Association	Administrative Committee	Best Student Selection Committee
Arts Association	Parent Teacher Association Committee	Students Forum
Examination Committee	General Discipline Committee	Women Grievances Redressal Cell.
P.G. Association	UGC Co-ordination Committee	Anti-ragging Committee
International Student Cell	Research Monitoring Committee	Value Education Committee
		Industry Academia Collaboration
		In-house publication Committee

- The concerned Chairman of the Committee gives report to the Principal, who takes the review of the activities through regular meetings with V.P.s, HODs and members of teaching and non-teaching staff. The college Principal forwards the reports to management for approval.
- The management takes the feedback of the activities through Life Members, Secretary and Local Managing Committee Members.
- With the use of ICT, the institute has adopted the method of monitoring and evaluating policies and plans. In addition, the college also publishes its Annual Report every year.
- The college has already adopted MIS system, ‘Vridhhi’ successfully to give transparency in implementation of revised policies. It also helps for period assessment of the policies, to monitor and evaluate the policies and revise them accordingly.
- Admission committee meetings are conducted in vacation to plan next year’s admission policies. Daily feedback is taken about the admission status of all faculties and courses.
- Based on the feedback received from faculty clerk, students, parents the decision about implementation online admission process is taken by the management and online admission process is implemented gradually for all the courses.
- The online feedback system is introduced by college for all the stakeholders. Feedback analysis is enabled to review the policies.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The Principal and the representative of management are associated with IQAC. Reports of the college activities are sent to the top management. The top management interacts with the staff through LMC and other meetings.

The college has well defined system, which ensures that adequate information is available for management to review the activities of the institutions. The information flows from HOD → concerned Vice Principal → Principal → LMC → BOLM → Business Council. The management mainly consists of teachers and educationists, state and national award winning teachers, some members are from industry and trade, some from medicine, law, and social work.

- Our Chairman of Business Council, Prof. Dr. G.R. Ekbote is a Professor of Surgery in B.J. Medical College, Pune.
Although a surgeon by profession, he has over 25 years of experience working on various important positions in the SPPU, Pune and Maharashtra University of Health Science, Nasik (MUHS) and Subcommittee of Planning Commission, New Delhi. He motivates the college staff to undertake research activities, Seminars, Conferences, Workshops and other relevant activities. He has been instrumental in developing team work among the teachers. He also encourages college teachers to take different positions in university.
- Our Vice Chairman Dr. Madhav Namjoshi is a renowned Homeopath in city.
- Our Secretary Prof. S.S. Deshmukh is Vice Principal and Head of the Department of Computer Science.
- All the members of BOLM are teachers. Our four staff members including Principal are representing Business Council.
- Some of our staff members are representing Board of Studies and Senate in SPPU, Pune. Management, through the Chairman, provides a very effective leadership.
- Teachers with academic excellence are felicitated periodically during different event organized by the parent body.
- The research journal named 'Dnyanamay' published by the parent body has inspired the college to publish seven research journals of different departments.
- Top-level management always encourage the college to organize international/ national/state level conferences on different themes.
- Top-level management always motivates the college to start new courses as per the requirement of stakeholders and current market trends.

6.1.6 How does the college groom leadership at various levels?

- The management, through the Principal, encourages the staff for improvement of institutional process. The Chairman of Business Council

and Local Managing Committee give instructions and suggestions to the staff. The management encourages the teachers in attending / conducting seminars, workshops and to take up research projects. The members of the staff are motivated to get positions at various authority levels in the university such as Boards of Studies, Faculties, Academic Councils, Senate and Management Council. Staff members are also encouraged to avail the facilities of Faculty Improvement programme (FIP) of UGC from time to time.

- The student representatives are nominated on various committees i.e. University Representative, Inter College Sport Representative (ICSR), Class Representative and Student Representative in various committees. The activities conducted by NSS / NCC inculcate the leadership qualities among the students. Most of the student representatives are appointed on various committees viz. Annual Social Gathering Committee, Grievance Cell, Cultural Activities etc.
- The teachers are also appointed as Chairperson on various committees for delegating responsibilities.
- Institution is providing opportunities for grooming their leadership qualities. Institution also motivates staff members for representation on various bodies, i.e. Local Management Committee, BOLM, BOLW, Business Council, Board of Studies, Management Council, Academic Council of Senate, as well as Chairman/Coordinator in University Examination work.
- College nominates one of the senior staff members as a 1) Academic Research Coordinator (ARC) of SPPU, Pune 2) Student Welfare Officer and 3) College Examination Officer (CEO). One of the staff members from Statistics is appointed as a Nodal Officer of UGC. Few staff members are coordinating different funding schemes, such as UGC, DBT, and DST. College is conducting Soft Skill Programme, Computer Awareness Session, training program for teaching staff also Orientation programme for office, Library and Laboratory staff.
- While a keen interest on grooming leadership as well as ensuring a steady influx of young leaders into the organizational setup, the institution has a non-permanent leadership profile. Here chairpersons make way and are elevated to the position of advisors to make room for other younger chairperson and thereon. This circle ensures new leaders are constantly brought to the force and given responsibilities to prove their mettle.
- The institution takes a proactive approach towards the well-being of its students irrespective of their diverse backgrounds. It takes special interest in the assimilations of students within its academic culture, especially for outstation and foreign students. It promotes loyalty, trust, friendship and respect among all the students to usher in a sense of brotherhood and unity on campus.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

Our institution believes in decentralized governance system. The responsibilities of Principal, Vice-Principals, HODs, Registrar, and Office Superintendent are laid down by standard code. The responsibilities of office bearers and other staff are also well defined and are communicated to the concerned staff through Orders, Circulars, Notices and verbal communication. For effective management, frequent meetings are conducted at various levels, i.e. HODs, Vice Principals, Non-Teaching staff, etc.

Decentralization improves the working effectiveness and enhances confidence among the staff and office bearers to accept responsibilities. Decentralization and operational autonomy available to various departments lead to good results and ease in functioning. Because of decentralization, upward as well as downward, two-way communications is established. Regular feedback from the students, parents, HODs and Vice Principals facilitate effective coordination. The administration of the college is adequately decentralized through its 28 Departments and 7 Research Centres. College runs into three shifts. Principal is assisted by Vice-principals and HODs. For the sake of convenience, each Vice- Principal is in-charge of one faculty. The HODs report to concerned Vice Principals and Vice-principals report to Principal.

The academic administration and examination committees function under supervision and guidance of Vice Principal and Principal. The Chairman and Director of Physical Education looks after Gymkhana activities with the help of staff advisors appointed for different games / sports.

Registrar is in-charge of all office administrative activities. He is assisted by three office superintendents, one for staff related work and other two for Accounts and general administration respectively. Library works under guidance and control of Librarian, who is assisted by Asst. Librarian and library clerks. There is a library committee, which plans and guides the activities of the library.

With the ambitious expansion plans of the management, several new positions are created to ensure better coordination and smooth functions between different departments, committees and another bodies.

Ex. Co-ordinator: Research Monitoring committee

Co-ordinator: Post-graduate courses

Co-ordinator: Administration

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes. The college promotes a culture of participative management among students and staff. The Principal acts as academic and administrative leader of the college. All the activities are classified and organized through various committees. The Principal, through the Vice-Principals and HODs, supervises

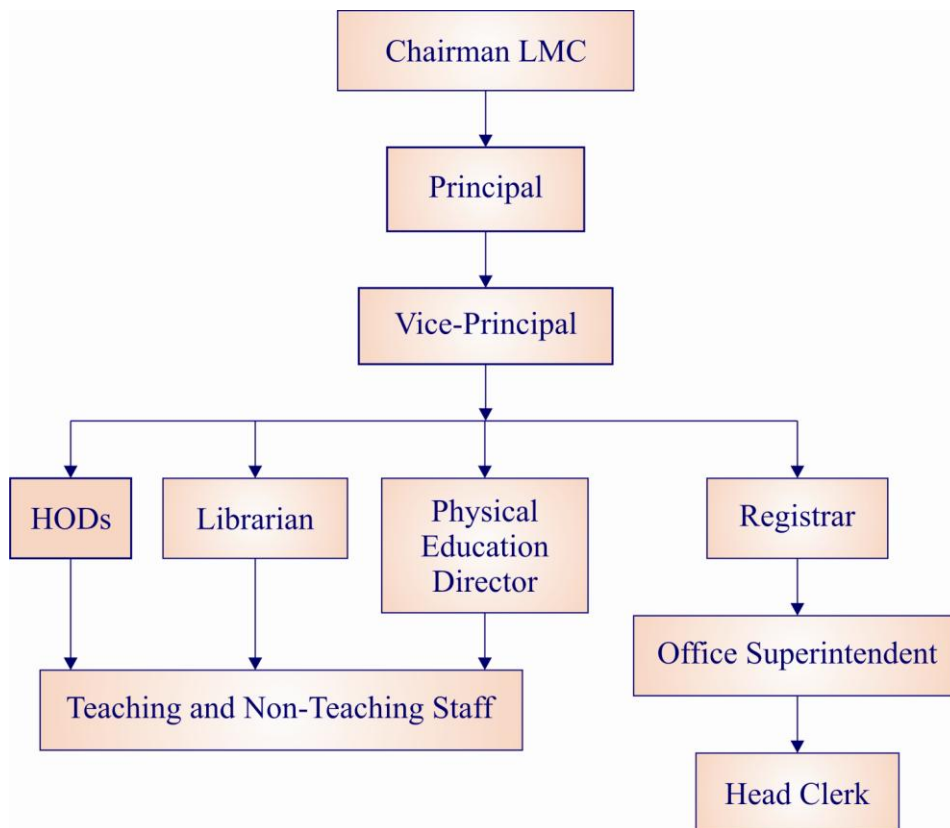
various activities of the college. The Principal takes periodic review of various activities through meetings of the Chairpersons of the Committees, HODs and Vice-Principals. Three elected staff members from teaching and one member from non-teaching represents Local Managing Committee. Few staff members are given responsibilities as Class Adviser. Personal counseling to the students is carried out in each department.

Psychology Department conducts counseling. Computer Science Department organizes career counseling and campus placement activities in the college. The past students of the college organizes Alumni meet / Past Student meet to share their professional experience. The students of the college represent various committees of the college such as Grievance cell, Art Circle, Anti-ragging Committee, Vigilance Committee, Annual Social Gathering Committee, IQAC Committee, Gymkhana Committee, etc.

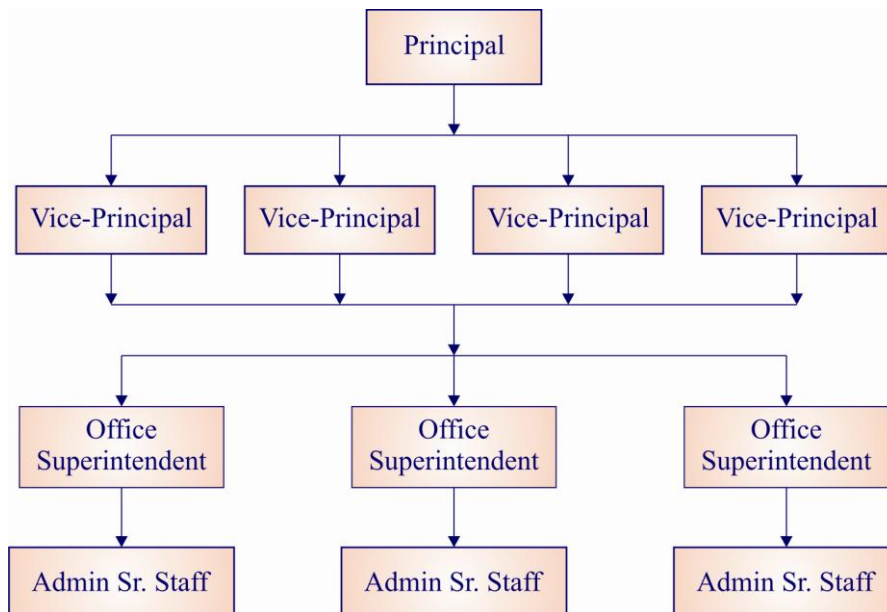
The periodic meetings are conducted for Non-teaching staff. Frequent interactive sessions are also arranged along with Laboratory Assistants, Library staff and Student Council members.

Five staff members, including Principal, are Life Members of the Progressive Education Society. They represent Board of Life Members at Management Council. Three staff members represents as members on Business Council, the top management body of the Progressive Education Society.

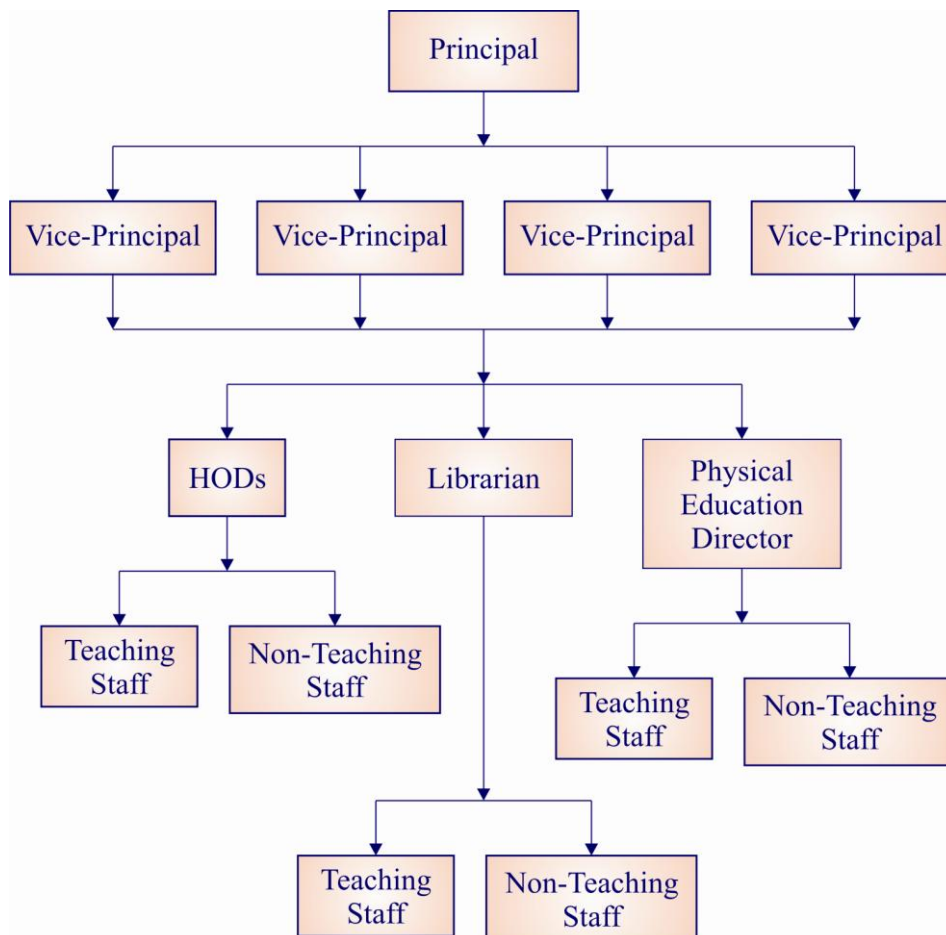
Level of Management:



College Administrative Structure:



Decentralization Structure:



6.2 Strategy Development and Deployment

Synoptic View:

● Perspective plan document is an important component of the institution's strategy development and deployment process. ● The institution has a well-defined organizational structure with effective processes developed for all its major activities. ● The institution has an effective feedback system involving all stakeholders. ● The institution has a well-defined Quality Policy and deployed with a systems perspective. ● The institution has an action plan and schedules for its future development. ● The institution has an effective Grievance Redressal Cell. ● Management and monitoring of the affiliated colleges is effectively handled by the institution. ● Student Satisfaction Survey is an integral input factor for all policies of the institution.

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes. The institution has quality policy. It is monitored under Internal Quality Assurance Cell (IQAC). The college has independent, distinct quality policies and objectives leading towards achieving the goals and missions. The college has acquired ISO 9001:2008 certification by BSI.

Various aspects of quality policies are drafted according to requirement of different sections of college.

For office, following points are taken into account as far as quality policies of office are concerned.

- Admission process for various courses should be completed within 10-15 minutes per student.
- Identity card should be issued to the student on the day of admission.
- Transfer certificate, Bonafide certificate should be issued to the student on the same day.
- For preservation of permanent record and its prompt availability, Digital record room is established in the college.
- College provides most of the office facilities on-line and follows e-governance for speedy and accurate work. Zero pendency policy is adopted.
- The compliance against the expenditure incurred by college from various funding agencies, such as UGC, DST, DBT, BCUD, are settled within prescribed time limit. Salaries of the staff members are deposited regularly and in time to their respective bank account.

For library, quality policies are concerned with the following.

- Reduction of the transaction time by use of library software
- Immediate availability of Books and References by use of library software (Autolib, Vridhhi)
- Immediate availability of Journals, Periodicals, Newspapers, Business Magazines are provided to the students immediately on demand:
- Appropriate reading arrangement and Photocopy facility in the library for student and staff members.

College library administration is keen in procuring new reference and textbooks on top priority.

The college has established Digital Library, which has facilitated the greater access to the library literature for students and staff. The reading room is made available for students for more than 14 hours in a day. New publications and arrivals are displayed. Separate reading room is provided for staff members.

Our college **Gymkhana Section** is quite active. It works almost for 14 hours a day. Most of the indoor games are made available for staff and students. College has well equipped Gymnasium for staff and students. College students have represented the college at various levels i.e. at District, State and as well as National. Our sports students have won prestigious Shiv Chhatrapati Award of Maharashtra State as well as several other awards at University, State and National level.

Various sports events and programmes of meditation and Yoga are organized for enabling the staff and students to maintain vigor, strength and good health. Separate well-equipped Meditation room is developed.

Departments and Research Laboratories are open to the students since morning 7.00 am to 10.00 pm. Our research science laboratories are well equipped with all modern equipment / instruments. In order to ensure the quality and all round development of the college, adequate funds are always made available by the college authorities. All laboratories are well equipped with ICT facilities. In commerce department, Tally package facility is provided to the students. Virtual and digital class rooms are made available on the campus. Psychology department has its individual counseling cell for the benefit of staff and students. IQAC is already established in all the departments to enhance the departmental qualities.

Quality policies driven by departmental IQAC are communicated to institutional IQAC and top level management. The college authorities submit the reports on performance periodically and regularly to the top management and thereby ensure the performance of effective and quality work.

6.2.2 Does the Institution have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes. The institute has a perspective plan for its development. The perspective plan is developed through the following committees:

- Academic Planning Committee
- Research Monitoring Committee
- UGC co-ordination Committee
- Purchase and Finance Committee

The staff gives suggestions to these committees in the meeting and the suggestions are noted by the Principal. The HODs and Principal finalize the perspective plan. Then the plan is discussed in the LMC meeting, where the representatives of non-teaching and teaching staff and management give their suggestions. After discussions and modifications the plan is approved.

Objectives are communicated through management, Principal, Vice-

Principal and HODs to the members of staff by means of meetings, notices and instructions.

The quality policies are reviewed through periodic meetings by IQAC. College has prepared a '*Vision Document*' 2015-20 covering the aspects such as governance, infrastructure, research, library, gymkhana, extra-curricular activities, IQAC and all administrative and academic departments of the college.

Academic and administrative services provided by the institution are as per the international standards laid down by British Standard Institution. The process of standardization has culminated into ISO 9001:2008 certification to the college.

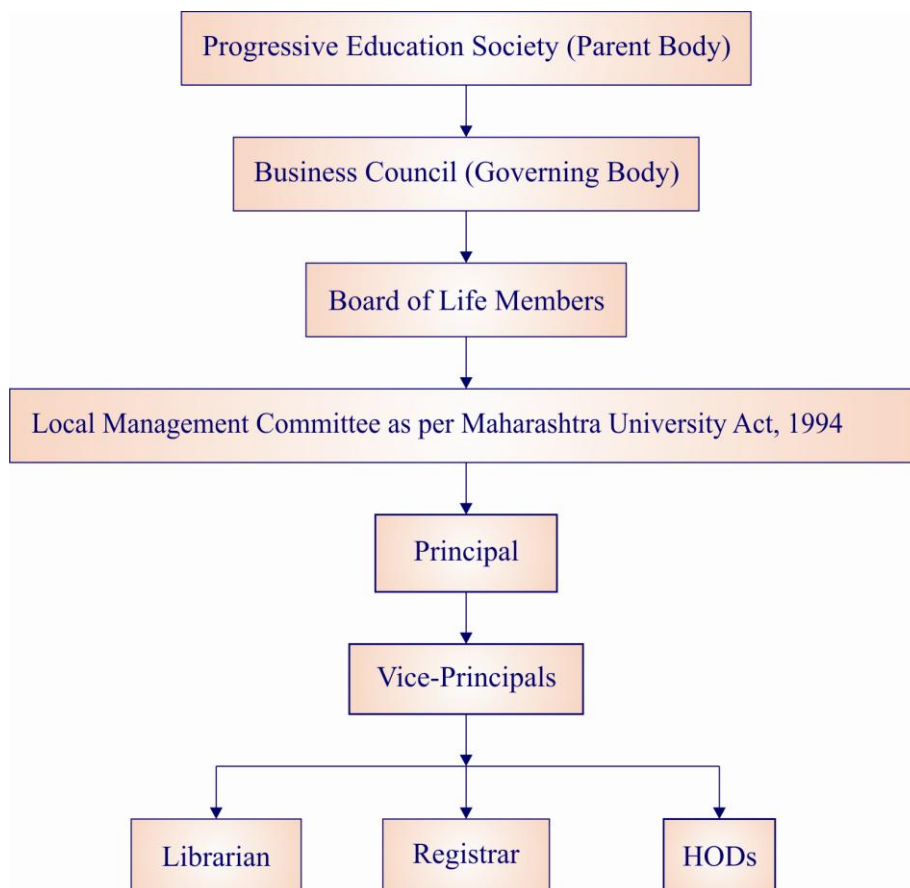
Following aspects are considered in the perspective plan:

- MIS system to be implemented for effective communication between all the departments, college management and top management.
- Infrastructure and its development to meet the growing requirement.
- Provision for the necessary resources for new laboratories and research centres.
- Introducing new courses.
- Meeting the needs of materials and human resource requirement – teaching, non-teaching and technical staff. Training and development of staff, (remedial programmes, establishment of equal opportunity cell, competitive examinations coaching, skill development programme for the students.
- Skill development programmes for the students.

The proper execution of the perspective plan for development of the institute apply to various funding agencies for seeking funds towards incurring improvement facilities in existing premises, equipment, renovation of infrastructure, rejuvenation equal opportunity centres, remedial coaching, coaching for NET/SET examinations and counseling cell. Enhancement of initiative for competence building, improvement in facilities of existing premises, examination reforms, educational innovations, field work, extension activities, maintenance of equipment, books and journals through UGC, DBT, DST, BCUD for fulfillment of perspective plan. A full-fledged proposal is prepared and submitted to SPPU under RUSA of MHRD (Ministry of Human Resource Development), New Delhi.

6.2.3 Describe the internal organizational structure and decision making processes.

Internal organization structure of management and college:



The important committees, LMC, Purchase and Finance Committee, conduct meetings to take major decisions.

Table 6.1 Dates of LMC, Purchase and Finance Committee meetings

Year	Dates of LMC, Purchase and Finance Committee meetings
2010-11	10/03/2011
2011-12	04/08/2011 , 13/10/2011, 22/02/2012
2012-13	03/04/2012, 25/09/2012, 04/10/2012, 27/02/2013, 27/03/2013
2013-14	06/09/2013, 17/01/2014, 07/02/2014, 18/02/2014
2014-15	01/07/2014, 18/07/2014, 9/12/2014, 27/02/2015
2015-16	09/10/2015, 27/11/2015, 27/12/2016, 16/02/2016, 20/2/2016, 21/3/2016

The Principal convenes LMC meetings to take the decision. All decisions are routed through LMC and forwarded Resolutions of the meetings for approval to BOLM with remarks of BOLM. Resolutions are forwarded to Business council for final approval. In the college administration, Principal convenes meetings of Vice-principals and HODs for departmental suggestions, requirement and future ideas. After compiling all the information and data, it is forwarded to LMC meeting for approval.

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following • Teaching and Learning • Research and Development • Community engagement • Human resource management • Industry interaction

- **Teaching and Learning**
 - Teachers of every department prepare lecture plans.
 - The teachers use various teaching and learning techniques as per the nature of the subject. Teachers are encouraged to adopt new methods and use ICT techniques.
 - Following teaching learning methods are adopted:-
 - 60% : Lecture Method (chalk and talk)
 - 40% : LCD Projector, Seminar, experimental method, demonstration, group discussion, study tour, feedback and lecture series, learning by performance, symposium.
However, attempt is being made to gradually increase the use of advance ICT technologies such as Virtual Classrooms, Virtual Laboratories, Digital Classrooms etc.
 - Blended Learning Methods are used in different courses.
 - Examination Committee ensures the smooth conduct of examinations – Internal and External.
 - The results of the examination are displayed and performance of the students is analyzed.
- **Research and Development:** College has constituted Research Monitoring Committee to facilitate and monitor research activities of the college. It looks after all the research activities conducted in the college, motivating staff members to apply for different agencies to carry out research projects. College deputed faculties on UGC Faculty Improvement Programme, to attend orientation, refresher programme and to enhance academic qualification such as M. Phil., Ph.D. and Post-Doctoral Fellowship. The institute encourages staff members who have potential for research to undertake various research projects. College provides space, equipment and other facilities. Duty leaves are sanctioned for fieldwork attending seminars, conferences, reference work. Notifications for university and other organizations that provide financial support are circulated and displayed on the staff notice board.
- **Community Engagement:**
 - Under women empowerment programme, the college conducts workshops for women such as perfume making, preparing jam, sauce, jelly and other food beverages, herbal products preparation, fashion technology course, training for self-defense.
 - College organizes extension activities to create awareness, among the society viz. traffic awareness, literacy awareness, environment awareness, anti-drug rally, water management, and tree plantation, survey regarding employability, rice plantation, roadside trees identification and display of nameplates.

- NCC volunteers extend their services in Ganesh Festival, Blood donation, Blood Group and HB testing Camps, etc.
- Workshops for senior citizens are arranged.
- Promoting use of non-conventional energy sources, e-waste management, segregation and wet-waste management.
- **Human Resource Management:** The total human resource requirements – teaching and non-teaching staff are properly estimated and the effective manpower planning is done at the top level management.

The norms laid down for the recruitment of the faculty and administrative staff by the regulating authorities, are taken into account and the advertisements are given in the national newspapers to draw competent and qualified manpower from all over the country.

The selection procedure is followed for selecting the staff as per the provisions made by Government of Maharashtra and SPPU.

College provides self-appraisal method for the faculty and the staff members are required to fill and submit the prescribed form available for self-assessment. Such self-assessment is done for the purpose of Career Advancement Scheme (CAS).

There is also a provision for assessment of teachers by students. Feedback forms are made available to the students for giving feedback on teachers. The suggestions made by the students are informed to the concerned staff through HOD for further improvement.

College has conducted orientation-training programme of 40 hours duration for newly recruited teachers. Training programme on personality development and personal skills is also conducted for administrative staff and library staff.

Staff welfare scheme, credit cooperative society, recreational activities, uniforms are provided, along with washing allowance to class IV employees. Festival advances are provided to non-teaching staff. Health checkup for staff and their family members, group insurance scheme is extended to all staff members. For mental peace, workshops on spirituality are periodically conducted. Academic visits are organized. Technical personnel are encouraged to participate in computer awareness. Safety and personality development programmes and canteen and gymnasium facilities are provided to staff members.

International standard badminton court is also available for the benefit of the staff. For motivating the leadership among the staff weekly, monthly and term end interactive meetings are conducted. Lectures are conducted for staff members through staff academy for human resource development. Cultural activities are conducted for staff. Staff Tea Club facility is also provided.

- **Industry Interaction:**
 - The college promotes industry interaction with various institutions, corporate and local industries, ex. Department of Zoology and Biotechnology have collaboration with NCCS Pune and Modern College of Pharmacy, Nigdi respectively.

- Similarly, Botany department established collaboration between Modern College of Pharmacy, Nigdi and Bharati Vidyapeeth Pune.
- The College has collaboration with the German Institute (Max Muller Bhavan).
- Collaboration of Dr. H.V.Ghate with University of WROCLAW, Poland.
- Department of English has collaboration with BCL, Pune. Renowned entrepreneurs are invited in various departments to share their experience.
- For campus placement activity, several companies are visiting college campus such as IBM, Infosys, Tech Mahindra, Quick Heal Symphony etc. for recruiting students from our college.
- Computer Science department has collaboration with Quick Heal Technologies, and Orbit Hitech Computers.

6.2.5 How does the Head of the Institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The college has well defined system, which ensures that adequate information is available for management to review activities of the institution. The information from the committees working in the college submits periodic report to HOD/ concerned Vice Principal. The concerned authority gives report to the Principal who takes the review of the activities through regular meetings with the Vice Principals, HODs and members of teaching and non-teaching staff. Finally, the college Principal sends administrative and annual report to the Chairman of the governing body every year. The audit report and the budgets are also sent to the governing body. The management collects the feedback of the activities through the Life Members (working in the college), Secretary, and LMC members. Thus, there is a constant flow of feedback made available to the management.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The management through the Principal encourages staff for improvement of institutional progress. Instructions and suggestions are given by the Chairman of the Business Council routed through the LMC to the staff. The Management encourages the teaching staff in attending, conducting seminar and undertaking research projects. Staff members are also encouraged to avail the facility of UGC such as refresher courses, orientation programmes, M. Phil. and Ph. D. To increase effectiveness and efficiency, staff members are deputed for skill development programmes. College management always supports staff members to participate in various bodies of the SPPU and other Universities, such as Senate, Board of Studies, Academic Council, and Management Council.

- Appreciations are made by giving awards for outstanding performances every year. Best Administrator, Best Teacher, awards are given by the management.
- Outstanding performance of staff members are considered for nominations to be made to University, State and Union Government.
- College forwards the proposals of highly qualified and deserving staff members to UGC for the consideration of award of Emeritus professor.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

The parent body namely Progressive Education Society has its Business Council, which is highest body at the management level. All important decisions such as appointment of staff sanction of budgets, leaves, various permission to the staff, decisions regarding actions to be taken with respect to staff matter, promotions, transfers, salary increments - decisions regarding introduction of new courses, major repairs, maintenance, purchases and constructions etc. are finally taken in Business Council by passing resolutions. The resolutions passed during 2014–15 relating to all the matters mention above are available in a separate registers / files. All the resolution passed during 2014-15 has been implemented by the college and the compliance of the resolutions is reported time to time to parent body.

The recommendations from LMC are forwarded to Business Council (parent body) through BOLM. Proposals are amended by top-level management in their meeting, if necessary. Then final resolutions are made for execution of the proposal. On receiving recommendations from the management, Principal executes the same.

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?

Yes. SPPU makes a provision for according the status of autonomy to the affiliated institutions. In this regard, brainstorming sessions under Staff Academy are organized. In this context the top management team organized one study tour to autonomous University namely Christ University at Bangalore for Life Members and staff members. The interactions are also held between the representatives of our college with the authorities of two autonomous colleges in the city viz. IndSearch, Symbiosis and St. Mira’s college. The top management is keen in collecting feedback from the staff members of the college. Interactions with other autonomous institutes to get necessary information about the functioning of an autonomous college have been in process.

6.2.9 How does the institution ensure that grievances/ complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

College has established Grievances Redressal Cell for staff and students. In addition to above cell, the college has also established Anti-Ragging Cell, Anti-Ragging Squad and Women Grievances Redressal Cell. The grievances are redressed through the representation of the staff of the college on Local Managing Committee. The Chairman of LMC, who is management representative, looks after redressal of the grievances. The major grievances pertain to placement in higher scale, staff recruitment, compensation to the staff etc. These are resolved by the higher authorities of the Government / University Grievance Cell and Tribunals. There are two separate grievance committees for redressal of grievances, one for women staff members and the other for girl students. The grievance redressal committees meet regularly. There are no cases pending before the grievances cell. Minor grievances of students are resolved through class advisors, HODs, Vice-principals and Principal.

The above mechanism helps to promote healthy relationship with the stakeholders of the institution.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

During the last six years, there was no court cases filed by and against the institute.

6.2.11 Does the institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?

Yes. The institution has a mechanism for analyzing student feedback on institutional performance.

The final year students make the assessment of the staff members on various criteria such as punctuality, completion of the syllabi, applied teaching techniques, subject knowledge, etc. Feedback of the students are collected and analyzed. Accordingly, staff members are instructed through respective HODs. In case of poor performance feedback, the management takes action after studying the whole issue.

The Principal holds students council meetings in which the feedback is taken from the students about the various activities, facilities and programmes. After analyzing the feedback, necessary action is taken.

Suggestion boxes are also kept at prominent places in the premises of the college. The students make their suggestions through these boxes. The suggestions so received are studied meticulously and suggestions are implemented wherever necessary.

The students are also appealed to report through official email about the difficulties in respect of administrative matters. The feedback form for students is also available on college website.

6.3 Faculty Empowerment Strategies

Synoptic View:

- The institution takes sustained interest in recruitment and promotion aspects of its employees.
- The institution adheres to GOI/ State Govt. policies on recruitment (access, equity, gender sensitivity and physically disabled).
- The institution has an effective welfare mechanism for teaching and non-teaching staff. The institution ensures transparent use of Performance Appraisal Reports.
- The institution conducts programmes to enhance the competency of its faculty and non-teaching staff.
- Performance budgeting is a core planning activity used by the institution for informed decision-making.
- The institution incorporates gender auditing to enhance inclusiveness.
- Effective welfare mechanisms of the institutions are available to its teaching and non-teaching staff.
- The institution conducts programmes for professional development of its staff.

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

Institution believes in professional development of staff members for Academic Enrichment. Institution invites the renowned entrepreneurs, professionals, educationists to interact with the staff members with a view to enhance their professional skill. Institution takes initiative to depute the staff members for the various training and development programmes, conferences, workshops and seminars. The skills of the staff members are used by intra development activities and joint activities. The staff members who have done innovative tasks are felicitated by giving awards.

The college authority encourages staff members to enhance their research and professional abilities. Institute organizes the study tour of faculties to corporate centres as well as renowned industries for developing their professional approach.

The professional development of non-teaching staff is enhanced by deputing them to several skill development workshops conducted for staff. UGC training programmes, Safety workshops are organized by different departments for handling of new instruments/appliances. Laboratory staff is encouraged for training programs and involvement in disaster management programme. The institution is always keen for overall professional growth of the staff members.

The members of the nonteaching and teaching staff are encouraged to pursue their studies/education. Several members have completed their UG/PG and other professional education during service tenure.

The number of teaching and non-teaching members who have acquired additional qualification while in service:

Teaching: 35

Non-Teaching: 19

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

The management, through the Principal, encourages the staff for the improvement of institutional process. Instructions and suggestions are given by the Chairman of Business Council and Local Managing Committee to the staff. Management encourages the teachers in attending / conducting seminars, conferences, workshops in association with SPPU (QIP, UGC, ICSSR, etc.) and take up research projects. Staff members are also encouraged to avail the facilities of FIP of UGC from time to time.

Staff members are encouraged to participate in Hands on Training – Research activities, soft skill development, leadership and personality development, orientation and refresher courses, short-term faculty improvement courses organized by Academic Staff College of UGC.

Staff members are motivated by providing ICT facilities, laboratory strengthening through procurement of new research instruments. For non-teaching staff members various training programmes are provided relating to laboratory safety, tally package, instrument maintenance training programme.

In view of financial need empowerment, college provides financial support to class III and IV on returnable interest free basis. For major financial support credit, cooperative society helps the staff members by giving long-term loan through easy and speedy procedures. For mental and physical fitness of the staff members, the college provides well-equipped gymnasium. For mental peace, lectures on spirituality are arranged frequently. For academic excellence, well-equipped digital library facilities are provided to staff members. For the excellent performance, the staff members are felicitated by management as well as by the College.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

The college provides self-appraisal method for the faculties. The staff members are required to fill and submit the prescribed form (PBAS and PBI) Performance Based Academic System. Concerned HODs make their observation and forward this form along with remarks to the Principal/Vice-Principal. There is also a provision of assessment of teachers by students. The final year students make the assessment of the teachers through feedback form. Information about students' feedback is compiled and analyzed. The strength and weakness of teachers are discussed individually with each member. Necessary instructions are given to concern staff members to bring about improvement in his / her performance. Suggestions are also invited from the members of the staff to take steps in academic and administrative areas.

Based on self-appraisal, confidential reports of staff members are prepared and forwarded to management. These reports are also sent to CAS authorities and SPPU, which form the basis of placement of teachers in the next higher scale / grade.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

- Appraisal reports are submitted to HOD and then they are forwarded to Vice-Principal / Principal for their remarks and suggestions.
- Finally, reports are submitted to management for final assessment.
- After the assessment by the management, necessary directives and suggestions are communicated to the Principal for further needful action.
- Principal takes relevant action and communicates it to stakeholder through letters and meetings.

6.3.5 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

Following are the welfare schemes that provide to the staff, which improves well being

- **Financial assistance:** The college management takes adequate steps for the welfare of teaching and non-teaching staff of the college. Various measures are taken for the welfare of the college staff they are as follows :
- **Credit Co-operative Society:** The credit Co-operative society provides financial assistance to all the members of the staff. The loans are provided for purchase or repairs of house, marriage, medical reasons, education purpose and other at a very reasonable rate of interest.
- **Staff Welfare Fund:** The Staff Welfare Fund is constituted to provide for urgent financial help to the members of the staff. This fund enables the members to get immediate financial help in case of emergency without requiring completion of much formality.
- Management Policy is to offer 25% concession in tuition fees for the wards of the staff members admitted in any institute under Progressive Education Society.
- College encourages teaching and nonteaching staff to improve their educational qualification. If required their regular timetable is rescheduled within the department.
- Psychological counseling is made available to teaching as well as nonteaching staff members.
- Organically grown vegetables and fruits are made available for purchase, once in a week, on the College campus, for the benefit of staff members and students.
- Recreational programmes are organized for teaching and nonteaching staff by Staff academy, College Management and the Management of Progressive Education Society.
- Group Insurance Scheme – Insurance cover is available to all the members under this scheme.
- Interest free advances are given against the salary in deserving cases.

- Emergency medical aid is provided.
- Health awareness camps are held for the benefit of the staff. Department of Physical Education has required equipment for the health check-ups.
- Stress management camp, Yoga, Spirituality workshops are organized with the help of expert agencies. Meditation room is made available for staff members.
- Canteen facility, Gymnasium, sports facilities are available in the campus for staff and students.
- Inter institutional sports activities for staff members are organized every year.
- The college management organizes academic visits and study tours for the benefit of the staff.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Recruitment of teaching staff and other staff is governed by rules and regulations of SPPU and Government of Maharashtra. The college adopts certain strategies and implements the plan to ensure that the staff of desired quality and qualification is selected.

- The management has maintained the reputation that best of the teaching talent is selected.
- Advertisement for recruitment is given in local newspapers as well as national newspapers.
- The selection is made strictly on merit basis as per UGC regulations.
- The adequate welfare facilities are provided to the staff members.
- Encouragement is provided to give scope for skills abilities, and talent of staff members.
- Staff members are encouraged to undertake research and other relevant activities, which help them to build their successful career.
- Staff members are encouraged to write textbooks as well as reference books.
- Suitable policies are adopted to provide opportunities for professional self-development and computer skills and to provide incentives to the staff.
- Necessary budgetary provisions are made and particular attention is also paid to enable the teachers and other staff to participate in various training programmes, seminars, workshops and conferences.
- Staff development training programme like hands on training programme, workshops for benefit of staff members at various levels of management are arranged, e.g. seminar on library management, training programme for accounts staff and library staff.
- College Conducts training programme for newly recruited teachers.
- College has made efforts to provide Safe Work Environment in all the laboratories. Fire extinguishers, safety goggles, gloves, exhaust fans, eyewash, safety shower, fume-hoods, first aid boxes etc.

- Frequent meetings of laboratory assistants with Vice-Principals and Principal are arranged and necessary instructions about laboratory safety are given.
- Care is taken to ensure that congenial and cordial atmosphere is maintained in the college. Staff academy is established to promote academic and research atmosphere in the college. Grievance Cell is constituted to redress the grievances of the staff. The LMC, which consist of representation of teaching and non-teaching staff, play an important role in safeguarding and promoting the interest of the members of the staff.
- Appreciations are made by giving awards for outstanding performances every year. Best Administrator, Best Teacher, awards are given by the management.
- Outstanding performance of staff members are considered for nominations to be made to University, State and Central Government.
- College forwards the proposals of highly qualified and deserving staff members to UGC for the consideration of award of Emeritus Professor.
- The college makes arrangement for deputation of deserving staff members for research at doctorate as well as Post doctorate scheme of UGC.
- The college provides encouragement for research work, academic growth and professional growth. Lien facilities are provided to the deserving candidates. College has successfully obtained financial assistance through UGC-BSR, DST-FIST, DBT-Star College, UGC-CPE, ICSSR, ISRO, BCUD-SPPU, etc. This has helped to improve the infrastructure, academic ambience and research culture of the institution.
- The college also encourages senior teachers, particularly the retiring teachers by forwarding their extension proposals to the concerned authorities.

6.4 Financial Management and Resource Mobilization

Synoptic View:

- The institution has adequate budgetary provisions for academic and administrative activities.
- Optimal utilization of budget is strictly adhered to by the institution.
- Monitoring financial management practices through internal audit is evidenced in the institution's financial health.
- The institution maintains a Reserve and Corpus fund.
- The institution has conducted internal and external audits are regularly conducted.
- The institution and leadership takes initiatives for mobilization of resources.

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

Budgets are sanctioned in LMC – BOLM – BC. Then the funds are made available for further actions to the purchase committee.

Budgets are prepared on the basis of requirements of various departments for the next financial year. All these requirements are considered by Finance Committee and then provisions are made in the budget.

For efficient use of available financial resources, following is the system of control.

- Budgetary Control, e.g., funds are utilized as per budget allocation.
- Finance Committee: Financial transactions are subject to supervision and control of finance committee.
- Internal Check: All financial transactions are subject to internal check/control i.e. all transactions are passed through Registrar → Vice-Principal → Principal. All purchases are routed through Purchase Committee → Principal → Chairman LMC. Pre sanction of Building Maintenance Committee (at P.E. Society) is taken before issuing work order and payments are made after scrutiny of measurements by said committee.
- Internal Audit: Periodic internal audit of all transactions is conducted by outside firm of Chartered Accountants. Their observations and comments are put before Finance Committee and compliances are made.
- Statutory Audit: At the end of the year, Statutory Audit is conducted by the auditor and the reports thereof are directly submitted to Business Council.
- The provisions for salary of the non-grant staff is made out of the funds separately earmarked every year. A unique salary payment scheme is devised by the parent body to ensure the regular monthly payment of the staff.
- The provision of insurance of the cash/ funds, buildings and other assets is also made.
- Separate accounts and cash section looks after the financial transactions. The operations of the sections are fully computerized and the advanced software is used for the accuracy, safety and efficiency of transactions.
- Expert guidance is also sought whenever required.

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

Accounts of the college are subject to internal audit. Internal auditor is appointed by the Business Council. Internal auditor is independent outside entity. Statutory auditors are appointed at the society level. Statutory auditors consider the report of internal auditors. The reports of internal auditors are put before the Finance Committee of the college and compliances are made by the college. Statutory audit report along with compliance report is forwarded to BOLM for consideration. Statutory reports are directly addressed to Chairman, Business Council. There are no major objections in the audit report, however, some of the observations are relating to payment of advances given to the staff for meeting expenses of college functions, signatures of the staff members on the pay sheet minimum cash transactions.

The internal audit for financial year 2013–14 has been completed by May 2013 and Statutory audit for the same period has been completed by July 2014.

The parent body organizes the expert guidance meetings of the auditors for the institutional heads. In this meeting the various issues relating to the audit, taxation and financial matters are discussed and resolved. Based on the discussions and expert guidance, the guidelines are laid down with respect to financial matters for the benefit of heads of the departments.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

- Major sources of receipts/funding are as under:
 - Salary grant from government for grant- in-aid section
 - Non salary grant
 - Tuition and other fees from students
 - Reimbursement of fees for category students from state government
 - Earmarked grants from UGC, DBT, DST, SPPU, ICSSR, ISRO and others
 - Specific grants under CPE, BSR, Star College, FIST
- Deficit (if any) is made good by the parent body (Progressive Education Society) by providing additional funds. The parent body also suggests the curtailment and postponement of certain expenses if thought necessary.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The institution makes the efforts to tap various funding agencies for securing additional funds under various schemes announced by central Government departments and institutions.

Efforts are also made to generate funds from BCUD-SPPU, Pune under QIP programme, Boards of Students Welfare, SPPU, Pune, various research schemes, NGO's and Alumni.

Table 6.2 Funds received from various funding agencies

Year	Amount Received in Rs.	Amount Utilized in Rs.	Funding Agency	Type
2010-11	1,25,000/-	1,21,563/-	UGC	MRP
	1,74,080/-	1,74,080/-	DST	Major Project
	10,00,000/-	10,00,048/-	UGC	One time Grant- NAAC
	18,76,714/-	13,63,456/-	UGC	XI Plan
	3,50,000/-	3,05,964/-	DST	Women Scientist
	1,50,000/-	1,50,000/-	BCUD	Virtual Classroom
	16,500/-	2,09,048/-	IIRS	Others
2011-12	2,10,853/-	2,62,374/-	UGC	MRP
	4,94,928/-	3,72,990/-	UGC	XI Plan
	3,01,231/-	1,10,349/-	BCUD	MRP

Year	Amount Received in Rs.	Amount Utilized in Rs.	Funding Agency	Type
	4,00,000/-	2,34,522/-	DST	Women Scientist
	45,00,000/-	-	UGC	BSR
	50,00,000/-	50,45,745/-	UGC	CPE
	36,00,000/-	35,08,783/-	DST	FIST
	1,54,800/-	5,000/-	IIRS	Others
2012-13	5,04,000/-	5,27,805/-	UGC	MRP
	8,61,800/-	-	UGC	Major Project
	-	3,56,280/-	UGC	XI Plan
	20,00,000/-	16,60,473/-	UGC	Additional Asst-XI Plan
	4,50,000/-	-	UGC	XII Plan
	-	47,90,396/-	UGC	BSR
	20,00,000/-	-	DBT	Star College Scheme
	1,29,848/-	3,27,303/-	BCUD	MRP
	-	1,39,514/-	DST	Women Scientist
	2,80,905/-	1,42,714/-	IIRS	Others
	1,28,800/-	3,12,878/-	UGC	MRP
2013-14	6,29,750/-	9,23,428/-	UGC	Major Project
	-	1,53,640/-	UGC	Additional Asst-XI Plan
	3,00,000/-	4,33,289/-	UGC	XII Plan
	40,00,000/-	37,65,728/-	UGC	CPE
	2,19,803/-	2,67,794/-	BCUD	MRP
	9,00,000/-	20,65,932/-	DBT	Star College Scheme
	10,000/-	93,441/-	DST	Women Scientist
	19,51,040/-	7,62,069/-	CSIR/ISRO /IIRS	Others
	1,98,700/-	1,20,667/-	UGC	MRP
2014-15	-	5,87,857/-	UGC	Major Projects
	-	2,54,750/-	UGC	XI Plan
	-	1,85,850/-	UGC	Additional Asst-XI Plan
	7,76,000/-	8,89,525/-	UGC	XII Plan
	1,52,346/-	30,789/-	BCUD	MRP
	99,793/-	2,32,774/-	UGC	CPE
	-	6,97,730/-	DBT	Star College Scheme
	11,04,436/-	1,98,232/-	CSIR/ISRO /ICSCR	Others
2015-16	1174500/-	9,89,170/-	BCUD	MRP
	-	21,977/-	UGC	CPE
	2117447/-	20,07,569/-	CSIR/ISRO /ICSCR/ ICSSR	Others
	-	29,790/-	UGC	Major Projects
	-	1,71,766/-	UGC	MRP
	-	7,500/-	UGC	XII Plan
	-	9,47,003/-	UGC	XI Plan

Salary Grants received from Government of Maharashtra are:

Table 6.3 Grants received from Government of Maharashtra

Year	Amount Received in Rs.	Amount Utilized in Rs.
2010-11	8,35,93,066/-	7,99,62,047/-
2011-12	8,60,82,408/-	8,30,33,246.50
2012-13	9,46,94,886/-	9,13,33,975/-
2013-14	9,94,21,390/-	9,46,22,115/-
2014-15	11,05,36,755/-	11,04,92,951/-
2015-16	11,58,60,463/-	11,57,69,533/-

6.5 Internal Quality Assurance System (IQAS)

Synoptic View:

- Academic audit of departments and its impact is an important quality initiative of the institution.
- The institution has an effective quality management and enhancement systems.
- The institution reviews its teaching learning process, structure, methodologies of operations and learning outcomes at periodic intervals.
- Internal Quality Assurance Cell (IQAC) has contributed significantly to institutionalizing quality assurance strategies and processes.
- External members contribute significantly in the functioning of the IQAC.
- Autonomy to academic departments is encouraged.

6.5.1 Internal Quality Assurance Cell (IQAC)

- Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?
- How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?
- Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.
- How do students and alumni contribute to the effective functioning of the IQAC?
- How does the IQAC communicate and engage staff from different constituents of the institution?
- Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes. The institution has established the Internal Quality Assurance Cell. IQAC is set up at Departmental and College level. The organization at Departmental level is as follows: HOD, senior most teacher and junior most teacher. IQAC at college level is as follows: Principal, Vice-Principals, IQAC Coordinator, Librarian, Physical Director, Students

Representative, Student Welfare Officer and stakeholders, two industrial persons. Ensuring best performance in all academic and administrative activities with continuous improvement and monitoring system – encouraging teachers, students and administrative staff to achieve higher and greater targets every year has been the policy of the institution. IQAC policy is applicable to all sections and departments of the college.

IQAC mainly takes care of teaching learning processes, Research and Development, Industry interaction, sports, examinations reforms, evaluation system and updated admission system. The digital record system and Digital Library system recently introduced by the college further facilitates maintenance and sustenance of administrative quality. The college has received grant for establishment of IQAC and the grant is being utilized.

The benchmarks for major areas of college academic and administrative activities have been decided and the steps are being taken to achieve them.

- **How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?**

The majority decisions of IQAC have been approved by the management for implementation. Almost all the decisions of IQAC are executed. Details are as follows:

Table 6.4 Grants received from Government of Maharashtra

Sr. No.	Details	Sr. No.	Details
1	Examination section	12	Sports scholarship
2	Additional auditors	13	Organizing Seminars, conferences
3	Installation of solar panel	14	Additional FIP
4	Additional Water filters	15	Financial assistance proposals
5	GCI and ED Cell	16	Website updation
6	Improvement in ICT	17	Campus maintenance , Cleanliness and safety
7	Additional infrastructure and laboratories up gradation	18	HR training
8	Classroom ambiance	19	Industry academia collaboration
9	Student research scheme	20	Additional Skill development
10	ISO certification	21	Starting new courses
11	Online admission	22	Teachers diary

- **Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes. Dr. S. S. Kharat, Principal, and Dr. P. D. Chaudhari, Dean of faculty of Pharmacy, SPPU have been co-opted as resource persons on the committee. They have made active contribution towards curricula designing and implementation and industry academia interface. Smt. Kundatai Apte, well-known social worker and Mr. Sanjay Katkar, Founder Director, Quick Heal, have been associated as members of IQAC from October 2013.

The external experts help the college IQAC to understand the role of

IQAC in college administration, changes to be made in the administrative structure to align system and process.

- **How do students and alumni contribute to the effective functioning of the IQAC?**

Students and alumni contribute to the effective functioning of the IQAC by giving feedback and suggestions:

- **Students** : Representation to the students is given on various committees to convey their views through (1) Students Council (2) Gymkhana Committee (3) Annual Social Gathering Committee (4) Library Committee (8) Participation in Earn and Learn Scheme
- **Alumni**: The College promotes the interaction of alumni with the present students to share their practical views and experience. Computer department conducts programming contest for undergraduate and postgraduate students in collaboration with alumni. It also invites the alumni for weekly interaction of present students. Alumni of the department offer different scholarships and prizes for the participating students. Alumni of Department of physics conduct counseling sessions especially on the topic of career in 'defense opportunities and experience while serving for the nation'. Commerce Department and Other departments conduct alumni meet frequently and exchange views and ideas. Department of Electronic Science conducts innovative project competition 'Imagine' every year with help of Alumni.

- **How does the IQAC communicate and engage staff from different constituents of the institution?**

The IQAC cell gives representations to the different sections and constituent parts of the college. The IQAC members also work on the various committees, which are engaged in the various activities of the constituent part of the college for example following committees function through IQAC

○ Academic planning committee	○ Timetable Committee
○ Examination Committee (COE)	○ Students Welfare committee
○ Academic Research Coordination (ARC)	○ Past Students Committee (Alumni)
○ Research Monitoring Committee	

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalization.

Yes. The institution has the integrated framework for quality assurance of the academic and administrative activities. This is done by constituting committees such as:

- Academic Committees: Academic Planning, Staff Academy, Science

Association, Commerce Association, Research Monitoring Committee, Planning Forum, Examination Committee

- Administrative Committees: UGC Coordination Committee, IQAC Committee, NAAC SSR Preparation Committee, Attendance Committee, Purchase Committee. General Discipline Committee Student Placement Committee, Health Scheme and Medical Check-up Committee, Admission Committee, Function and Festival Celebration Committee, Student and Staff Welfare Committee.

Above committees consists of the academic and administrative representatives from various departments students and management representatives. The above committees continuously work within their capacities and function properly. The records of the above committees are maintained by respective Chairpersons.

The respective committee conducts frequent meetings of the members of committee. The minutes and data are finalized and furnished with suggestion to the Principal for framing policies and plans on receipts of approval from Principal. The committee executes the work. The Principal takes periodic review of performance of all integrated committees.

The college LMC guides in planning, monitoring and evaluation mechanisms regarding academic and administrative processes as per the Maharashtra Universities act 1994.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes. The institute provides training to its staff for effective implementation of the quality assurance procedures. Collaborative activities have been undertaken by the departments with the renowned institutes like IIT Mumbai and Electronic Science department. It has resulted in establishment of virtual laboratory.

The visits of senior faculty members were arranged to Christ University, Bangalore to study the examination reforms in higher education and the issues in the autonomy to the colleges. The visits were fruitful particularly to bring about relevant reforms in examination activities in the college.

The institute encourages the staff members to participate in international, national and state level conferences, by reimbursing actual expenditure incurred and sanctioning duty leave.

The staff members are also motivated to apply to different funding agencies such as UGC, DBT, DST, ICSSR, and BCUD-SPPU for carrying out research projects. Every year the institute organizes one international, one national and two state level conferences in collaboration with SPPU. The staff members of the institute play a leading role in organizing the conferences and presenting research papers on various subjects. Workshops for non-teaching staff of colleges run under Progressive

Education Society were organized. Workshop for library staff is also organized for libraries of all colleges under Progressive Education Society. The College deputed faculty members for doctoral research work for the period of two years to complete the research work.

The college has also organized following activities:

- *Modi* script workshop for office
- Introduction to Google apps activity training for staff
- Faculty orientation for staff
- Training for office staff and library staff
- Lecture on Yoga by Prof. M. D. Shinde
- Health related lecture by Dr. Jagadish Hiremath
- Lab safety training for lab attendants and lab assistants
- Faculty orientation for newly recruited teachers
- API workshop and refresher course for C.A.S. beneficiaries.

All above steps taken by the college have found useful to the teachers to march towards excellence in education, enhancing the academic growth.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Yes. The institute conducts academic audit through various measures. The institute studies the strengths, weaknesses as well as performances through academic audit of the students. For staff members the feedback from the student, self-appraisal report, confidential reports are collected on yearly basis. The diaries are maintained by the staff members for recording academic, curricular, co-curricular activities. All such records are available to HODs, Vice-Principals and Principal. The credit system at PG level and Ph.D. level is constantly reviewed.

IQAC of the institute reviews the quality of research as well as student teaching learning process. Academic audit is also done at departmental level. The result analysis is prepared by each department and reviewed and suggestions are given for further improvement.

Due to IQAC practices, there is overall enhancement in the skills of the students as well as staff. Following can be quoted as an outcome of our efforts on quality. Recently our institution is recipient of Best Principal Award 2014. Similarly, the Best Programme Officer of NSS and Best NSS College award by SPPU.

Lecture plans, feedback, confidential reports, self-assessment reports, reports of HODs and Vice-principals are prepared in academic audit.

The institution has received several honors and awards such as CPE of UGC and Star College of DBT in the year 2012 and 2013 respectively along with of grant of Rs.1.5 crores. College has also received the fund under the BSR scheme of UGC and FIST of DST to the tune of Rs. 90 lakhs. Due to IQAC practices in sports, our students have improved their performance at

state and national level competitions. Few of them are recipient of prestigious Shiv Chatrapati award.

The college has acquired ISO 9001:2008 certification by BSI.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

- The College has undergone the process for ISO 9001:2008 Certification and the training for the staff members has been completed in February 2015. The HR training for newly recruited academic and administrative staff was also undertaken in December 2014 and November 2014.
- The academic and administrative audit is regularly conducted by the parent body.
- The accounts audit is conducted by the external auditor.

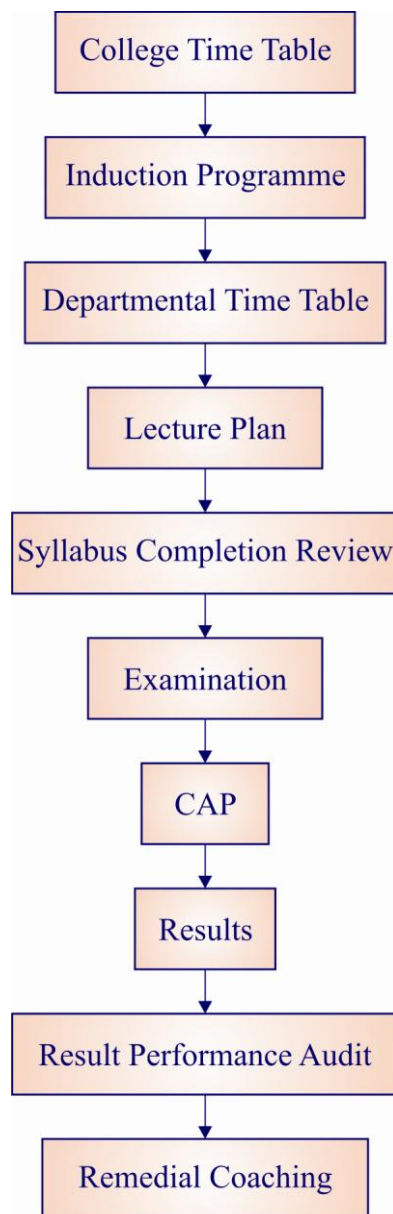
6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure methodologies of operations and outcome?

The institution plans and organizes the teaching learning process by (1) Preparing lecture plan (2) For smooth conduct of examination constitutes examination committee. (3) Syllabus completion review is taken after the end of every term. (4) Staff members are participated in university level as well as college level central assessment programme. (5) The result of the examination are displayed. (6) The performance of the students is analyzed. (7) The students of poor academic performance are identified and remedial teaching is provided to them to improve their performance.

Flow Chart:

The flow chart given below shows how the review of teaching learning process is taken and what are the details of structure, methodologies of operation.

Every year, the institutional academic calendar is prepared. The activity calendar is also prepared by the college.

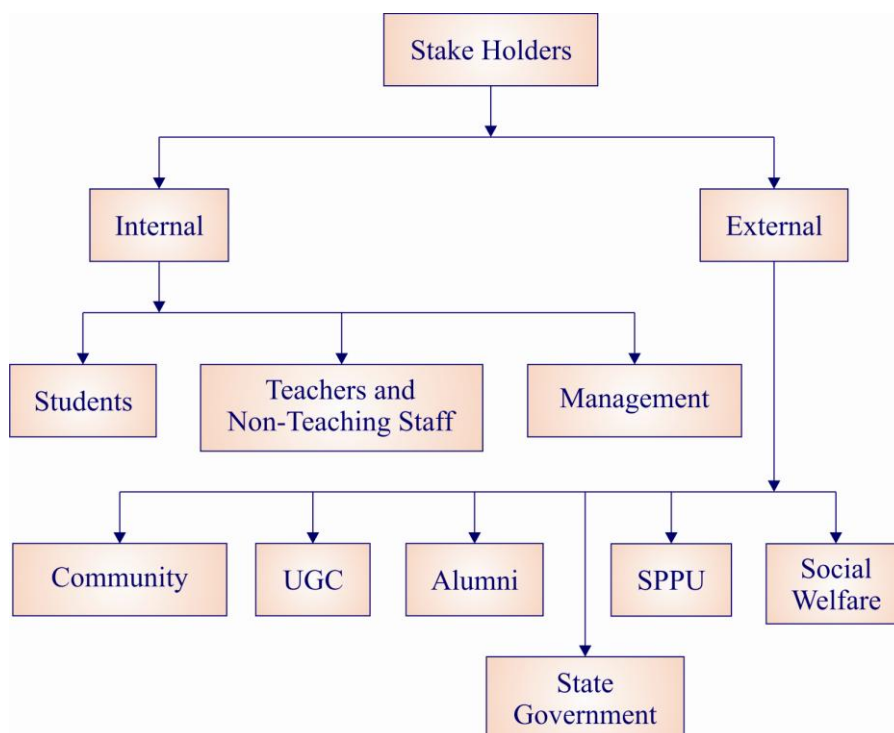


6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The institute communicates its quality assurance policy mechanism and its outcome to various internal and external stakeholders by adopting following procedure. College IQAC has institutionalized the students' feedback, suggestion box, anti-ragging cell, grievance redressal cell, hostel feedback, stakeholders' interaction and academic audit process. The departmental academic calendar, course plan, remedial classes, induction and orientation activities, mentoring process, academic audit and career counseling activities all these facilitate communication of institutional quality assurance strategies

and processes.

Institute communicate its quality assurance policies mechanism by arranging various programme such as alumni meet, extension programme with community, viz. traffic awareness programme, tree plantation programme, rice plantation, voting awareness programme, HIV awareness programme, river cleaning programme, garbage disposal movement, empowerment of women by motivating self-protection camp, the felicitation of the teacher and staff at the various functions, recognition of the excellent performance by the top management etc. To communicate the progress report and to develop rapport parents meet are held. The top-level management participate in all types of workshops, meeting, Informative lectures organized by Joint Director of Education. Institution strictly follows the circulars and make compliance within the stipulated time. The officials of the Institute attend the interface meeting for availing the financial grant with UGC officials. The progress of the institute is communicated to stakeholders through Annual General Meeting (AGM) and Progressive Education Society's annual report. The institute has special computer section in its office for record keeping. The digital record room facilities and virtual classroom facilities are available. For blind students, brail script software is available. For economically backward students "Earn while Learn Scheme" is available. The college has constituted committees with reference to sexual harassment, Right to Information Act, NET/SET coaching, coaching at entry level examination, counseling centre, as well equal opportunity cell, foreign language coaching, remedial classes etc. Counseling sessions are also arranged for international students are facilitated by the institution.



The college has a dynamic website through which the information, events are communicated to the stakeholders. The College Library also has a separate website, which can also be accessed through college website.

General staff meetings are organized twice a year where in the staff members are felicitated for their special achievements. Special meetings of Heads of the Departments are conducted regularly through which the management decisions are communicated to the staff members.

The college has rolling display at the porch through which the continuous display of important events is made.

Through the bulk SMS system the staff members and students are kept well informed along with the traditional notices and circulars.

□□□

Criterion VII: Innovations and Best Practices

Synoptic View:

- Green audit. • Promotion of eco-friendly campus. • e-waste management

7.1 Environmental Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes. The institute has conducted Green Audit of its campus and facilities. The copies of Green Audit report are provided to all Heads of the Departments. They are advised to communicate the observations in Green Audit report to the stakeholders of their department. IQAC of Modern College has resolved in its annual meeting to focus on the issues of environment and its conservation.

In addition to Green Audit, college has also conducted Energy Audit, Fire Audit, Safety Audit and Biodiversity Audit of its campus.

7.1.2. What are the initiatives taken by the college to make the campus eco-friendly?

- Energy conservation • Use of renewable energy • Water harvesting • Check dam construction • Efforts for Carbon neutrality • Plantation • Hazardous waste management • e-waste management

The college has constituted Green Campus Initiative (GCI) committee, which has taken following initiatives to make the campus eco-friendly: (i) Organizing workshops, seminars, conferences on environment related issues. (ii) Awareness rallies on environmental pollution. (iii) Conducting poster competitions, scientific model competitions, Essay competitions, Street plays, etc. (iv) Promoting use of Green Energy / non-conventional energy. (v) Recycling of water. (vi) Promoting water conservation measures like rainwater harvesting. (vii) Conducting add-on courses on waste management viz. Vermitechnology.

Some of the major initiatives undertaken by the college are as follows:

- **Energy Conservation**
The college has done its energy audit. Use of LED and CFL lamps is promoted to save electricity. Members of the staff and students are encouraged for saving the energy by making use of energy saver star rating electric appliances. All the departments are advised to follow the practice of regular maintenance of electrical appliances and instruments. Teachers, students and support staff are encouraged to participate in No-vehicle day (Bus-day) campaign.
- **Use of renewable Energy:** We do use renewable energy. The college has installed three solar power plants.

- **Solar Power Plant :**
Installed in East Wing
Capacity – 1 KW
Solar Panel – 12 V 1000 Watt
- **Solar Distilled Water Plant :**
Installed in the Department of Botany
Capacity 25 Litre / day
- **Solar power inverter:**
Installed for Principal's Office and nearby area.
- **Water Harvesting :** Roof top rain water harvesting system is installed.
The details are as follows:
 - Name of Building: Modern College, Pune-5.
 - Type of roof: Inclined Asbestos shed
 - Approx. Roof Top area considered for harvesting: Shed- 3800 sq. feet
 - Approx. Seasonal rainfall in Pune (Avg.) : 700 mm
 - Approx. Rainfall in one rainy day (Avg.) : 10 mm

	In one season	On one rainy day
Shed	2,22,390 litres	3,177 litres
Total	2,22,390 litres	3,177 litres
- **Check Dam Construction:** NSS students of Modern College, Pune-5 have constructed two Check Dams in Ghotawade and Kule-Dakhane village.
 - The first Check Dam was constructed in December 2010, by NSS students of Modern College, Pune -5 at Ghotawade, Paud.
 - The other Check Dam was constructed in December 2012, by NSS students of Modern College, Pune -5 at Kule-Dakhane, Paud.
- **Plantation:** The college has substantially contributed to the plantation activity. Plantation by NSS, NCC volunteers and faculty members :
 - Plantation of about 75 different tree plants including medicinal plants at Paud.
 - Construction of 200 feet of running CCT at Baner tekdi.
 - Paddy Plantation Programme at Vinzar and Velhe: 500 students actively participated in the rice fields of farmers.
 - Tree Plantation of 125 tree plants followed by discussion on importance of plantation.
 - Plantation of trees in sister institutions such as PES Girls High School, Paud and NCL School, Pashan.
 - Department of Botany has prepared a digital herbarium.
- **Hazardous Waste Management:** College has established the system of biomedical-waste disposal system in collaboration with organization viz. Passco Environmental Solutions Pvt. Ltd. The MoU has been executed with Passco Environmental Solutions Pvt. Ltd. An International Conference on “Environmental Conservation by Adopting new Technologies” was organized on 28th - 29th January 2014.

- **e-Waste Management:** The national conference on ‘Hazardous e-waste management’ was organized on 23rd - 24th December 2013, to create the awareness in society about the e-waste and its adverse effects on living beings. The message conveyed was that the e-waste could be recycled and reused by different methods.
 - Survey on e-waste management in adopted village Phulgaon, District Pune.
 - Organized lectures of experts on e-waste management.
 - Prepared and displayed posters / banners on e-waste management at Phulgaon.
 - Started e-collection centre at Department of Electronic Science.
- **Other Measures**
 - Admission process for various classes is online. It is useful for the conservation of natural vegetation.
 - Instead of plant collection, digital herbarium is used in the Department of Botany which is useful in conservation of natural vegetation.
 - Department of Zoology runs Vermiculture project.
 - Dust free chalks are used to save environment.
 - Plastic free and tobacco free campus to save environment.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years and created positive impact on the functioning of the college.

Various innovations introduced during the past years are as follows

- **Administration:**
 - **Use of e-governance:** Computerization of the Institute’s activities, covering Academics, Library, Examination and Administration e.g.
 - Online Admission Process.
 - Use of *Vridhhi* Software for office automation.
 - Use of intranet facility in office.
 - Online process of filling up examination forms of SPPU.
 - Bulk SMS facility for students and staff members
 - Biometric attendance for teaching and non-teaching staff.
 - Internet facility improved from 2 mbps to 10 mbps Leased line.
 - **Digital Record Room :** Digital Record Room is used for preserving the data in paperless format. This helps in ways more than one e.g. minimum space requirement, minimum human resource utilization, saving of man hours and energy, multiprocessing and multiuser data accessing at any given time. The data in the form of research papers, conference proceedings, college magazines, theses, etc. is easily stored and helps in significantly reducing the physical volume of storage.
 - **Digital Library :** For an academic institution like college, library is an invaluable source of knowledge.

- Digitization improves the functioning of the library in ways more than one. With the use of advanced scanners, the stock verification of library becomes more efficient and less time consuming. Digitization of college annual magazines of last 40 years and scanning of various rare and old books, various question papers and project report is in process. Furthermore, following facilities are also introduced in our library:
 - Subscription of e-resources like N-list, British library etc.
 - Use of OPAC to locate the required book with minimum manual help.
- **Academics:**
 - **Use of ICT:** The college uses ICT facility in following ways:
 - **Virtual Classroom:** In Virtual Classroom, the students can get an opportunity to listen to live or recorded sessions of eminent personalities across the globe. The sessions can be interactive for live sessions.
 - **Virtual Laboratory:** In Virtual Laboratory, the students can use the equipment, laboratory set-up at remote laboratories live. This saves the cost of highly expensive laboratory set-up, costly equipment like robotics.
 - **Digital Classrooms:** In Digital Classroom, faculties can deliver lectures, elaborate topic, make the teaching interactive, conduct group assignments etc. It comprises of Synchronous Learning, Live Technological support, Multilevel Feedback, use of White Board, Sharing Screen with Students, Session Recording, and Live Audio-Visual Support.
 - **Digital Library:** Digitization improves the functioning of the library in ways more than one. With the use of advanced scanners, the stock verification of library becomes more efficient and less time consuming. Digitization of college annual magazines of last 40 years and scanning of various rare and old books, various question papers and project report is in process. Furthermore following facilities are also introduced in our library:

Subscription of e-resources like N-list, British library etc. Use of OPAC to locate the required book with minimum manual help.
 - **Use of ICT in the Classrooms and Laboratories :** The use of ICT in the form of LCD projectors, CD Players, DVD Players, etc. help the teachers and students for effective Teaching-Learning Process and creates an effective visual/audio-visual impact.
 - **Digital Language Laboratory:** For the teaching of foreign language like German use of ICT is a regular practice.
 - **Use of Digital Herbarium :**

The department now has adopted a digital way to overcome the limitations of traditional methods of making herbarium and storing the collection of specimen. The students now visit various localities

and take high quality digital images of plant and plant organs. These plants are correctly identified with the help of experts in the field of Angiosperm taxonomy. These images are then arranged suitably in the form of a searchable database, thus contributing to the development of the digital herbarium.

- **Use of Digital Animal Dissection:** Animal dissection is not an efficient method as it is harmful to animals. Department of Zoology has created a video film of animal dissection, which is demonstrated to students at the time of practical. This has helped in saving the animal life.
- **Yuva Sanshodhak:** The college has launched the research funding scheme especially for students through which students get monetary help for their research.

- **Innovation**

- **Art circle**

- Special workshop and training programs for students in Performing Arts such as Dance, Drama and Music.
 - Special guidance by eminent personalities and experts
 - Organization of cultural events viz. Spic-macay, cultural festival by North-East students.
 - *Dhol-Tasha Pathak* for girls
 - College music band

- **NCC:** Self Defense training for girls

- **NSS:** Involvement of students in rice plantation.

- **Gymkhana:**

- Sports scholarship for sports persons who represent the college at International, National, State and All India Inter University levels.
 - Special coaching and training programs for our college teams.
 - Aerobics for students, Core muscle training

- **Yoga and meditation:** Celebration on June 21st 2015 of International Yoga Day, as declared by the United Nations General Assembly (UNGA)

- **For staff:**

- Body Fat assessment program
 - Movement mechanism and Yoga

7.3 Best Practices

7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

BEST PRACTICE 1

a. Title of the activity

Use of Advance Technology in academics and administration

b. Goal(s)

- To develop / enhance competencies in Teaching, Learning, Evaluation and Research.
- Use of web based infrastructure such as Google Apps for Education and Research.
- Use of effective communication techniques for increasing the efficiency of teacher-student team work, resulting the teaching learning experience more effective, interactive and further interesting.

The Information and communication technology provides a basic infrastructure for teaching and learning. One of the main objectives of use of ICT to teachers and students is to effectively create, store, retrieve, analyze and present information related to teaching, learning as well as research in their respective fields. The ICT facility enables improvement in competencies in advanced teaching and research work.

c. The context

Students come from various socio-economic backgrounds with little or no access to ICT for learning. The use of ICT by the college has positive impact on learning experience. The importance of ICT results in the betterment of teaching-learning experience. It also helps to develop relatively more analytical and practical aptitude and to decide future career goals as well.

d. The practice

- Every department of the college has received laptops and LCD projector for conducting lectures, practicals and seminars.
- Internet facility of 10 mbps leased line is provided to all departments.
- College website is developed for presenting college activities related to academics, administration, research and student support services.
- Use of Google Apps for Education and research.
- Online examination software ‘Quiz Faber’ is used by Department of Electronic Science to conduct internal examination.
- Library makes use of advance technologies to access online reference databases. Teachers and students have direct access to INFLIBNET facility of UGC. Web OPAC is also made available for remote access.
- The college has digital library.
- **Digital record room:** The college has set up Digital Record Room where in the documents are digitized and advanced search options are provided through it.

- **Virtual classroom:** Virtual classroom facility is made available with online audio-video recording system. The interactive sessions with eminent professors, scientists are conducted for postgraduate students.
 - Webinar is organized in psychology department.
 - **Digital classrooms:** The college has developed five digital classrooms in which 'Mi board' is installed, enabling to teach interactive sessions including audio-video, drawing objects and recording lectures.
 - Wi-Fi connectivity is being made available on college campus.
 - Mobile jammer in Library Reading hall.
 - **ICT in Sports:** Live matches are recorded and those are replayed in Gymkhana Department for the players to learn the tactics, to understand and avoid the mistakes during play and to improve their performance.
 - **ICT in Languages:** Up to academic year, 2010 language laboratory was situated away from language departments. For effective and efficient use, now the language laboratory has been created in the department of English. The computers and related equipment are shifted to the new location. Presently necessary software and the equipment viz. computers, earphones speakers, etc are available in the Language Laboratory.
 - **ICT in Social Sciences:** Collection of educational videos made available for students.
 - **ICT in Geography :** GIS mapping
 - **ICT in Commerce:** Use of latest versions of accounting software viz., SPSS and Tally.
 - **ICT in Sciences :**
 - Most of the advanced instruments in laboratories are aided with Computer and internet facility
 - Dedicated Bioinformatics laboratory for bioinformatics study
 - Mathematics and Statistics laboratories are equipped with advanced software such as Metlab, 'R' Software, Algorithm software, Problem solving software, Modeling and Simulation software.
 - Animation laboratories have software such as Maya, Flash, Adobe Acrobat, Photoshop.
- e. Evidence of success / Improvement in students**
- Because of ICT facilities, lecture notes, references, information can be easily exchanged between teachers and students.
 - The ICT facility is used for demonstration of practical sessions and their standardization. This has resulted into better understanding of the subject and clarity of the concept.
 - Google Apps for Education and research
 - The students and teachers use official email IDs to exchange the information.
 - The online software helps to organize various tasks in teaching and learning.

- **ICT in Sports:** Increase in medals and championship in Gymkhana Department. This resulted in achieving General Championship of the year 2015-16 awarded by SPPU.
- **ICT in languages:**
 - Significant increase in the interest of the students in learning foreign languages is observed because of the specialization implemented in the subject.
 - The quality of home assignment and projects has increased because of access to digital library and electronic resources.
 - The employability of the students has increased.
- The students of Computer Science, Electronic Science and Physics design, program and evaluate elementary tasks in regular lectures, practicals and projects using computers.
- The number of publications in national and international journals, poster presentations in State, National / International conferences has increased because of ICT facility.
- The students access various educational websites and online examinations for preparation of various competitive examinations

f. Problems encountered and resources required

- Technical Problems related to presentation
 - Antivirus upgradation,
 - High-speed internet.
- Computers to Students ratio: The college has 574 desktops. The computer-student ratio is 1:11.
- Orientation of staff and students for using advanced technology is necessary.
- Encouragement for more applications of ICT
- The number of virtual classroom should be increased.
- Advanced software and hardware should be purchased for subjects such as Bioinformatics / Animations / Graphics / Modeling and Simulations
- Robotics and feedback devices are required
- Need of ICT for Drama and Music

BEST PRACTICE 2

a. Title of Practice :

Green Campus Initiative

b. Goal :

- To increase environmental awareness among students, staff and the neighborhood community of the college.
- To minimize the environmental pollution on the college campus.
- To minimize the use of Municipal Corporation water resources by installing wastewater recycling plant and rain harvesting system.
- To use renewable energy resources particularly solar energy.
- To establish Vermi-technology for the disposal of wet garbage, which can

be used as fertilizer for plants on the campus.

- To study and maintain biodiversity of campus.
- To quantify carbon emission and find out solutions to minimize it.

c. The Context :

Clean environment is the basic necessity of human being for maintenance of good health and efficiency. Limited availability of public transport has resulted into increased use of personal vehicles, which is one of the causes of increase in air pollution. Due to extensive urbanization, water is increasingly becoming a scarce natural resource in metropolitan cities like Pune. Solar energy can be the potential replacement for conventional electricity.

In order to keep the college campus '*clean and green*', the college has undertaken 'Green campus initiative'

d. The Practice : The Green Campus Initiative practices are as follows:

- **Green Audit:** College has conducted its Green Audit in the academic year 2014-15, by taking technical assistance from external experts. The green audit report is prepared by adhering to the standards provided by ISO/DIS 14067, 2012 and report was obtained in July 2015. The Green House Gases (GHG) quantification is done in terms of carbon footprints (CFP). The carbon footprints are expressed as Carbon dioxide equivalents (CO₂e). Twenty-Six departments of the college were audited for the direct or indirect emission of GHG.

The 26 departments of the college are instructed to follow the measures to minimize the Carbon emission, based on the Green Audit report.

- **Biodiversity audit:** The Biodiversity audit of the college campus was conducted in the academic year 2014-15. Department of Botany, under the guidance of external agency has completed the Biodiversity assessment of the college campus.

Systematic documentation coupled with measures for enhancement and protection will prove to be a prudent step towards '*environment protection and green initiative*'.

Key findings:

- A total of 107 species of flora were observed during the biodiversity survey.
- Thirteen species of birds were observed during the survey.
- Ten species of butterflies were seen.
- Two species of mammals, one amphibian and one mollusc species was recorded.
- Three IUCN listed species of conservation significance were recorded in the survey.

Results: The results of the biodiversity survey are as following:

- The campus demonstrated the presence of more than 15 species of plants, which have been listed under the IUCN Red list.

- Out of these 15 species of plants, 3 species, namely *Pterocarpus marsupium* (Bibala), *Santalum album* (Chandan) and *Jacaranda mimosifolia* (Neelmohar) are listed under the Vulnerable Category of IUCN Red list.
- On similar lines, 11 bird species, 2 mammal species and 1 amphibian species have been listed under the IUCN Red list.
- **Name Plates on trees:** Trees are an integral part of human life. To create awareness among people about botanical name, common name, plant family and significance of these trees we have undertaken a program to label the roadside trees near college campus.

More than 800 trees along the roadsides of J.M. Road, F.C. Road, Modern college Road were identified and nameplates were displayed on tree trunks. During 2013-14 and 2014-15, nearly 350 roadside trees along Ghole Road and Apte Road were identified and nameplates were displayed on tree trunks.

- **Biomedical Waste Disposal:** Biomedical waste generated by life science departments of our college is collected periodically by the PASCO Environmental Solution Pvt. Ltd. for its proper disposal. Our college has signed MoU with the firm. This company is registered with Pune Municipal Corporation to treat this waste by various treatments.
- **E-waste Management:** From the academic year 2012-13, Department of Electronic Science has taken initiative in the issue of e-waste management. Due to advancement in technology, various types of electronic gadgets are being manufactured and marketed. These products become outdated after few months or years. Since these products contain some kinds of hazardous materials such as lead, zinc, lithium batteries, tin, etc., improper disposal of these products is dangerous for living beings. Therefore, management of e-waste is very important issue. E-waste management can be done by three different ways such as reduce, reuse and recycle. Our college has taken initiative in organizing a national conference on 'Hazardous e-Waste Management' and has contributed in creating awareness about hazardous e-waste management.

A rally on e-waste management was organized in the adopted village viz. Phulgaon. Few students of Department of Electronic Science have done research projects under *Yuva Sanshodhak* Scheme launched by the college.

- **Biodegradable Urban Waste management:** Since January 2010, Department of Zoology is conducting the **Integrated Vermitechnology Training Course (IVTC)** in collaboration with a renowned organization 'INORA' (Institute of Natural Organic Agriculture), Pune. Two batches are conducted per year. Students and general citizens enthusiastically participate in this training course.

Vermiculture facility is created on the college campus. Biodegradable waste generated on the college campus is used to manufacture vermicompost. Such vermin-compost is used as manure for the plants on the college campus.

- **Use of Renewable Energy:** Two solar panels with 1 KW capacity have been installed on the rooftop. Using these solar panels, we are lighting 25 lamps which are installed in staircase of East wing and 12 lamps in Principal's Office. The backup of this system is about 6 hours per day.

Solar Distillation Plant having distillation capacity 25 lit. per day is also installed. Department of Physics has taken initiative in starting a course on Renewable Energy as one of the specialized courses at T.Y.B.Sc..

- **Microscale experiments in Chemistry:** The Department of Chemistry is practicing microscale technique in Analytical Chemistry Practicals. For this purpose special glassware such as Pasteur pipette, Hickman Head, Hirsch funnel are procured and Special microscale methods such as double burette titration are adopted. This method reduces the volume of solutions required to about one fourth of that in the traditional method.
- **Energy audit:** Energy Audit of consumption of electricity in the College was entrusted with 'Enrich Consultants' Pune. The objectives of the audit include assessment of the energy consumption pattern of the facilities, identify the areas where potential for energy/cost saving exists and prepare proposals for energy/cost saving along with investment and payback periods.

We have implemented '*no cost and low cost*' recommendations according to the guidelines given in Save Energy Program of MEDA. Energy Audit also gives focused attention to energy cost and cost involved in achieving higher performance with technical and financial analysis.

Following Energy Efficiency Improvement measures were implemented by the college.

- Automatic Power Factor Correction systems were installed for main building, east wing and administrative building.
- Energy Saver Circuits were installed for old air conditioners
- Replacing Conventional Ballasts for Fluorescent Tube Lights (FTL) with Electronic Ballasts
- Replacing Tube Lights (FTL) with LED Tube Lights

Total savings during the energy audit is estimated at 10.10 Lakhs, which is 23 % of the total energy cost with an overall payback period of 3 Years.

- **Rainwater harvesting :** The rainwater harvesting system installed on the college campus has enabled us to use rainwater collected on the rooftop of the college building, particularly in the rainy season. This has helped in reducing the use of water supplied by Municipal Corporation.
- **Sewage Treatment Plant:** The college has installed Sewage Treatment Plant costing 18,00,000/- Rs.. This is done in collaboration with Modern College of Engineering. This has facilitated treatment , recycle and reuse of 20,000 liter water per day.

- **Digital herbarium :** Department of Botany has created Digital Herbarium of flowering trees of Western Ghat regions of Maharashtra. This has enabled to overcome the limitations of traditional herbarium.
- **Animal dissection simulation :** Department of Zoology has stopped dissection of useful animals, through the effective use of animal dissection simulations.
- **E-Governance :** The college is promoting e-governance with the clear objective of minimizing use of papers and thus preventing cutting of trees. Digital Record Room, bulk SMS service, on-line admissions, e-magazine, placement e-brochure, office automation software, etc. are some of the initiatives taken by the college in this direction.
- **Digital library:** Thousands of e-books and e-journals are made available to the students and staff members in the digital library.

e. Evidence of Success:

- **Green audit:** It has created awareness about environmental conservation among all the stake holders.
- **Biodiversity audit:** It has sensitized the students and staff members about importance of studying and enriching the bio-diversity.
- **Name plates of plants:** It has helped to provide scientific information of roadside trees to the neighborhood community.
- **Biomedical waste Disposal System :** It is found useful in avoiding harmful effects of bio-medical waste generated on college campus.
- **e-waste management System:** It has created awareness among the stake holders about importance of e-waste management.
- **Biodegradable Urban Waste Management System and Training Course:** The training course has generated expertise and the concerned system has helped to produce eco-friendly vermin compost as manure for plants on the campus.
- **Use of Renewable Energy:** Use of solar energy has reduced the consumption of electricity.
- **Microscale Experiments:** It has contributed towards reducing use of chemicals, thereby reducing water pollution due to chemical pollutants.
- **Energy audit:** It has sensitized the stake holders about reducing consumption of electric energy.
- **Rain water harvesting:** It is found useful in reducing use of water supplied by Municipal Corporation, particularly in the rainy season.
- **Sewage Treatment Plant:** It has facilitated retreatment, recycle and reuse of 20,000 liter water per day.
- **Digital herbarium:** It has helped to create awareness about damage caused by traditional herbarium to the vegetation and using digital herbarium to avoid such damage to the vegetation.
- **Animal dissection simulation:** This is effective, efficient and eco-friendly method of studying anatomical and histological features of animal bodies.

- **e-Governance:** This is found to be eco-friendly as well as effective and efficient method as far as governance is concerned.
- **Digital library:** It is space efficient and eco-friendly facility in the library, by which all the stake holders are benefited.

f. Problems Encountered and Resource required:

- Need of training : Digital Library, Digital Classrooms, Virtual Classroom, Virtual Laboratory and Digital Record Room.
- Maintenance of newly developed equipment
- Unavailability of skilled manpower: Training is given to local person and in some cases (such as green audit and biodiversity audit) agencies were required.
- Need of follow-up in awareness of environmental impact: Students and staff are repeatedly made aware of GCI by various posters, demonstration and lecture.
- Requirement of funds and space: Main source of fund was parent body and space was also obtained through college management.

Contact Details

- **Name of the Principal:** Dr. Rajendra S. Zunjarrao
- **Name of the Institution:** *Progressive Education Society's* Modern College of Arts, Science and Commerce, Shivajinagar, Pune -5
- **City:** Pune (Maharashtra)
- **Pin Code:** 411 005
- **Accredited Status:** NAAC Re-accredited 'A' Grade
- **Work Phone:** (+9120) 25535102/927/468 **Fax:** (+9120) 25536075
- **Website:** www.moderncollegepune.com
- **E-Mail:** principal@moderncollegepune.com
- **Mobile:** +91 9922007302

□□□

D. Compliance / Action Taken Report

On The Recommendations For Quality Enhancement of the Institution, by NAAC Peer Team, During Second Cycle of Accreditation in 2010

1. The college may plan to introduce an array of subjects in all the three streams with greater inter-disciplinary combinations, flexibility and mobility at the UG and PG levels.
 - Presently college is offering 11 UG courses and 11 PG courses under Science stream, 3 UG and 1 PG courses under Commerce stream and 9 UG courses and 5 PG courses under Arts stream.
 - In all, number of UG and PG courses in March 2010 was 19 and 16 respectively and it has increased to 23 and 16 respectively in the last 6 years.
2. There should be a perspective plan to progressively modernize and remove obsolescence in laboratories, library and other areas which call for update.
 - Infrastructure of all science laboratories has been improvised with the grants received from UGC under BSR program and the instruments are updated with DST-FIST, CPE and Star College grant from DBT.
 - Library infrastructure has been modernized and Digital Library is developed. The library resources have been considerably enhanced.
 - The college has prepared 'Vision Document' in which perspective plan to progressively modernize all the departments has been stated.
3. Library being the hub of all academic activity calls for concerted planning to give it the modern shape, ambience and upkeep with its latest books, journals and update in information pool for students and faculty. Its holding should be digitized. Eventually a digital library be established in due course.
 - Efforts to establish Digital Library were started immediately after second cycle of accreditation, in the academic year 2011-12 and the Digital Library was set-up in the academic year 2012-13. It was inaugurated by His Excellency Governor of Tripura on 31st July 2013.
 - The college had 87,683 print books in 2010 and now the number is 1,08,448. As far as the number of accessible e-books is concerned, it has gone up to 4,82,000 from 97,000. The number of available e-journals has increased from 6000 to 22,400 in the said post accreditation period.
 - A new interactive library website is developed which enables use of Web-OPAC for easy search of books in library from remote locations. The library website is also linked to the college website. A monthly library e-bulletin is published and is also available on library website.

- Additional new library software namely *AutoLib* has been purchased in addition to *Vridhhi* software for issue of books, *Web-OPAC* and library administrative work.
 - In order to provide services to the researchers, the library has established the facility of anti-plagiarism software.
 - Improvements in ambiance of the library infrastructure are made and new book storage racks are purchased in the library. OPAC system is used in the library to easily locate the books on the racks.
 - Overall library resources have been augmented and modernised.
4. Basic Science education requires to be reinvented in consonance with the national debate on its relevance, role and importance to channelize students' talent in national development more effectively.
- The college has implemented DBT STAR College scheme for enhancement of the quality of basic Science education since 2013.
 - The efforts undertaken by college to enhance the quality of basic science education have resulted in enrolling '*INSPIRE* scholarship recipients' and other talented students to UG and PG courses.
 - Every year the college organizes one International, one National and two State level conferences in which PG students and researchers are encouraged to participate actively. College has implemented '*Yuva Sanshodhak*' scheme to promote research among UG and PG students in Arts, Commerce and Science streams. One student is a winner of State Level '*Avishkar*' Research Project competition.
 - Teachers of science departments have been actively involved in several programmes organized to enhance the quality of basic science education. One of the teachers is recipient of INSA award in the area of Teaching Learning and Evaluation.
5. For continuous teacher training while they are allowed to attend ASCs there should be a provision of sabbatical leave as well so as to enable them to enhance their academic base.
- In last six years, seven teachers were sanctioned special study leave for Ph.D. research and two teachers were awarded special study leave for post-doctoral research work.
 - Teachers are also encouraged to attend teachers' training program, refresher courses, orientation courses, summer vacation training programs, for which they are sanctioned duty leave.
 - College organizes teacher training program to enhance academic base. The IQAC and 'Staff Secretary Committee' also department wise conduct quality enhancement workshops.

6. Communication skills, histrionic talents and confidence building measures in the students could be promoted for their better placements.

- Soft skill programs are organized for UG and PG students by the 'Soft Skills Development Committee' of the college.
- Corporate trainers are invited for providing soft skills training to the students.
- Department wise communication skill and presentation skill trainings are arranged.
- The placement cell of the college organizes mock Interviews, group discussions and online tests for enhancing histrionic talents and for building confidence among the students.
- Commerce Association, Arts Association and Science Association organize Debate competitions, Group Discussions, Seminars, Poster Competitions, Hobby Exhibitions, Quiz Competitions, Exhibitions, Trade fares (*Vyapar Mela*), etc. at various levels of participation.

7. The college may prepare for the application and grant of Autonomous status which will enable it to have complete academic and functional freedom.

- The college has been preparing for the application and grant of autonomous status by
 - i. Organizing sensitization workshop for creating awareness about autonomy among staff members.
 - ii. Arranging expert's guidance lectures on benefits of academic autonomy.
 - iii. Arranging visits to autonomous institutions.
- The number of autonomous add-on courses has gone up from seven to twenty-eight in the last six years.
- In addition to the seven research centres recognized by SPPU, the college has established an interdisciplinary autonomous research centre in Life Sciences.

8. For seeking more funds for innovative programs the college may apply to the UGC for its identification as College with Potential for Excellence.

- Accordingly, the college applied for CPE status to UGC in September 2011 and it has been awarded ***College with Potential for Excellence Status*** in September 2011.
- Following the award of the CPE status by UGC, the college put in efforts and applied for the financial assistance through DST-FIST, DBT-STAR, UGC-BSR, UGC-Community College, UGC-MRP, etc., and has successfully obtained financial assistance to the tune of **Rs. 6,27,70,275/-** in last 6 years under these schemes. For a traditional college like ours, this achievement has given further encouragement and impetus to strive for the ***Excellence Status***.

9. Consultancy and Research culture should become a professional imperative for the faculty with the support and encouragement of the authorities of the college.

- The college has framed consultancy policy and patent policy, which has been approved by local management committee and the parent body.
- The college has established a Centre for Promotion of Research, for promoting research activities and enhancing the quality of research. In last 6 years, members of teaching staff have successfully obtained financial assistance from of more than Rs. 2 Crores for their individual research projects from different funding agencies namely, UGC, DST, ISRO, ICSSR, CSIR, etc.
- Every year the college organizes one International, one National and two State level conferences on the topics of current interest, for promoting research culture among the staff members.
- All the research centres are encouraged to publish the research journals. From their respective subjects. Post Graduate Research Centre in Economics has published a '*RESECO : Annual Research Journal in Economics*' in the year 2015.

10. May introduce the teaching of foreign as well as other Indian languages.

- German language is introduced at B.A. special level.
- Certificate, Diploma course in German, French, Japanese languages introduced.
- International conference on Employability Enhancement Through Proficiency in Indian and Foreign Languages was organized in 2013.
- The short duration course on Marathi Translation is introduced in the college.
- The short-term course in *Modi* script is also conducted.

11. Many more add-on job-ready courses as per UGC and university norms be introduced while many more be considered as hobby courses for others.

- The number of add-on courses are increased from 7 to 28 in last 6 years.
- Under the Community College scheme, sanctioned by UGC in 2015, the college has started add-on, job oriented certificate and diploma courses in Fashion Technology (Dress Designing and Tailoring).

12. Possibility to seek research grants from different funding agencies be pursued.

- Grants worth more than Rs. 6 Crores have been received in last 6 years from funding agencies viz. UGC, DBT, DST, ISRO, CSIR, ICSSR, etc.

13. Formal system of tracking alumni be evolved.

- Alumni Association is registered and the system of online registration of alumni is established through college website.

- Department wise rapport with alumni is established and their periodical meetings are held.
- The formal system of taking online feedback from alumni is established.

14. Hostel amenities be improved to the advantage of the hostellers.

- Girl's hostel facility is available since the inception of the college. Hostel facilities for boys have been introduced since 2015.
- The capacity of the girls' hostel has increased substantially and the modern facilities have been introduced in the girl's hostel.

□□□

E. Post-Accreditation Initiatives

The college was re-accredited in the year 2010 with 'A' grade with 3.15 CGPA.

The report of the peer team was carefully studied by IQAC, all the office bearers of the college and the management. The observations and recommendations to the committee have been carefully noted for necessary action has already been taken as is evinced in Compliance / ATR.

As a part of our continuous drive for improvement in the quality of higher education, the college has taken certain initiatives during post accreditation period, which are stated below:

Realizing the importance of Teaching, Learning and Evaluation, in the whole process of higher education, the college took initiative and established a separate cell '*Centre for Innovations in Teaching, Learning and Evaluation*'. The cell is headed by Dr. Mrs. Sushma Joag, a winner of '*INSA Award 2015*'. (i) Regional workshop on co-operative learning was conducted under the guidance of International expert from Israel Dr. Yael Sharan in the academic year 2012-13. (ii) 'International Conference on Innovations in Teaching, Learning and Evaluations' was also organized in the year 2015-16.

The research endeavors have been geared up with increased participation of students and teachers in research with greater number of major and minor research projects. The college has made all out efforts for resource mobilization from various funding agencies. So far, college has received more than Rs. 2 crores of grants under this activity. The college also has made a special budgetary provision for funding the student's research projects under '*Yuva Sanshodhak*' Scheme. *Centre for Promotion of Research* has been established under the guidance of Ex. Principal and UGC Scientist 'C' (Professor), Dr. S. Y. Paranjape as Chief Advisor. The objectives of this cell are stated as follows: (i) To guide, coordinate and promote all the research activities. (ii) To encourage interdisciplinary research projects. (iii) To initiate research projects with potential of application and with industrial collaborations.

Steps have been taken towards skill development among the students. A number of autonomous add-on courses have been started. The use of ICT facilities in Teaching, Learning, Evaluation and Administration has been increased. The college has taken initiative in providing counselling facility for students and the neighbouring community.

The college also has taken initiative in increasing the infrastructural facilities. The library infrastructure has been completely renovated. The modern amenities like surfing of internet, accessing e-books, and well-equipped staff study section, library website, library e-bulletin and Digital Library are now available in the college. The initiative also has been taken in conducting Green Audit, Biodiversity Audit, and Fire Audit. On the occasion of International Yoga Day, College has introduced the facility of 'Yoga and Meditation Hall'.

F. Evaluative Reports: Department wise

Department of Biotechnology

1. **Name of the department:** Department of Biotechnology.
2. **Year of establishment :** UG: 2005; PG: 2008.
3. **Names of Programmes /Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

B.Sc. Biotechnology
M.Sc. Biotechnology

4. **Names of Interdisciplinary courses and the departments/units involved:**

- FY Biotechnology: Department of Computer Science, Chemistry, Mathematics, and Physics.
- SY Biotechnology: Department of English.

5. **Annual/ semester/choice based credit system (programme wise):**

B.Sc. Biotechnology: Semester Pattern
M.Sc. Biotechnology: Semester Pattern with Choice Based Credit System

6. **Participation of the department in the courses offered by the departments:**

The faculty is involved in teaching few topics in the Department of Botany and Zoology

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil

8. **Details of courses/programmes discontinued (if any) with reasons:-**

9. **Number of teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Assistant Professors	9	9

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Sangeeta Vijay Bhagat	M.Sc., M.Phil., Ph.D. (Biochemistry)	Head of the Department	Biochemistry	16	-
Dr. Rebecca Sandeep Thombre	M.Sc., Ph.D. (Microbiology) SET. (Life Sciences)	Assistant Professor	Microbiology	12	-

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Shubhangi Sanjay Puranik (Up to April 2015)	M.Sc., Ph.D. (Zoology)	Assistant Professor	Zoology	17	-
Mrs. Rama Mandar Phadke	M.Sc., SET (Biotechnology)	Assistant Professor	Biotechnology	12	-
Dr. Geetanjali Madhusudan Litake	M.Sc., Ph.D. (Medical Microbiology)	Assistant Professor	Medical Microbiology-	5	-
Prof. Ravi L Dabhade	M.Sc., NET, GATE (Biochemistry)	Assistant Professor	Biochemistry	5	-
Dr Sangeeta Sathaye	M.Sc., Ph.D. (Biochemistry)	Assistant Professor	Biochemistry, Plant Biotech	5	-
Dr. Sharad Goswami	M.Sc. Ph.D. (Botany)	Assistant Professor	Botany	10	-
Prof. Radhika Oke	M.Sc.	Assistant Professor	Biotechnology	01	-

11. List of senior visiting faculty:

Mrs. Kanchan Rajadhyaksha (Retd.), Department of Mathematics, Modern College, Pune-5

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

B.Sc. Biotechnology: 15%
M.Sc. Biotechnology: 10 %

13. Student -Teacher Ratio (programme wise)

B.Sc. Biotechnology: 17: 1
M.Sc. Biotechnology: 16: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	4	4

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil / PG.:

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	3	-	6	-	-

16. Number of faculty with on-going projects from a) National b) International funding agencies and grants received

Principal Investigator	Title	Funding agency	Amount (Rs.)	Year
Dr. Sangeeta Bhagat	Screening of some indigenous plant species for Xanthine Oxidase inhibitors- Potential remedy for gout	BCUD	1,60,000/-	2014-2016
Dr. Rebecca Thombre	Studies on bacterioruberin and membrane proteins from Haloarchaea isolated from Mumbai	BCUD	2,30,000/-	2014-2016
Dr. Geetanjali M. Litake	Studies on environmental dissemination of MDR <i>Staphylococcus</i> species	BCUD	1,80,000/-	2014-2016
Mr. Ravi L. Dabhade	Green synthesis of metal nanoparticles and studies on nitrate reductase	BCUD	1,30,000/-	2014-2016
Ms. Rama Phadke	Evaluation of potential of cytotoxicity of curcumin protein from <i>Jatropha curcas</i> L.	UGC	3,35,000/-	2015-2017

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Name and Designation of the Staff	Research Project Major/Minor	Funding Agency	Duration from _____ To _____	Amount Rs.
Dr. Sangeeta Bhagat, HOD	Minor	UGC,	Completed (2009-2011)	80,000/-
Dr. Rebecca Thombre Asst. Professor	Minor	GC-CAM	Completed (2005-2008)	6,00,000/-
	Minor	BCUD	Completed (2012-2014)	2,00,000/-
	Minor	UGC	Completed (2013-2015)	90,00,000/-
Dr. Shubhangi Puranik, Asst. Professor	Minor	UGC	Completed (2009-2011)	70,000/-
Mrs. Rama Phadke, Asst. Professor	Minor	BCUD	Completed	2,00,000/-
Dr. Rebecca Thombre	Major	ISRO	Completed (2013-2015)	16,04,000/-
Dr.P.P.Kanekar (CSIR Emeritus Scientist)	Major	CSIR	Completed (2013-2016)	7,62,000/-

- College funded project: Mrs. Rama Phadke: Isolation and purification of lectin protein from *Jatropha curcas*. Amount funded Rs. 4,000/-.

18. Research Centre /facility recognized by the University

Recognized Research Centre for M.Phil. in Biotechnology.

19. Publications:

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference	International	National	Book chapter				
Dr. Mrs.S.V. Bhagat	2	1	9	-	-	-	14	-	-	-
Mrs. R.S. Thombre	17	9	38	-	-	8	65	13.8	43	3
Dr. Mrs.S.S. Puranik	2	3	13	-	-	-	18	-	3	1
Mrs.R.M. Phadke	-	-	13	-	-	-	13	-	-	-
Dr. G.M. Litake	7	3	6	-	-	-	16	10.86	161	6
Mr. R.L. Dabhade	-	-	1	-	-	-	1	-	-	-
Dr. S. S. Sathaye	3	-	-	-	-	1	4	-	210	4
Dr. Sharad Goswami	-	-	2	-	-	-	2	-	-	-
Ms. Radhika Oke	4	-	2	-	-	-	5	13.8	-	-
Dr. Kanekar Pradnya	2	-	-	-	-	-	2	7.6	1254	19

20. Areas of consultancy and income generated:

Animal Cell Culture, Revenue generated Rs. 10,000/-

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards

Nil

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

B.Sc. Biotechnology: 100%

M.Sc. Biotechnology:

YEAR	% of students
2010-11	25
2011-12	33
2012-13	33
2013-14	80
2014-15	100
2015-16	100

b) Percentage of students placed for projects in organizations outside the institution i.e., in Research laboratories/Industry/other agencies

M.Sc. Biotechnology:

YEAR	% of students (NCL, ARI, NIV, Serum Institute, NCCS and SPPU, Pune)
2010-11	75
2011-12	67
2012-13	67
2013-14	20
2014-15	Nil
2015-16	Nil

23. Awards / Recognitions received by faculty and students

- **Dr. Puranik Shubhangi:**

Recognised M.Phil. /Ph.D. guide in Zoology by Savitribai Phule Pune University.

- **Dr. Rebecca Thombre:**

- **BRSI-Best Poster Award** at International Conference on Bioinformatics and Biotechnology organized by Biotech Research Society of India, at Le Meridian, Pune from 25-27 November 2013.

- **Best Paper Award** at National Conference on e-Waste Management, PES, Modern College from 23-24 December 2013.
 - **Best Paper Award** for paper on “Cyclodextrin glycosyl transferase” at Indian Convention of Food Scientist and Technologist (ICFOST, CFTRI, Mysore) organized by AFSTi, Yashada, Pune. (24 Feb **2012**)
 - **Best Paper Award (Young Scientist Category)** for Oral Presentation on “Nanotechnology and Cancer” at National Symposium on Life Sciences, Elphinstone College, Mumbai. (7 January **2012**).
 - **Best Oral Presentation Award** for oral paper on “Screening of alkaliphilic bacterial diversity of Lonar lake for industrially important cyclodextrin production at “International Conference on Biodiversity and its Conservation organized by Modern College, Pune, January **2011**.
 - **Best Oral Paper Award** for paper on “Studies on CGTase producing bacteria from Lonar lake “ at National Seminar for women , WE-MEET organized by College of Engineering, Pune.(**2010**)
 - Received an award, Certificate and Gold medal from Uttar Bhartiya Sangh at HV Desai College on 28th Nov 2015 for excellence in field of education.
- **Ms. Radhika Oke:**
Won First Prize in poster presentation in an International conference entitled, ‘Innovations in Teaching, Learning and Evaluation in higher education’ organized in Modern College, Pune-05 on 29th-30th January 2016.
 - **Ms. Mrunmayee Patil (F.Y. Biotech):**
Received award for overall performance in NCC (Rank-Junior Under-Officer)
 - **Ms. Janhavi Dave (F.Y. Biotech):**
Received award of ‘Best Cadet of Naval NCC’ (2015-16).

24. List of eminent academicians and scientists / visitors to the department

Date of Event	Name of Activity / Event	No. of Participants	Usefulness of Activity / Event	Other Information
21/02/2011	Lecture series on ‘Career opportunities in Biotechnology’	150	Information about career opportunities	Speakers- Dr. Bikash Aich, Adv. Shreedhar Parundekar, Mrs. Soumi Dattagupta
07/02/2012	Lecture on Biofilms	130	Interaction with foreign scientist	Speakers- Dr. Susan Lang from Glassgow Caledonian University, UK
18 and 19/01/ 2013	Lecture series on ‘Intellectual Property Rights-A career option for Life Sciences’	100	Information about career opportunities	Speakers- Adv. Ganesh Hingmire (GMGC), Adv. Shreedhar Parundekar, Mrs.

Date of Event	Name of Activity / Event	No. of Participants	Usefulness of Activity / Event	Other Information
				Kulkarni (NCL Innovation Centre)
07/09/2013	Lecture on 'Credit system implementation'	24	For faculty and PG students for implementation of newly introduced credit system for M.Sc. course	Speaker- Dr. Saroj Ghaskadbi
Feb. 2014	Lecture series on 'Advanced techniques in Genomics and Proteomics' for Life science PG students	75	Interaction with scientist Information about Mass spectrometry and Next generation sequencing	Speakers- Dr. Ashok Giri (NCL), Mr. Sourabh Pradhan IISER
27 and 28/03/2014	Skill development workshop in PCR techniques	32	Training of T.Y.B.Sc. Botany and Zoology students	Funded by BDT STAR College
28/01/ 2015	Opportunities in National Tsing Hua University, Taiwan	200	About scholarships for higher studies in Taiwan	Prof. Yu Lin Wang and Prof. Cheng Yao Lo
10/02/ 2015	Scientific Writing	50	Writing project reports and scientific communication	Dr. H.V.Ghate

25. Seminars/ Conferences/Workshops organized and the source of funding

National: A national conference on 'Stem Cell Technology' was organized by Department of Biotechnology during 13-15th March 2010, sponsored by Savitribai Phule Pune University.

26. Student profile programme/course wise:

Name of the Course/programme B.Sc. Biotechnology	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-11	175	42	10	32	80.95
2011-12	162	33	8	25	100
2012-13	145	54	15	39	92.00
2013-14	157	33	3	30	75.55
2014-15	145	41	8	33	98.00

Name of the Course/programme M.Sc. Biotechnology	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-11	126	22	7	15	100
2011-12	139	26	7	19	89.00
2012-13	140	25	5	20	96.00
2013-14	133	24	5	19	100
2014-15	148	24	5	19	100
2015-16	155	23	6	17	RA

27. Diversity of Students

B.Sc. Biotechnology

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	98.31	1.69	Nil
2014-2015	96.95	3.05	Nil
2015-2016	96.21	3.79	Nil

M.Sc. Biotechnology

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	83.78	10.81	5.41
2011-2012	90.91	7.27	1.82
2012-2013	100.00	0.00	0.00
2013-2014	100.00	0.00	0.00
2014-2015	92.59	3.70	3.70
2015-2016	100.00	0.00	0.00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

NET: 10 GATE: 20

29. Student progression

Student progression	Against % enrolled
UG to PG	99
PG to M.Phil.	-
PG to Ph.D.	10
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	30
• Other than campus recruitment	50
Entrepreneurship/Self-employment	5

30. Details of Infrastructural facilities

- Library: Central Library facility of the college
- Internet facilities for Staff and Students: Well-equipped computer laboratory with LAN facility on 15 computers are installed for this purpose.
- Class rooms with ICT facility: Three classrooms with LCD projector facility
- Laboratories:
 - Two UG and two PG laboratories for regular practicals and Project work

- Four special laboratories :
 - Research laboratory
 - Animal Tissue Culture
 - Plant Tissue culture
 - Bioinformatics Laboratory with Internet connection

All laboratories are well equipped with latest instruments.

31. Number of Students receiving financial assistance from college, university, government or other agencies.

Students receiving government scholarship

Year	Total Number of Students
2010-2011	26
2011-2012	17
2012-2013	34
2013-2014	93
2014-2015	17
2015-2016	25

Other Scholarships:

Year	Name of Student	Name of Scholarship
2010-2011	Mokshada Varma	Received scholarship from 'Malhotra Weikfield Foundation' for M.Sc. Biotechnology
2013-2014	Meenu Kuman and Elvina Joseph	Received scholarship from 'Leela Poonawala Foundation' for M.Sc. Biotechnology
2013-2014	Prachi Joshi, Sameer Sohoni and Aakankha Patil	PICC scholarship

32. Details of students enrichment programmes (special lecture/workshops / seminar with external experts.

- Star college funded workshop based on PCR based techniques was conducted in March 2014 for T.Y.B.Sc Life Sciences students

Date of Event	Name of Activity / Event	No. of Participants	Usefulness of Activity / Event	Other Information
January. 2014	Soft skill workshop	34	Training of students for self-awareness and development	Organizer-PACEMAKERZ Group discussions and personal interviews

33. Teaching methods adopted to improve students learning

In addition to traditional methods of teaching,

- Interactive sessions
- Seminars
- Group discussions
- Quiz and debates

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Dr. Shubhangi Puranik: NSS Programme officer, conducted health camps to improve the nutritional status of women and children of the villages.

35. SWOC analysis of the department and Future plans

Strength

- Well-equipped laboratories to conduct basic as well as advanced practicals
- ICT enabled classrooms for better teaching-learning experience.
- All the members of the faculty are actively engaged in research work and have received grants from various government funding agencies.
- Preference to the department from senior scientist to run a CSIR funded project due to congenial research atmosphere and research facilities.

Weakness

- In the present scenario, the graduates and postgraduates in biotechnology are finding it difficult to get suitable job opportunities.
- Placement activity at departmental level needs to be strengthened.

Opportunities

- Good research culture in the department enables students to have better opportunities in research field.
- Placements in software development companies are also available along with biotech companies.
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges

- Higher studies and hands-on training are must for better job profile.
- Continuous advancement in the field needs frequent updation of the curriculum.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans

- Skill development courses for enhancement of employability of students
- To establish research centre for Ph.D. in Biotechnology
- Submission of major research projects
- To run B.Sc. Blended course in collaboration with foreign universities.

□□□

Department of Botany

1. **Name of the department:** Department of Botany
2. **Year of establishment :** UG: 1970 PG: 1994
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - B.Sc. (Botany as a Principal subject)
 - M.Sc. Botany (Plant Biotechnology and Angiosperm Taxonomy specializations)
 - Ph.D. in Botany
4. **Names of Interdisciplinary courses and the departments/units involved**

Since the college is affiliated to the Savitribai Phule Pune University, the department implements syllabus prescribed by the university and such interdisciplinary courses are not available in the prescribed syllabus.

A course on Environmental Awareness is compulsory for all undergraduate classes. One of the staff member works as an Assistant Coordinator for the course.

The Post Graduate Department of Botany has a compulsory course on 'Human Rights' and 'Cyber Crime' in the teaching of which the Department of Electronic Science is involved.

The courses like Biostatistics, Bioinformatics, Plant Biotechnology and Seed Technology are interdisciplinary in nature. The teaching of these courses is done with the help from the departments of Statistics, Zoology, Computer Science, Biotechnology, and Microbiology.

5. **Annual/ semester/choice based credit system (programme wise)**

B.Sc. Botany : Semester Pattern

M.Sc. Botany : Choice Based Credit System since June 2013.

Before June 2013, Semester Pattern

6. **Participation of the department in the courses offered by other departments**

The department is involved in the conduction of a Course on Environmental Awareness, which is coordinated by the Department of Geography. Some of the staff from our department also contributes in the curriculum of the departments of Microbiology and Biotechnology.

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**

- A skill development course on 'Biofertilizer Technology' is conducted in association with Sahyadri Biogreen, Satara (Maharashtra).
- A skill development course on 'Seed Technology' is conducted in

association with Riccia Seed, Pune. The experts from this industry are visiting faculty for the said course. Apart from this, the department also invites faculty from the College of Agriculture, Pune.

- The course structure of B.Sc. Botany has a course on Medicobotany. For better teaching learning experience, we are planning to have Memorandum of Understanding with the Modern College of Pharmacy, Nigdi, Pune (Maharashtra).
- In collaboration with Multiversity, a well-known educational organization, the department has conducted e-learning sessions for the postgraduate students of Botany.

8. Details of courses/programmes discontinued (if any) with reasons: -

9. Number of teaching posts

	UG		PG	
	Sanctioned	Filled	Sanctioned	Filled
Professors	Nil	Nil	Nil	Nil
Associate Professors	02	02	Nil	Nil
Asst. Professors	04	04	03	03

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. R.S. Zunjarrao	M.Sc., Ph.D.	Head of the Department	Cytogenetics and Plant Breeding	UG: 28 yrs PG: 22 yrs as Contributory staff	Awarded degree 01 Pursuing research 02
Dr. Mrs. N.M.Patil	M.Sc., Ph.D.	Associate Professor	Plant Physiology	UG: 24 yrs PG: 17 yrs as contributory staff	Pursuing research 03
Dr. R.B.Barmukh	M.Sc., Ph.D., SET	Assistant Professor	Cytogenetics and Plant Breeding	UG: 10 yrs PG: 9 yrs full time and 10 years as Contributory	Pursuing research 01
Dr. U.R.Wayase	M.Sc., M.Phil. Ph.D., NET	Assistant Professor	Plant Physiology	UG: 10 yrs PG: 10 yrs as Contributory	-
Prof. A.P.Goggi	M.Sc., NET	Assistant Professor	Plant Physiology	UG: 04 yrs PG: 04 yrs as Contributory	-
Prof. A.P.Kulkarni (Upto 25 th Jan 2016)	M.Sc., NET	Assistant Professor	Plant Biotechnology	UG: 3 yrs PG: 02 yrs as contributory	-
Prof. S. P. Salunke	M.Sc.	Assistant Professor	Angiosperm Taxonomy	UG: PG:21 yrs	-
Dr. K.D. Gopale	M.Sc., Ph.D.	Assistant Professor	Angiosperm Taxonomy	UG: 4 yrs PG: 4 yrs	-
Prof. R.D.Kulkarni (Upto 31 st Jan 2015)	M.Sc., SET	Assistant Professor	Botany	UG: 3 yrs PG: 4 yrs	-
Dr. Rekha Salunkhe	M.Sc. Ph.D.	Assistant Professor	Botany	PG: 6 months	-

11. List of senior visiting faculty

- Dr. V.D.Ranade, Retd. Head, Department of Botany, Abasaheb Garware College, Pune.
- Dr. D. R. Shirke, Retd. Professor, Department of Botany, Savitribai Phule

Pune University, Pune.

- Dr. S.D. Bonde, Retd. Scientist, Agharkar Research Institute, Pune.
- Dr. Mahesh Shindikar, Department of Environmental Science, College of Engineering, Pune.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

B.Sc. Botany: 14% of the total workload

M.Sc. Botany: 33% of the total workload

13. Student -Teacher Ratio (programme wise)

UG: 15:1 PG: 8:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	6	6

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil / PG.

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	02	-	6	-	-

16. Number of faculty with on-going projects from a) National b) International funding agencies and grants received

Number of faculty: 7, Total grants: Rs. 48,92,550/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sr. No.	Name of the faculty	Title of the project	Funding agency	Sanctioned amount (Rs)
1.	Dr. R.S.Zunjarrao (PI) Dr. R.B.Barmukh (CO-I)	Developing a digital herbarium of angiosperms of Western Ghats	UGC	9,86,750/-
2.	Dr. R.S.Zunjarrao (PI)	Ecological and life history studies of association between grouse locusts and lower cryptograms	DST	39,52,500/-
3.	Dr. Mrs. N.M.Patil	Isolation of induced mutants in linseed (<i>Linum usitatissimum</i>) under salt stress	UGC	12,50,800/-
4.	Dr. U.R.Wayase	Prospects of effective microorganisms in sustainable agriculture	UGC	1,20,000/-
5.	Prof. A.P.Goggi	Utilization of potential of <i>Alternanthera sessilis</i> , R.Br. – An ethanomedicinal weed	UGC	1,30,000/-
6.	Prof. A.P.Kulkarni	Antioxidant and antiprotease activity of <i>Sonchus asper</i> Hill.	UGC	1,25,000/-
7.	Dr. K.D.Gopale	Fatty acid profiling and molecular characterization of potential biodiesel producing microalgae from South India.	DST (SERB)	24,00,00/-
			TOTAL	89,65,050/-

18. Research Centre /facility recognized by the University

The Department of Botany has a Post Graduate Research Centre recognized by the Savitribai Phule Pune University since 1984. The department has a spacious and well-equipped Post Graduate Research Laboratory. Since 2013, three JRFs are working on major research projects. In the last four years, three research students were awarded the Ph.D. degree of Savitribai Phule Pune University and at present four research students are pursuing their research for the doctoral degree of Savitribai Phule Pune University.

The Post Graduate Research laboratory has following special equipment.

- HPLC
- PCR
- UV-Vis Spectrophotometer
- Microphotography unit (Leica)
- Bomb Colorimeter
- Gel Documentation unit
- Cooling water bath
- -20 °C refrigerator
- Environmental Chamber
- Incubator shaker

19. Publications:

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference	International	National	Book chapter				
Dr. R.S. Zunjarrao	4	5	-	-	-	-	9	4.2	40	3
Dr. Mrs. N.M.Patil	9	1	-	-	-	-	10	-	25	3
Dr. R.B.Barmukh	2	-	1	-	-	-	3	0.9	73	4
Dr. U.R.Wayase	1	-	-	-	-	-	1	0.56	1	-
Prof. A.P.Kulkarni	4	-	-	-	-	-	4	0.92	40	3
Dr. K.D. Gopale	3	3	-	1	-	-	7	3.8	2	3

20. Areas of consultancy and income generated

- Dr. R.S.Zunjarrao, Head, Department of Botany, has developed expertise in the Plant Tissue Culture Technology since the last two decades. He has offered the consultancy to the various renowned tissue culture laboratories in and around Pune city. However, these consultancies were offered on the non-remunerative basis.
- Dr. U.R. Wayase has offered to the farmers non-remunerative consultancy on biofertilizers and their applications. He has also guided the farmers on the fruit farming of pomegranate.
- Dr. K.D.Gopale is giving a non-remunerative consultancy on the subject of biodiesel to Shirke Biofuels, Pune, India.
- Mrs. Rasika Kulkarni is member of consulting panel of Sahyadri Biogreen, Satara on non- remunerative basis.
- The revenue generated through remunerative consultancy on microalgae is Rs. 15,000/- .

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards.

- Dr. R. S. Zunjarrao is a member of Boards of Editor of the Journal International Journal of Bioscience Discovery. He is also a Member of the Board of Studies in Botany, Savitribai Phule Pune University, Pune.
- Dr. Mrs. N. M. Patil is a Life Member of the Indian Society of Plant Physiologists.
- All the faculty members of UG and Prof. R.D.Kulkarni from PG are the members of Association of Teachers of Biological Sciences (ATBS).
- Prof. A.P.Kulkarni is a Life Member of Rose Society of India.

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

All the students of M.Sc. Part II undertake a research project in the fourth semester. Thus, every year at least 24 students undertake in-house projects, that is equivalent to around 7.2% of total number of students (UG+PG) studying the subject Botany in undergraduate and postgraduate programmes.

The S.Y and T.Y.B.Sc. students have availed short duration research projects funded by Research Monitoring Committee of the college, Ignited Innovators of India, College of Engineering, Pune and college also supports students participating in Avishkar competition.

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Up to the academic year 2013-2014, all the projects of M.Sc. Botany students were of in-house type. However, from the academic year 2014-2015, about 60% students have undertaken the project in other institutions or industries.

23. Awards / Recognitions received by faculty and students

- Dr. R.S.Zunjarao, Head of the Department of Botany and Principal of the college was awarded the Best Principal Award of the Savitribai Phule Pune University in February 2014.
- Dr. R S Zunjarrao and Dr. N M Patil became recognized guides for Ph.D. degree of Savitribai Phule Pune University.
- Dr. K D Gopale was awarded for the Best Poster Presentation in the International Conference on Biodiversity and its conservation, organized by P.E. Society's Modern College of Arts, Science and Commerce, Shivajinagar, Pune-5, from 28th to 30th January 2011.
- Dr. N. M. Patil and Dr. K. D. Gopale were recipients of Best Poster Presentation Award in International Conference on Biodiversity and its

Conservation held at Modern College of Arts, Science and Commerce in 2011.

24. List of eminent academicians and scientists / visitors to the department

- Dr. Amitabh Joshi, JNASCAR, Bangalore.
- Dr. Sitaramam, Retd. Head, Department of Biotechnology, Savitribai Phule Pune University.
- Dr. S. Manchester, Natural History Museum of Florida, USA.

25. Seminars/ Conferences/Workshops organized and the source of funding a) National b) International

The Department has successfully organized three International Conferences under the guidance of Principal Dr. R. S. Zunjarrao who was convener of these conferences.

- Dr. Mrs. Neeta Patil was an Organizing Secretary for these conferences.
- International Conference on Biodiversity and its Conservation, 28th to 30th January 2010, funded by University Grants Commission, New Delhi.
- International Conference on Business Opportunities in Life Sciences, 28th to 30th January 2012, funded by University Grants Commission, New Delhi.
- International Conference on Environmental Conservation by Adopting New Technologies, 28th and 29th January 2014, funded by University Grants Commission, New Delhi and National Bank for Agriculture and Rural Development (NABARD), Pune.
- Workshop on Revised syllabus of T. Y. B. Sc. Botany (2010 pattern) was organized in which theory syllabus was thoroughly discussed and amended. This workshop was funded by BCUD
- Workshops on Seed Technology, Plant Tissue Culture and Microtomy were organized for undergraduate students of Botany and these workshops were funded from DBT Star College Scheme.

26. Student profile programme/course wise:

Name of the Course/programme B.Sc.	Applications received	Selected	Enrolled		Pass %
			*M	*F	
2010-2011	297	163	50	113	100
2011-2012	361	158	44	114	95.23
2012-2013	326	156	42	114	100
2013-2014	402	161	46	115	96.77
2014-2015	396	167	63	104	85.71
2015-2016	427	178	62	116	RA

Name of the Course/programme M.Sc.	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	68	20	5	15	100
2011-2012	16	7	3	4	90.47
2012-2013	79	25	8	17	100
2013-2014	122	24	4	20	100
2014-2015	83	21	9	12	100
2015-2016	78	23	7	16	RA

27. Diversity of Students

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	0.5	0.05
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	84.62	11.54	3.85
2011-2012	84.62	7.69	7.69
2012-2013	100	0.00	0.00
2013-2014	100	0.00	0.00
2014-2015	100	0.00	0.00
2015-2016	100	0.00	0.00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

NET, SET: 02, Hrishikesh Khodade and Ganesh Mankar

Defense Services: 01, Anand Pratap Singh

ICAR NET and TIFR Entrance Examination: Ganesh Mankar

29. Student progression

Student progression	Against % enrolled
UG to PG	40%
PG to M.Phil.	< 1%
PG to Ph.D.	< 1%
Ph.D. to Post-Doctoral	Nil
Employed • Campus selection • Other than campus recruitment	Nil
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities

- Library: Central Library of the college
- Internet facilities for Staff and Students : The department has wired as well as wireless internet facility through 10 mbps leased line. The students have free access to the wired internet facility, facility of downloading the documents and printing documents.
- Class rooms with ICT facility: The classrooms used for F.Y.B.Sc., S.Y.B.Sc, and T.Y.B.Sc as well as classrooms for Post Graduate classes are equipped with LCD projectors and portable audio system.
- Laboratories :The department has three separate laboratories for UG, PG and Post Graduate Research. These laboratories are well equipped with necessary equipment and instruments.

31. Number of students receiving financial assistance from college, university, government or other agencies.

The figures represent the total number of students of the Science faculty and the Post Graduate students of the department.

Academic Year	Total number of students
2010-11	59
2011-12	85
2012-13	65
2013-14	142
2014-15	169
2015-16	161

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

The department has organized following lectures:

- Dr. H V Ghate, Ex-Head, Department of Zoology delivered a lectures on Scientific Writing to the post graduate students
- Dr. Ankur Patwardhan, Head, Department of Biodiversity delivered a lecture on 'Green Audit' on 5th February 2015.
- Dr. Pankaj Mundada from Yashwantrao Chavan College of Science, Satara has delivered a lecture on Biofertilizer Technology.
- Dr. Stevenson Manchester, Curator of Paleobotany from Florida Natural History Museum, University of Florida, US, has delivered a lecture on the subject of Palaeobotany.
- Dr. N D Bhore delivered a lecture on 20th December 2010 to the students of Botany on the subject 'Scope, Importance and Prospects in the field of Botany'.
- Dr. Sanjay Eksambekar from Phytolith Research Institute, IIT Campus, Mumbai, delivered a lecture on 'Phytolith- an emerging tool' on 14 August 2010.
- A lecture series based on the career opportunities for UG and PG students was organized on August 2010 and exhibition based on it in February 2011.

33. Teaching methods adopted to improve student learning

- E- learning sessions were conducted by Department of Botany in collaboration with a well-known educational organization Multiversity.
- All the faculty members use PowerPoint presentations, animations and educational videos for better teaching- learning experience.
- Students are taken to field visits and industrial visits.
- Students are exposed to participatory learning experiences by organizing various competitions like scientific model making competition, flower arrangement competition and photography competition.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Labelling roadside trees with botanical names: The department has taken the initiative in labelling the trees in the nearby areas. So far, the trees on the Modern College Road were labelled with the botanical names. This activity was extended to the trees on the Ghole Road and Apte Road.
- The faculty members from the department conducted a short-term training course for the Self Help groups in the neighbourhood communities. This course was based on the preparation of herbal cosmetics.
- All the staff members were actively involved in Indian Census activity in 2010-11
- All the staff members were actively involved in State Assembly Elections in the capacity of Presiding officers.

35. SWOC analysis of the department and Future plans

Strength:

- Very effective use of ICT for enhancing the quality of teaching and learning.
- The department has well-equipped laboratories.
- A well-equipped and well established Post Graduate Research Laboratory recognized by the Savitribai Phule Pune University as a Research Centre for pursuing research for Ph.D. degree
- Various high-end instruments are available in the department for research
- A well-developed Digital Herbarium
- The department has a well-established Plant Tissue Culture laboratory.
- Almost all of the staff members in the department have research projects funded by UGC, DST, and BCUD etc.
- Almost all of the staff members have enhanced their qualifications in service.
- A good tradition of add-on courses

Weaknesses:

- Placement activity at departmental level needs to be strengthened.

Opportunities:

- To attract meritorious students to the subject and motivate them to take up a career in the field of Botany.
- To motivate students for pursuing research in all major areas of plant sciences.
- To improve the soft skills in the students
- Hands-on-training programmes for the students in various plant-based industries.
- To create awareness about environment related issues among the students as well as people in general through the events like 'nature walk'.

- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- To motivate more students to take up career in Botany subject.
- To inculcate appropriate skills for better job opportunities
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plans:

- More number of add on courses in collaboration with industries.
- Maximum students will be given hands-on training in various plant-based industries.
- Industry sponsored collaborative research projects
- Publication of a research annual
- Publication of an e-brochure/ print copy brochure for better placement of the students.

□□□

Department of Chemistry

- 1. Name of the department:** Department of Chemistry
- 2. Year of establishment :** 1970
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B. Sc. (Chemistry),
M. Sc. (Analytical Chemistry)
- 4. Names of Interdisciplinary courses and the departments/units involved:** Nil
- 5. Annual/ semester/choice based credit system (programme wise) :**
F.Y. B.Sc. (Chemistry) : Annual Pattern
S.Y. and T.Y. B.Sc. Chemistry: Semester Pattern
M.Sc. Analytical Chemistry: Semester Pattern with Choice Based Credit System
- 6. Participation of the department in the courses offered by other departments:**

Name of the Course	Name of the Department
Fundamentals of Chemistry	Department of Biotechnology
	Department of Microbiology

- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** Certificate Course in Analytical techniques was conducted in collaboration with industry viz., ROSS Life Sciences, Pune.
- 8. Details of courses/programmes discontinued (if any) with reasons: -**
- 9. Number of Teaching posts**

Designation	Sanctioned	Filled
Professors	-	-
Associate Professors	2	2
Assistant Professors	8	7

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Prof. S.R.Pokharkar (Upto 30 th September 2013)	M.Sc. M.Phil.	Ex-HOD, Associate Professor	Inorganic Chemistry	35	-
Dr.(Mrs) S. D. Joag (upto 31 st October 2015)	M. Sc, Ph. D	Ex-HOD, Associate Professor	Organic Chemistry	35	-
Dr. S. K. Ujalambkar	M. Sc. Ph. D. M.A. (Marathi) M.Com.	HOD (From 1 st Nov. 2015), Associate Professor	Physical Chemistry	33	-
Prof. H. K. Gaikwad	M.Sc. , SET, NET	Assistant Professor	Organic Chemistry	16	-
Prof. S. S. Sakate	M.Sc., SET, NET	Assistant Professor	Organic Chemistry	14	-
(Mrs) P. B. Suryavanshi	M.Sc., SET, NET	Assistant Professor	Organic Chemistry	12	-
Prof. R. M. Jagtap	M.Sc., SET, NET	Assistant Professor	Organic Chemistry	08	-
Prof. L. B. Rane	M. Sc. M.Phil.	Assistant Professor	Analytical Chemistry	06	-
Dr.(Mrs.)M. Nirgudkar	M. Sc. Ph. D.	Assistant Professor	Physical Chemistry	05	-
Prof. Tejal Dolas	M.Sc.	Assistant Professor	Organic Chemistry	04	-
Prof. A. S. Warangule*	M.Sc., NET	Assistant Professor	Organic Chemistry	02	-
Prof. M. J. Kashid	M. Sc.	Assistant Professor	Inorganic Chemistry	02	-

(* Working in the Leave Vacancy of Prof. S.S.Sakate, who is on a sabbatical leave of UGC-FIP for pursuing Ph.D.)

11. List of senior visiting faculty:

Dr. P. G. Pol, *Ex-HOD, Fergusson College, Pune 4.*

12. Percentage of lectures delivered and practical classes handled

(programme wise) by temporary faculty:

UG : L: 18 % P: 12 %

PG : L: 15 % P: 12 %

13. Student -Teacher Ratio (programme wise):

B.Sc.: 15:1

M.Sc. : 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

One post of Faculty Clerk, in the college office is sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	6	6

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil /PG.

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	6	1	2	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Year	Name of the staff member	Funding agency	Amount sanctioned Rs.
2013-15	Prof. R. M. Jagtap	BCUD, Savitribai Phule Pune University, Pune 7.	2,30,000/-
2009-11	Dr. Mrs. S. D. Joag	UGC-WRO	2,00,000/-
2009-11	Prof. S.S.Sakate	UGC-WRO	2,00,000/-
2009-11	Prof. S.R. Pokharkar	BCUD-SPPU	2,50,000/-

18. Research Centre /facility recognized by the University:

The staff members are actively involved in the research activities. However, the process of starting recognized Post Graduate Research Centre by SPPU, Pune has been initiated.

19. Publications:

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citations	h-index
	International	National	Presented in Conference	International	National	Book chapter				
Dr.(Mrs) S. D. Joag	2	-	1	-	-	-	3	1.12	-	-
Prof. H. K. Gaikwad	8	-	-	-	-	-	8	-	-	-
Prof. S. S. Sakate	3	-	4	-	-	3	10	-	110	5
Prof. R. M. Jagtap	2	-	3	-	-	-	5	5.26	-	-

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards

Dr. Sudhir Ujalambkar worked on the Editorial Board of National Conference on Chemistry organized in the college on 23rd to 25th February 2012.

22. Student projects

- a) **Percentage of students who have done in-house projects including inter departmental/programme:** PG: 15% UG: 10%
- b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies:** PG: 05 %

23. Awards/ Recognitions received by faculty and students:

Teachers

- Dr. (Mrs) Sushama Joag received INSA ‘Best Teacher Award’ in October 2015.
- Dr. (Mrs) Sushama Joag received First Prize at National Competition on ‘Role that chemical industry can play to enhance Chemical Education in India’ organized by BASF-ICT, Mumbai in January 2011.

Students

- Ms. Apoorva Bhagat First Rank in SP Pune University at M. Sc (Analytical Chemistry) in May 2012, Ms Pratiksha Muley 7th rank in M.Sc. (Analytical Chemistry) May, 2012.
- Ms. Amrita Yadav won Second Prize in University level ‘Arnikar Lecture competition’ in February 2015, First Prize in state level Ingle Lecture Competition, February 2015.
- Mrs. Sanskar Gujar received First Prize in University level Pujari Lecture Competition, March 2015.

24. List of eminent academicians and scientists / visitors to the department

- Prof. M. S. Wadia, Ex-HOD, Department of Chemistry, SP Pune University, Pune 7.(2014)
- Prof. D. D. Dhavale, Director CIF, HOD Department of Chemistry, SP Pune University, Pune 7 (2014).
- Prof. R. S. Kusurkar, Ex-HOD, Department of Chemistry, SP Pune University, Pune 7. (2014)
- Dr. Sanjay Sonawane, Ex-Head, Analytical Division, Sai Advantium, Hinjwadi, Pune. (2010)
- Dr. Prasad Kulkarni, Sc. D., Agharkar Research Institute, Pune. (2011)
- Dr. Sourav Pal, Director, NCL, Pune.
- Dr. Prabodh Chobe, GM, BASF, Mumbai.
- Dr. Sikdar, Dy. Director, HEMRL, Pune.
- Dr. Vinay Oswal, Director, NAFARI, Pune.
- Mr. S.P.Bhagwat, General Manager, L and T, Mumbai.

25. Seminars/ Conferences/Workshops organized and the source of funding

National : National Conference on 'Perspective of Chemical Sciences' funded by BCUD, SPPU in February 2012

26. Student profile programme/coursewise:

Name of the Course/programme B.Sc. Chemistry	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	207	96	111	-
2011-2012	361	269	111	158	-
2012-2013	326	271	99	172	-
2013-2014	402	287	108	179	65.78
2014-2015	396	252	120	132	70.58
2015-2016	427	282	116	166	RA

Name of the Course/programme M.Sc. Chemistry	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	54	33	8	25	47.22
2011-2012	48	33	17	16	40
2012-2013	68	40	17	23	46.66
2013-2014	75	49	36	13	66.66
2014-2015	81	43	29	14	66.66
2015-2016	89	47	29	10	RA

27. Diversity of Students

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	0.5	0.05
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	98.63	1.37	Nil
2011-2012	98.80	1.20	Nil
2012-2013	100.00	Nil	Nil
2013-2014	98.94	1.06	Nil
2014-2015	100.00	Nil	Nil
2015-2016	100.00	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. : NET: 01

29. Student progression:

Student progression	Against % enrolled
UG to PG	40-50%
PG to M.Phil.	-
PG to Ph.D.	2-3%
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	2-3%
• Other than campus recruitment	10%
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- Library: Central Library.
- Internet facilities for Staff and Students : Six computers with 10 mbps leased line internet connection and Wi-Fi.
- Class rooms with ICT facility: Yes
- Laboratories:
 - Sr. General Laboratory: 01
 - L. H. Gadgil Instrumental and Physical Lab.: 01
 - P. G. Laboratory: 01
 - Research Laboratory: 01

31. Number of students receiving financial assistance from college, university, government or other agencies:

The figures represent the total number of students of the Science Faculty and the Post Graduate students of the department.

Year	Total number of students
2010-11	59
2011-12	80
2012-13	72
2013-14	147
2014-15	185
2015-16	179

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

- **Special Lectures by External Experts:**

Date	Topic
23/02/2012	1. Chemistry in shaping materials for the future - Dr. Saurav Pal, Director, NCL, Pune. 2. Career opportunities in chemical Industry - Dr. Prabodh Chobe, Senior G. M., BASF, Mumbai.

Date	Topic
24/2/2012	3. High Energy Materials, Science and Scope, - Dr. A. K. Sikder, Dy Director, HEMRL, Pune.
25/2/2012	4. Development and Application of NAA - Dr. R. N. Acharya, Scientist 'F', BARC, Mumbai.
11/2/2014	5. NMR spectroscopy - Prof. Dr. D. D. Dhavale, HOD, Dept. of Chemistry, SPPU.
12/2/2014	6. C-13 NMR Spectroscopy - Prof. Dr. R. S. Kusurkar, Emeritus scientist, SPPU.
13/2/2014	7. Mass Spectroscopy - Prof. Dr. M. S. Wadia, Emeritus Professor, SPPU.

- Certificate Course in Analytical Techniques (in collaboration with Ross Life Science Pvt Ltd) 27th to 30th March 2012.
- A training course in 'Chemical Based Product Preparation' is conducted every year

33. Teaching methods adopted to improve student learning:

- Use of effective pedagogy methods
- Use of molecular-crystal models
- Charts
- Use of LCD projectors
- Group Discussion
- Students Seminar

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Staff members of the department contribute substantially in the ISR in the capacity of Ex-Chairman (Student Welfare), Co-ordinator (NSS), Advisor (Art Circle), and Co-ordinator (Chem-Modern Competition).
- Staff members are also involved in number of extension activities such as Chemiad exam of SPPU, Science Talent Exam of HBSCE, NNT Programme of MKCL, Teacher's Training programmes of Exploratory Science centre, Science Park of SPPU, invited talks on science related topics in various institutions.
- Dr. S.K.Ujambkar has worked as a Coordinator of Summer Training/Refresher Course for college and university teachers.

35. SWOC analysis of the department and Future plans:

Strength:

- Good infrastructure
- Experienced, research oriented and enthusiastic staff

Weaknesses:

- Constraint of occasional dependence on temporary staff (CHB)
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Higher studies in chemistry as well as job opportunities due to the availability of central research institutes like NCL, and chemical industries in around Pune.
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- Paucity of career oriented teachers to teach Chemistry at UG and PG level
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans:

- Research Centre recognized by the Savitribai Phule Pune University.
- Laboratories with improved infrastructure.
- CCTV camera system in all the laboratories
- E-brochure for better placement of the students.
- More add-on courses.



Department of Commerce

1. **Name of the department:** Department of Commerce
2. **Year of establishment:** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
B.Com. : 1970
M.Com. : 1977
Ph.D. : 2008
4. **Names of interdisciplinary courses and the departments / units involved**
 - Certificate Course in Tally
 - Certificate Course in *Modi* script
 - Certificate Course in Graphology
5. **Annual / semester / choice based credit system (Programme wise):**
B.Com.: Annual Pattern
M.Com.: Semester Pattern with Choice Based Credit system
6. **Participation of the department in the courses offered by other departments Lectures by members of the department:**
 - Lectures for M.Sc. Botany on 'Entrepreneurship Development'
 - Lectures for T.Y. B. Sc. Biotechnology on 'Bio-Process Economics'
 - Lectures for First Year B.B.A. and B.C.A. on 'Advanced Accounting and Costing'
 - Lectures for T. Y. B.Sc. Electronics on 'Entrepreneurship Development'
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons:** -
9. **Number of teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	7	7
Assistant Professors	6	6

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc. D.Litt. / Ph.D. / M.Phil. etc.,)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Y. R. Waghmare	M. Com., F.C.A., Ph. D.	Associate Professor	Advanced Accounting, Costing	35	8
Dr. S. K. Rahane	M. Com., M. Phil., Ph. D., M. A. (Psychology - Counselling)	Associate Professor	Advanced Accounting, Costing	33	4
Dr. A. V. Kamble	M. Com., M. Phil., Ph. D.	Associate Professor	Advanced Accounting and Auditing	29	4
Prof. S. J. Ahiwale*	M. Com., M.A. (Eco), M. Phil.	Associate Professor	Advanced Accounting	26	-
Dr. R. W. Kulkarni	M. Com., F.C.M.A., M. Phil, M.M.S., Ph.D.	Associate Professor	Advanced Costing	32	-
Dr. V. N. Gaikwad	M. Com., SET, Ph.D.	Associate Professor	Advanced Accounting	23	-
Prof. A. V. Desai	M. Com., SET	Associate Professor	Marketing and Corporate Law	20	-
Prof. S. R. Hirve	M. Com., SET	Assistant Professor	Advanced Accounting, Costing	11	-
Prof. R. D. Bansode*	M.Com., D.T.L., G.D.C.and A., NET	Assistant Professor	Advanced Accounting	15	-
Prof. R. D. Jadhav	M. Com., NET	Assistant Professor	Advanced Accounting and Taxation	04	-
Prof. R. Y. Deshpande	M. Com., M. B. A., LL.M., NET	Assistant Professor (Part time)	Mercantile Law	31	-
Prof. Rasika Date	M. Com., SET., A.C.A.	Assistant Professor (Part time)	Advanced Accounting and Auditing	21	-
Prof. Amol Nikale	M.Com., NET, GDCandA, DMC.	Assistant Professor	Advanced Accounting and Auditing	01	-

(* Presently on Sabbatical Leave as per UGC-FIP, for pursuing Ph.D.)

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: B.Com.: 6% , M.Com.: 4%

13. Student – Teacher Ratio (programme wise):

B.Com.: 20:1

M.Com.: 15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Four posts sanctioned and filled. Three Faculty Clerks from main office and one Attendant in the department provide the administrative support.

15. Qualification of teaching faculty with D.Sc. / D.Litt. / Ph.D. / M.Phil. / PG.

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	8	4	5	-	-

16. Number of faculty with ongoing projects from a) National b) International Funding agencies and grants received: 01

17. Departmental projects funded by DST – FIST; UGC, DBT, ICSSR, etc. and total grants received:

Prof. Rasika Date has received a Minor Research Project entitled ‘Gender Audit of Educational Institutions – A Case Study of Select Deemed Universities in Pune’ from BCUD, SPPU, Pune-7, for the period 2014-16. The funds sanctioned are Rs. 90,000/-

18. Research Centre /facility recognized by the University:

Post Graduate Research Centre in Commerce, established in 2008, is recognized by the Savitribai Phule Pune University, Pune-7.

19. Publications:

Name of the faculty	Research Papers			Books			Total publications
	International	National	Presented in Conference	International	National	Book chapter	
Dr. Y.R.Waghmare	1	7	-	-	4	-	12
Dr. S. K. Rahane	-	-	1	-	-	-	1
Dr. A. V. Kamble	-	3	-	-	-	-	3
Prof. S. R. Hirve	-	2	2	-	-	-	4
Prof. R. D. Bansode	1	3	-	-	-	-	4
Prof. Rasika Date	1	3	5	-	1	-	10

• Monographs published by the department:

- Monograph on New Companies Act, 2013. (Published in February, 2014)
- Monograph on GST(Published in February, 2015)

20. Areas of consultancy and income generated:

Sr.No.	Name of the faculty	Area of consultancy
1.	Dr. Y.R.Waghmare	Investment and Tax Planning
2.	Dr. S.K.Rahane	Pre-marital counselling and general counselling
3.	Prof. Rasika Date	Investment and Tax Planning

Non-remunerative and informal consultancy

21. Faculty as members in a) National committees, b) International Committees, c) Editorial Boards

Dr. Y. R. Waghmare and Prof. Rasika Date are members of the Institute of Chartered Accountants of India

22. Student Projects:

- Percentage of students who have done in-house projects including inter departmental/ programme:** 100% at PG level
- Percentage of students placed for projects in organizations outside the institute i.e., in Research laboratories/ Industry/ other agencies:** Nil

The details of UG level students participating in *Avishkar*, a Research Project Competition organized by Savitribai Phule Pune University, are as follows:

YEAR 2010-11

Sr. No.	Name of The Student	Title of Project	Class	Name of The Guide
1	Pranav C. Shirole Sagar Shah	A Study impact of Levy of Income Tax on selected Urban Co-operative Banks in Pune District	S.Y.B.Com	Prof. Rasika Date

The project was selected in the Savitribai Phule Pune University team for State Level Research Project Competition *Avishkar* 2010-11 held at Nashik.

YEAR 2011-12

Sr. No.	Name of The Student	Title of Project	Class	Name of The Guide
1	Ms. Shruti Nadagouda	A study of ATM facility provided by Urban Co-operative Banks in Pune city area	T.Y.B.Com.	Prof. Rasika Date
2	Tushar R. Gujarathi Vikram U. Gawade	A study of Educational loans given by various banks in Pune city	S.Y.B.Com.	Dr. Sanjeevani Rahane
3*	Gaurav Tyagi	A study of Information Technology based customer services provided by selected Urban Co-operative Banks in Pune city area.	T.Y.B.Com.	Prof. Rasika Date

* This project was selected at University Level *Avishkar*.

YEAR 2012-13

Sr. No.	Name of The Student	Title of Project	Class	Name of The Guide
1	Shilpa Raju*	An Analytical Study of Disputed Statutory dues of select companies	T.Y.B.Com.	Prof. Rasika Date
2	Darshan Shah	Behavioural Finance	T.Y.B.Com.	Prof. Rasika Date

*This project was selected for State Level *Avishkar*.

YEAR 2013-14

Sr. No.	Name of The Student	Title of Project	Class	Name of The Guide
1*	Ms. Khandve Neha Ms. Gothe Amruta	A Study of Impact of Local Body Tax (LBT)	T.Y. B. Com.	Prof. Rasika Date

* This project was selected for University Level *Avishkar*.

YEAR 2014-15

Sr. No.	Name of The Student	Title of Project	Class	Name of The Guide
1*	Ms. Ekta Bhosale Ms Kajal Mokal	Using Smart Phone Smartly	M.Com	Prof. Rasika Date
2*	Ms. Neha Khandve Ms. Bhakti Wagh	Fire Safety Audit- The need of the hour	M.Com	Prof. Rasika Date

* This project was selected for University Level *Avishkar*.

YEAR 2015-16

Prof. Rasika Date represented Savitribai Phule Pune University at the Tenth State Level Research Convention '*Avishkar 2016*' in Commerce category at Post-PG level.

23. Awards / Recognitions received by faculty and students

- Dr. S. K. Rahane: 'Best Teacher Award' by the Progressive Education Society, Pune.
- Mr. Vikram Gawde (2012-13) and Miss Mrinalini Chaturvedi (2013-14) were recipients of the 'Best Student Award' by the college.

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Banerjee Sudipti: Head, Department of Commerce, University of Calcutta.
- Dr. Sanjay Kaptan: Head, Department of Commerce, SPPU, Pune.

25. Seminars/ Conferences / Workshops organized and the source of funding

- a. National: 01
- b. International: Nil
- c. State: 01

Year	Particulars	Theme
2010-11	One Day Workshop on 11 th Oct., 2010	Revision of syllabi for T.Y.B.Com.
2010-11	State Level Seminar on 11 th and 12 th March 2011	Implementation of the International Financial Reporting Standards (IFRS)
2011-12	One Day Seminar on 19 th Jan., 2012	Recent Amendments in Cost Accounting Records Rules and Cost Audit
2012-13	National Level Seminar on 23 rd and 24 th March, 2013	Emerging Trends in Indian Commerce and Industry
2013-14	One Day Seminar on 21 st Feb., 2014	New Companies Act, 2013

26. Students profile (programme/course wise):

UG:

Name of the programme B.Com.	Applications received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	2000	441	209	232	86.00
2011-2012	1991	517	228	289	78.50
2012-2013	2498	473	206	267	71.39
2013-2014	1052	482	218	264	71.17
2014-2015	2284	500	206	294	67.67
2015-2016	2015	563	233	330	RA

PG:

Name of the programme M.Com.	Applications received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	260	61	21	40	45.00
2011-2012	288	58	35	23	81.00
2012-2013	298	57	30	27	47.40
2013-2014	310	63	20	43	52.00
2014-2015	395	58	25	33	47.00
2015-2016	427	57	17	40	RA

27. Diversity of Students

B.Com

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	99.9	0.1	Nil
2012-2013	99.92	0.08	Nil
2013-2014	99.91	0.09	Nil
2014-2015	99.67	0.33	Nil
2015-2016	99.69	0.22	0.08

M.Com

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	99.09	Nil	0.91
2011-2012	99.09	0.91	Nil
2012-2013	98.99	Nil	1.01
2013-2014	100.00	Nil	Nil
2014-2015	100.00	Nil	Nil
2015-2016	100.00	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: 02

29. Student progression

Student progression	Against % enrolled
UG to PG	PG strength is less as compared to UG. Out of total students admitted for PG, more than 50% are our UG students.
PG to M.Phil.	-
PG to Ph.D.	8 students
Ph.D. to post –Doctoral	-
Employed - Campus selection - Other than campus recruitment	Placement cell of the college provides assistance and guidance to the students for employment.
Entrepreneurship / Self-Employment	The department organizes <i>Vyapar Mela</i> , a trade fair for promoting entrepreneurship/self-employment.

30. Details of infrastructural facilities

- Library: Yes
- Internet facilities for staff and Students: Yes
- Class room with ICT facility: Yes
- Laboratory: Yes

31. Number of students receiving financial assistance from college, university, government or other agencies:

Academic Year	Total number of students
2010-11	53
2011-12	114
2012-13	164
2013-14	233
2014-15	314
2015-16	427

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts – Guest lectures, Seminars, Soft Skills Development Workshop.

Variety of activities are undertaken by the department for the enrichment of students and for developing the interests in the various subjects. These activities include:

- **Add-on courses**
 - A course on Tally
 - A course on *Modi* script

- **Skill Development Workshops on:**
 - Accounting and Finance
 - E-Tax Accounting
 - Stock Trading
 - Graphology
- Project report competition
- Employment guidance and interview technique programme
- Career Planning lectures, lectures on how to prepare for M.B.A. entrance examination
- Special guidance for other competitive examinations
- Professional Examinations: guidance is informally provided to the students to appear for C.A., I.C.W.A., and CS examinations, along with the University Curriculum.
- Presentations by Students
- Quiz Competition
- Paper reading competition
- Group Discussion
- Debating and elocution competition on the subjects of current importance
- Placement and counselling
- A Guest Lecture was organized on Union Budget-2016. The speaker was C.A. Chandrashekhar Chitale, Pune.

Field Visits 2014-15

Sr. No.	Faculty In- Charge	Class	Places Visited
1	Dr. S.K. Rahane and Prof. S. R. Hirwe and	M.Com Part I	Sling Flexi Cartons Pvt.Ltd.
2	Dr. A. V. Kamble and Prof. R.D. Jadhav	S.Y.B.Com. B	Gultekdi Market Yard – APMC
3	Prof. R.D. Jadhav	S.Y.B.Com	Katraj Diary
4	Prof. S. R. Hirwe	T.Y.B.Com. C	Chintamani Silk Mills Pvt.Ltd. (Cotton Textile Mill) at Theur

Field Visits 2013--14

Sr. No.	Faculty In- Charge	Class	Places Visited
1	Prof. S. R. Hirwe and Prof. Moreshwar	T.Y.B.Com. C	Malegaon Sugar Factory
2	Dr. A. V. Kamble	S.Y.B.Com. B	Gultekdi Market Yard – APMC

Field Visits 2012-13

Sr. No.	Faculty In- Charge	Class	Places Visited
1	Dr. Mrs S. K. Rahane	T.Y.B.Com. C	Simply Delicious, Pune
2	Prof. S. J. Ahiwale and Prof. R.D. Bansode	S.Y.B.Com. D	Someshwar Sahakari Sakhar Karkhana and Electricity Unit at Baramati Dist., Pune
3	Dr. R.W. Kulkarni and Prof. V.N.Gaikwad	T.Y.B.Com. D	Devgi Warner (I) Ltd, MIDC Bhosari
4	Dr. R.W. Kulkarni and Prof. V.N.Gaikwad	T.Y.B.Com. B	Stock Exchange, Mumbai

Sr. No.	Faculty In- Charge	Class	Places Visited
5	Dr. A. V. Kamble	S. Y. B. Com B	Market Yard, Pune and Packing Unit at Chakan
6	Prof. Moreshwar	F.Y.B.Com.	College of Agricultural Banking, Reserve Bank of India, Pune.

Field Visits 2011-12

Sr. No	Faculty In- Charge	Class	Places Visited
1	Dr. Mrs S. K. Rahane and Prof. S. R. Hirwe	T.Y.B.Com. C	1. Chintamani Silk Mills Pvt.Ltd. (Cotton Textile Mill) at Theur 2. Jaggery Manufacturing Plant at Rahu.
2	Prof. S. J. Ahiwale and Prof. R.D. Bansode	S.Y.B.Com. D	Trimurti Agro Product Ltd. (Sabudana Factory) at Koregaon Bhima, Pune.
3	Dr. R.W. Kulkarni	T.Y.B.Com. D	Devgi Warner (I) Pvt. Ltd,
4	Dr. A. V. Kamble	S.Y.B.Com. B	Market Yard, Pune
5	Prof. Moreshwar and Prof. P. S. Shah	S.Y.B.Com.	College of Agricultural Banking, Reserve Bank of India, Pune.

33. Teaching methods adopted to improve student learning:

- Use of ICT in classrooms, Multiple Choice Question Tests, Group Discussions, Presentations by students

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Through NCC and NSS, and Vidyarthini Manch

35. SWOC analysis of the department and future plans:

Strengths:

- Well qualified and experienced faculty with few members having professional qualification
- Permanent Post-Graduate recognition
- Most of the faculty members have PG recognition
- Adequate options available to the students at various levels
- Research Centre for pursuing Ph. D. in Accountancy, Banking and Finance, Business Administration, Marketing Management, Business Practices and Business Economics.
- Some members of the Department are Members of the Boards of Studies and Senate of SPPU.
- Five members have completed Ph. D., two members have registered for Ph. D., and registration of five members is in process.
- The Department provides Skill Development Courses: 'Certificate Course in Computerized Accounting, Workshop on Accounting and Finance, Modi language, Skill Development Programme, E- Tax Accounting, Introduction to Stock Trading, introduction to Graphology.
- The Department organises industrial visits, workshops, guest lectures, seminars, exhibition and various competitions for all round development of the students.

Weaknesses:

- Some students are from vernacular medium and opt for Marathi as medium for examination purposes as permitted by the SPPU. This has an adverse effect on teaching, learning and the career prospects of the students.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- More research oriented projects
- More use of digital classroom, virtual classroom, ITC.
- More exposure to practical experience
- Placement activity on larger scale

Challenges:

- Meritorious students opt for professional courses like C.A., I.C.W.A., and CS examinations and focus on these examinations. Motivating them for participation in academics and co-curricular activities is a challenge.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans:

- All faculty members will be Ph.D. qualified by 2020.
- E-brochure for better placement of the students.
- More tie-ups with various industries and more add-on courses in collaboration with these industries for the benefit of the students.

□□□

Department of Commerce (Self-Financed)

1. **Name of the department:** Department of Commerce (Self-Financed)
2. **Year of establishment :** 2007
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 B.Com.
 M.Com.
 Bachelor of Business Administration (B.B.A.)
 Bachelor of Computer Application (B.C.A.)
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
 B.Com.: Annual Pattern
 M.Com.: Semester Pattern with Choice Based Credit System
 Bachelor of Business Administration (B.B.A.): Semester Pattern
 Bachelor of Computer Application (B.C.A.): Semester Pattern
6. **Participation of the department in the courses offered by other Departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Assistant Professors	--	31

10. **Faculty profile with name, qualification, designation, specialization, D.Sc. /D.Litt. /Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Prof. M.D.Waghmare	M.Com., M.Phil.	Head of the Department and Vice Principal	Commerce	16	-
Prof. Philomena Rudolf Fernandes	MA, B.Ed., NET ,Pursuing Ph.D.	Assistant Professor	Economics	13	-
Prof. Sangeeta Mavale	M Com, MPM	Assistant Professor	Commerce	13	-
Prof. Mina Gawande	MSc, M.Phil. (Stats)	Assistant Professor	Commerce	9	-

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Prof. Swapna Tekale	MSc. , MCA	Assistant Professor	Computer Applications	9	
Prof. Pravin Salunke	M Com, GDCA, SET, CA-IPCC	Assistant Professor	Commerce	8	-
Prof. Vaishali Doshi	M Com, CS-Inter, NET	Assistant Professor	Commerce	8	-
Prof. Shruti Pawar	MCS	Assistant Professor	Computer Science	8	-
Prof. Jasmeet Jangira-Patil	MBA - Marketing	Assistant Professor	Marketing	7	-
Prof. Amol Shinde	MBA – Finance, NET Qualified in June 2011, SAP – ERP (FI/CO), Pursuing PhD in Financial Management	Assistant Professor	Finance	7	
Prof. Bhoomika Parmar	M Com	Assistant Professor	Commerce	7	-
Prof. Sonali Raut	MCA	Assistant Professor	Computer Applications	7	-
Prof. Lawly Das	MBA – HRM, M.A – English, Certified Corporate Trainer from British Connections, Pune	Assistant Professor	HRM	6	-
Prof. Snehal Mirajkar	MBA – Finance and Marketing	Assistant Professor	Finance and Marketing	6	-
Prof. Vaibhav Thakare	MCA	Assistant Professor	Computer Applications	6	-
Prof. Gauri Khire	MCA	Assistant Professor	Computer Applications	6	-
Prof. Pradnya Khalane	MCA, MSc(maths) , NET(CS)	Assistant Professor	Computer Applications	6	
Prof. Shreya Vaidya	M Com, CWA-Inter, SET	Assistant Professor	Commerce	5	-
Prof. Vanita Patil	MCA	Assistant Professor	Computer Applications	5	-
Prof. Prashant Patil	MCA	Assistant Professor	Computer Applications	5	-
Prof. Yuvraj Shelke	M.A., M.Phil. pursuing	Assistant Professor	English	4	-
Prof. Maitreyee Phadnis	M Com, DTL Pursuing M.Phil.	Assistant Professor	Commerce	4	-
Prof. Namrata Gadgil	MCA	Assistant Professor	Computer Applications	4	-
Prof. Urmila Karale	M.A English, MBA – Finance, NET Qualified in June 2012	Assistant Professor	Finance	3	-
Prof. Niketan Shet	M Com, MBA, NET-JRF	Assistant Professor	Commerce	3	-
Prof. Parag Fulzele	MCA	Assistant Professor	Computer Applications	3	-
Prof. Neha Deshpande	MBA – Marketing, NET Qualified in June 2013	Assistant Professor	Marketing	2	-

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Prof. Jayashree Chinchankar	MLL and LW MBS –HR	Assistant Professor	HRM	1	-
Prof. Mansi Vale	MCA	Assistant Professor	Computer Applications	1	-
Prof. Sai Dumbre	MCA	Assistant Professor	Computer Applications	1	-
Prof. Aditi Patil	B.C.S., M.C.A.	Assistant Professor	Computer Applications	5	-
Prof. Pushpala Gorade	B.C.S., M.C.A.	Assistant Professor	Computer Applications	4	-

11. List of Senior Visiting Faculty:

- Mr. Pradeep Thite, Chartered Accountant, Pune.
- Adv.AjayWagh, Civil Lawyer, Shivajinagar Court, Pune.
- Adv. Vaibhav Salunke, Cyber Law Lawyer, Pune.
- Mr. Sumit Shah, Chartered Accountant, Pune.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

B.Com.: 5%

M.Com.: 5%

Bachelor of Business Administration (B.B.A.): Nil

Bachelor of Computer Application (B.C.A.) : Nil

13. Student -Teacher Ratio (programme wise):

B.Com.: 17:1

M.Com.: 15:1

Bachelor of Business Administration (B.B.A.): 13:1

Bachelor of Computer Application (B.C.A.) : 13:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Three posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	2	2
Class 4	2	2

15. Qualifications of teaching faculty with DSc/D.Litt./Ph.D./MPhil/PG:

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	33	2	-	-	-

16. Number of faculty with on-going projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University:

Few staff members are involved in research activities. The department intends to apply for the Research Centre in the near future.

19. Publications:

Name of the faculty	Papers			Books			Total publications	Total citations	h-index
	International	National	Presented in conference	International	National	Book chapter			
Prof. Lawly Das	2	3	-	-	-	-	5	-	-
Prof. Amol Shinde	1	1	-	-	-	-	2	2	1
Prof. Philomena R. Fernandes	-	-	3	-	-	-	3	-	-
Prof. Niketan Shet	-	-	3	-	-	-	3	-	-
Prof. Vaishali Doshi	-	-	1	-	-	-	1	-	-
Prof. Sangeeta Mavale	-	-	-	-	1	-	1	-	-
Prof. Vaibhav Thakare	1	-	-	-	-	-	1	-	-
Prof. Gauri Khire	1	-	-	-	1	-	2	-	-
Prof. Namrata Gadgil	-	1	-	-	3	-	4	-	-

• Books with ISBN/ISSN numbers with details of publishers

Author	Name of Books	ISBN
Prof. Gauri Khire	Programming in Visual Basics.	978-93-5158-198-7
Prof. Namrata Gadgil	Computer Networking and cyber security	978-93-5158-318-9
Prof. Namrata Gadgil	Java Programming	978-93-5158-323-3
Prof. Namrata Gadgil	Advanced Web Technology	978-93-5158-479-7

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees
- b) International Committees
- c) Editorial Boards

Nil

22. Student projects

- a) Percentage of students who have done in house projects including inter departmental/programme:

B.B.A.: 100%

B.C.A.: 100%

M.Com.: 100%

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students:

- Raj Agarwal (SY BBA) worked with IIM Ahmedabad in their "Scholars for Change" programme during the period of April - June 2014 and December 2014 – February 2015 where there were around 750 people from across the country. He was the top performer in that programme and hence was called there for an 'on campus internship opportunity'. He worked in the capacity of an Assistant Campaign Manager where he helped in understanding the impact of the educational content on the learning pattern and understanding of the children thereby promoting the importance of Innovation in Human Life.
- Sayali Bapat (SY BBA) and Prathamesh Shinde (TY BBA): Second Prize in the Inter College Paper Presentation Competition
- Sandeep Kumar (FY BBA) and Sayali Bapat (TY BBA): First Prize in the Inter College Paper Presentation Competition
- Zaheer Gari (FY BBA): Selected for AIESEC's International Internship Program. He worked for Global Social Volunteering Project hosted by AIESEC in the University of Johannesburg, South Africa.
- Mayur Kamble, a student of BCA won the Silver Medal in the Inter-Collegiate Boxing competition.

Sports achievements

Sr. No.	Name	Game	Level	Recognition	Year
1.	Vaibhav Balwadkar	Baseball	Inter Collegiate	Bronze	2012-13
2.	Ajit Pawar	Kho kho	Inter Collegiate	Bronze	2012-13
3.	Vaibhav Balwadkar	Softball	State	Participated	2012-13
4.	Vaibhav Balwadkar	Baseball	State	Participated	2013-14
5.	Kalpesh Thombare	Taekwondo	State	3rd Place	2013-14
6.	Vaibhav Kulkarni	Baseball	Inter Collegiate	3rd Place	2013-14
7.	Mayur Kamble	Baseball	Inter Collegiate	3rd Place	2013-14
8.	Vaibhav Balwadkar	Baseball	Inter Collegiate	Winner	2014-15
9.	Manish Gaikwad	Baseball	Inter Collegiate	Winner	2014-15
10.	Garima Vivek Motadoo	Cricket	Inter Collegiate	Winner	2014-15
11.	Yuvraj Rakshe	Baseball	Inter Collegiate	Winner	2014-15
12.	Kalpesh Thombare	Baseball	Inter Collegiate	Winner	2014-15
13.	Swamy Sumit	Hockey	Inter Collegiate	1st	2015-16
14.	Sharma Gemonder	Football	Inter Collegiate	Participated	2015-16
15.	Sachinand Unde	Football	Inter Collegiate	Participated	2015-16
16.	Akshay Bhalerao	Football	Inter Collegiate	Participated	2015-16
17.	Yash Agarwal	Football	Inter Collegiate	Participated	2015-16
18.	Amey Kalambe	Cross Country	Inter Collegiate	2 nd	2015-16
19.	Amey Kalambe	Boxing	Interzonal	2nd	2015-16
20.	Chitale Nandan	Table Tennis	Inter Collegiate	Participated	2015-16

Sr. No.	Name	Game	Level	Recognition	Year
21.	Nishigandha Joshi	Volleyball	Inter Collegiate	Participated	2015-16
22.	Mangesh Manohar	Best Physique	Zone	3rd	2015-16
23.	Mangesh Manohar	Best Physique	Inter Collegiate	2nd	2015-16
24.	Mangesh Manohar	Best Physique	Modern Shree		2015-16
25.	Krishnamurthy Shrijeet	Basketball	Inter Collegiate	Participated	2015-16

Name of the Faculty: Prof. Sangeeta Mavale

- Appointed as a Director in Sampada Cooperative Bank in 2015
- Invited as a resource person by Maharashtra Cultural Ministry in 2015
- ‘Best Teacher Award’ in 2014 by Kasaba Ganapati Trust, Pune
- *Mamta* Award for Powada
- *Ranragini* Award for Powada

24. List of eminent academicians and scientists / visitors to the Department:

- Mr. D. S. Kulkarni , Chairman, DSK Enterprises
- Miss Kalpana Madhyani, Corporate Trainer
- Mrs. Anu Sethi, Training Manager, Volkswagen
- Mr. Amit Jadhav, Director of Modelcam Technologies Pvt. Ltd.
- Mr. Vilas Jagtap, CEO, *Knowledge Planet*.
- Dr. Sharayu Bhakare, Assistant Professor, Symbiosis College of Arts and Commerce, Pune.
- Dr. Rashmi Hebalkar, Member – Business Ethics Forum.
- Mrs. Yamini Mathur, Corporate Trainer.
- Mr. Mohan Palesha, Chairman – District Rotary Foundation.
- Mr. Avi Raj from IIM K, Mentor at PIBM, Pune.
- Mr. David Hangsing from IIMB, Mentor at PIBM, Pune.
- Mr. Samir Mondal, H.O.D – Academics of PIBM, Pune.
- Mr. Nihal Khan, Regional Manager - ICFL, ICICI Securities Ltd.
- Mr. Amit Kadam, Regional Marketing Manager - ROM and MPCG, ICICI Securities Ltd.
- Mr. Deepak Bodhani, Managing Partner at Digitech Engineers.
- Mr. Mahendra Patil, Head – HR, Whirlpool.
- Mr. Ravindra Singh, CFO, LOOP Mobile.
- Mr. Sunil Kumar Singh, AVP, Channel and Business Development, PIAGGIO Vehicles.
- Mrs. Anne Anish, Kensho Image Consultancy.
- Dr. P. V. Sathe, Coordinator, Research Centre, BMCC, Pune.
- Dr. N. M. Wechalekar, Director, IndSearch.
- Dr. N. M. Nare, Principal, T C College.

- Adv. Ajay Wagh, Advocate.
- CA. Sumit Shah, Partner, Vakhariya Associates.
- Dr. Sanjay Kaptan, HoD, DCRC, Pune University
- Dr.Y.M.Thorat, Vice Principal, Jedhe College.
- Dr.Mukund Mahajan –Retired Associate Professor in Economics.
- Mr. Rajendra Rakhecha, CEO, Earthsoft Consultant
- Prof. Dr. Ranjit Patil, Vice Principal, DY Patil College.
- Prof. Shivendu Bhushan, HoD BCA, Indira College of Commerce and Science.
- Mrs. Shakila S., HOD, Computer Science, Abeda Inamdar Senior College.
- Dr. Bhooshan Kelkar, IT Expert.
- Mr. Amit Jadhav, Entrepreneur.
- Mr. Bharat Jagtap, Sr. S/w Associate, Bitcode Technologies.
- Mr. Vilas Jagtap, Corporate trainer.
- Mrs. Yamini Mathur, Corporate Trainer.

25. Seminars/ Conferences/Workshops organized and the source of funding:

- National: 01 (Funded by Savitribai Phule Pune University under QIP)
- State: 05 (Funded by Savitribai Phule Pune University under QIP)
- District: 02 (Funded by Savitribai Phule Pune University under QIP)

26. Student profile programme/course wise:

B.B.A.

Name of the Course/ programme	Application received	Selected	Enrolled		Pass %
			M	F	
2011-2012	150	71	47	24	85.5
2012-2013	210	105	69	36	82.8
2013-2014	265	146	94	52	84.3
2014-2015	445	205	130	75	71.9
2015-2016	582	248	164	84	RA

B.Com.

Name of the course/ Programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	5	5	3	2	40.00
2011-2012	150	130	75	65	72.00
2012-2013	400	358	220	138	63.55
2013-2014	450	392	258	134	53.73
2014-2015	600	392	216	176	49.50
2015-2016	650	430	245	185	RA

M.Com

Name of the course/ Programme M.Com	Applications received	Selected	Enrolled		Pass %
			M	F	
2012-2013	80	62	35	25	72.00
2013-2014	75	60	30	30	75.00
2014-2015	70	57	30	27	88.8
2015-2016	90	60	25	35	RA

B.C.A.

Name of the course/ Programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2011-2012	142	117	67	50	66.67
2012-2013	255	214	134	80	61.74
2013-2014	240	196	112	84	72.58
2014-2015	446	245	148	97	48.63
2015-2016	582	249	146	103	RA

27. Diversity of Students:

B.B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2011-2012	94.4	5.6	Nil
2012-2013	90	10	Nil
2013-2014	85.6	6.2	8.2
2014-2015	90	5	5
2015-2016	93.95	3.6	2.4

B.Com.

Year	% of students from the same state	% of students from other States	% of students from abroad
2012-2013	96	4	Nil
2013-2014	94	2	Nil
2014-2015	95	5	Nil
2015-2016	95	5	Nil

M.Com.

Year	% of students from the same state	% of students from other States	% of students from abroad
2012-2013	100	Nil	Nil
2013-2014	100	Nil	Nil
2014-2015	100	Nil	Nil
2015-2016	100	Nil	Nil

BCA

Year	% of students from the same state	% of students from other States	% of students from abroad
2011-2012	85	10	5
2012-2013	85	10	5
2013-2014	85	5	10
2014-2015	85	5	10
2015-2016	97.99	1.2	0.8

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:

Defense Service: 2%

29. Student progression

Student progression	BBA	B. Com.	BCA	M.Com.
UG to PG	80%	60%	89%	-
PG to M.Phil.	-	5%	-	-
PG to Ph.D.	-	-	-	-
Ph.D. to Post-Doctoral	-	-	-	-
Employed				
• Campus selection	15%	5%	4%	10%
• Other than campus Recruitment				5%
Entrepreneurship/Self-employment	5%	25%	Nil	5%

30. Details of Infrastructural facilities:

- Library: Yes
- Internet facilities for Staff and Students: 4 Mbps optic fibre leased line)
- Class rooms with ICT facility: 100%
- Laboratories: Yes

Instruments	Quantity		
	Computer Lab I	Computer Lab II	Computer Lab III
Computer	31	26	43
LCD Projector	1	1	1
UPS	1	1	1
Server	1	1	-
Dot Matrix Printer	3	3	6
LaserJet Printer	-	-	2
A.C.	2	2	-
CCTV cameras	1	1	-
Intercom	-	1	1
Laptop	-	-	3

31. Number of students receiving financial assistance from college, University, government or other agencies:

- Department level fee concession is given to selected financially weak students.
- In view of huge fees amount, instalment payment facility is also provided to the needy students.

No. of BBA Students Availing Scholarship

YEAR	Number of students
2011 – 12	09
2012 – 13	09
2013 – 14	37
2014 – 15	64
2015 - 16	78

- Scholarship from Social Welfare department is awarded to 42% students as prescribed by the government norms.
- B.Com students got scholarship under Samaj Kalyan SPPU -186 students for 2014-2015 and Freeship-63 students

- Scholarship under Samaj Kaylan SPPU -120 students for 2013-2014 and Freeship-35 students
- Scholarship under Samaj Kaylan SPPU (2014-2015)
M.Com. I: 15 Students
M.Com. II: 18 Students

B.C.A.

YEAR	Total Number of students
2011-12	31
2012-13	27
2013-14	77
2014-15	105
2015-16	107

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

Commerce department organized lecture series at local level under the banner ‘*Grahak Teerth Vyakyanmala*’ where eminent speakers such as ACP Barge on Cyber Security, Renu Gavaskar, a social worker, Dr. Milind Bhoi were invited to motivate students for various aspects of learning and skill developments.

- In house Lecture series under soft skill on Direct Taxes - lecture by CA Sumit Shah for M.Com. students
- In house Lecture series on Human Rights by Adv. Ajay Wagh
- In house Lecture series on Cyber Law by Adv. Vaibhav Salunke

Annual activities of BBA for 2012-13

Date	Activity
26/07/2012	Workshop on Personality Development for S.Y. BBA
30/07/2012	Seminar on Communication Skills for F.Y. BBA and F.Y. BCA
2/08/2012	Guest Lecture on “ Role of Ethics in Today’s Business ” for T.Y. BBA
6/08/2012	Seminar on Body Language and Interview Skills
9/08/2012	Guest Lecture on Entrepreneurship Development for S.Y. and T.Y. BBA
12/08/2012 (World Youth Day)	Competition on GD and Presentation for all BBA students
25/08/2012	Academic Visit for F.Y. BBA to NIBM, Kondhwa.
18/12/2012	Seminar on Global Education by FOCUS Consultants for TY BBA and TY BCA
21/12/2012	1 st Industrial Visit for S.Y. BBA
24/12/2012 to 29/12/2012	Days and Events celebrated
January, 2013	Placement Activity for T.Y.BBA
5/01/2013	2 nd Industrial Visit for S.Y. BBA
8/01/2013	Guest Lecture in Corporate Communications and Interview Techniques by Miss Kalpana Madhyani for SY BBA and TY BBA
12/01/2013	Guest Lecture in Corporate Communications by Mrs. Anu Sethi for FY BBA
22/01/2013	Annual Gathering of WCBS
25/01/2013	Workshop on G.D and P.I by Career Launcher for S.Y. BBA and T.Y. BBA

Annual activities of BBA for 2013-14

Date	Activity
13/07/2013	Orientation Programme for F.Y.BBA and F.Y.BCA on the topic “ Today is your Tomorrow ” by Mr. Amit Jadhav
29/07/2013	Guest Lecture on “ Management through Communication ” by Mr. Vilas Jagtap
8/08/2013	Guest Lecture on Communication Skills on “ Creating value through Communication ” for F.Y BBA students by Dr. Sharayu Bhakare
10/08/2013	Guest Lecture on “ Role of Ethics in Today’s Business ” for S.Y. BBA and T.Y. BBA by Dr. Rashmi Hebalkar
12/08/2013 to 17/08/2013	Youth Week (Motivational Movies, Critical Review of the shown Movie, Art Exhibition) for BBA and BCA students
13/08/2013	Academic Visit to NIBM, Kondhwa for F.Y. BBA students
13/08/2013	Guest Lecture on “ Body Language and Interview Skills and Skillsets required for the Corporate Industry ” for S.Y. BBA and T.Y. BBA by Mrs. Yamini Mathur
14/08/2013	Guest Lecture on “ The Art of Standing Out ” for F.Y. BBA by Mrs. Yamini Mathur
17/08/2013	Concluding Function of Youth Week followed by cultural programmes and certificate distribution
20/08/2013 and 22/08/2013	Presentation on “ Cultural and Linguistic Diversity in English speaking Countries ” by F.Y.BBA students
29/08/2013	Guest Lecture on Communication Skills on “ Group Dynamics and Effective Resume Writing Skills ” for S.Y and T.Y BBA students by Dr. Sharayu Bhakare
11/12/2013	Guest Lecture in Investment Banking by IMARTICUS LEARNING for S.Y.BBA and T.Y.BBA
16/12/2013 to 21/12/2013	Social Week
20/12/2013	Guest Lecture on “ Developing a Positive Mind-set: Changing Attitude to Change your Life ” for F.Y.BBA, S.Y.BBA and T.Y.BBA by Mr. Mohan Palesha
28/12/2013	Guest Lecture on “ The Power of Subconscious Mind ” for F.Y.BBA, S.Y.BBA and T.Y.BBA by Mrs. Anu Sethi
7/01/2014	Guest Lecture in Group Discussion and Personal Interview for F.Y.BBA, S.Y.BBA and T.Y.BBA by the mentors of PIBM (Mr. Avi Raj from IIM K; Mr. David Hangsing from IIM B; Mr. Samir Mondal, H.O.D – Academics of PIBM)
10/01/2014	Seminar on the “ Importance of Stock Market for Students ” by ICICI direct Centre for Financial Learning. Also conducted Stock MIND competition and seminar
13/01/2014	Seminar on “ Entrepreneurship Development ” by Hon’ble Shri D. S. Kulkarni for the BBA, BCA and M.Com students
22/01/2014	Parents – Teacher’s Meet for the FY BBA students post declaration of FY BBA results
25/01/2014	Celebration of Kanitkar Day
28/01/2014 to 31/01/2014	Annual College Fest – Aarohan and Days to be celebrated
4/02/2014 and 5/02/2014	State Level Seminar on “ Emerging Trends in Service Sector ” for the BBA, BCA, B.Com and M.Com students
14/02/2014	1 st Industrial Visit for S.Y.BBA
17/02/2014	2 nd Industrial Visit for S.Y.BBA
28/03/2014	Farewell for T.Y. BBA

Annual activities of BBA for 2014-15

Date	Activity
10/07/2014	Orientation Programme for F.Y. BBA by Mr. Sanjay Katkar, Co-Founder and CTO, Quick Heal Technologies on “ Management Education and the Expectation of Corporate World from the Budding Managers ”
16/07/2014	Guest Lecture on “ Communication as Interaction ”
18/07/2014	Guest Lecture on “ Small Business Ideas and Opportunities ”
22/07/2014	Guest Lecture on “ Group and Team Dynamics ”
25/07/2014	Guest Lecture on “ Good Ethics mean Good Business ” for S.Y. BBA and T.Y. BBA by Dr. Rashmi Hebalkar
29/07/2014	Guest Lecture on “Building Your Talent Pool for Future Growth”
1/08/2014	Academic Visit to NIBM, Kondhwa for F.Y. BBA students
8/08/2014	Guest Lecture on “ Trading in Stocks and Money Multiplier ”

Date	Activity
12/08/2014 to 16/08/2014	International Youth Day / Week (Motivational Movies, Critical Review of the Movie, Art Exhibition) for B.Com, BBA and BCA students
16/08/2014	Concluding Function of International Youth Week followed by cultural programmes and certificate distribution
26/08/2014	Guest Lecture on “Internet / Online Marketing”
29/08/2014	Guest Lecture on “Corporate Manners and Etiquettes”
2/09/2014 and 3/09/2014	Group Presentation on “Cultural and Linguistic Diversity in English speaking Countries” by F.Y.BBA students
9/09/2014	Guest Lecture on “Building on own strength”
8/12/2014	Guest Lecture on “Image Management through Appearance and Communication” for S.Y.BBA and T.Y.BBA by Anne Anish
10/12/2014	Guest Lecture on “Talent Management” for S.Y.BBA and T.Y.BBA by Mr. Sandeep Chougale
13/12/2014	Guest Lecture on “Corporate Expectations and Opportunities in Marketing, HR and Finance” for F.Y.BBA and S.Y.BBA by Mr. Samir Mondal, Mr. Sunil Kr. Singh, Mr. Ravindra Singh and Mr. Mahendra Patil
16/12/2014	Guest Lecture on “Requirement of Industrial Skills for Accounts and Finance Career” for F.Y.BBA, S.Y.BBA and T.Y.BBA by Prof. Raghvan Iyenger
19/12/2014	Guest Lecture on “Soft skills and Personality Development” for S.Y.BBA and T.Y.BBA by Prof. Dipti Inamdar
20/12/2014	Guest Lecture on “Stock market and Equity Research” for S.Y.BBA and T.Y.BBA by Mr. Bharat Dalal and Mr. Samir Mondal
22/12/2014	Academic Visit for F.Y. BBA (A) to NIBM, Kondhwa
23/12/2014	Academic Visit for F.Y. BBA (B) to NIBM, Kondhwa
30/12/2014	Guest Lecture on “Basics of Photography” for BBA and BCA by Mr. Vivek Athani
7/01/2015 to 10/01/2015	Annual College Fest “AAROHAN – EXPLORING THE LIMITLESS TALENT”
28/01/2015 and 30/01/2015	Industrial Visits for SY BBA
31/01/2015	Introductory Workshop on ‘Digital Marketing’ for BBA
4/02/2015 – 7/02/2015	SOCIAL WEEK
13/02/2015 and 14/02/2015	STATE LEVEL SEMINAR on ‘Business Innovation through Advanced IT’ for the BBA, BCA, B.Com and M.Com students
20/02/2015	Lowe Lintas Recruitment Drive for TY BBA, TY BCA and TY B.Com

Annual activities of BBA for 2015-16

Sr. No.	Date	Activity
1	30/06/2015 and 1/07/2015	Counselling Programme for F.Y.BBA students by Prof. M.D.Waghmare
2	2/07/2015	Guest Lecture on “Students and Ethics” for S.Y. BBA by Dr. Rashmi Hebalkar
3	3/07/2015	Guest Lecture on “Image Management through Appearance and Communication” for S.Y. BBA by Mrs. Anne Anish
4	6/07/2015 – 11/07/2015	Personality Development in-house activity / workshop for S.Y.BBA during regular classes
5	9/07/2015	Seminar on “Understanding the General Ability Test Pattern and its preparation” for T.Y. BBA and T.Y.BCA by Mr. Amitendra Kumar
6	15/07/2015	Guest Lecture on “Digital Entrepreneurship – A Choice” for S.Y. BBA and T.Y. BBA by Bajaj Allianz
7	13/07/2015 – 18/07/2015	Team Building and Self-Introspection in-house activity / workshop for S.Y.BBA during regular classes
8	22/07/2015	Guest Lecture on “Changing Face of HR - New Trends in HR” for S.Y. BBA and T.Y. BBA (HR Spl.) by Prof. Ashish Mohture
9	24/07/2015	Orientation Programme for F.Y. BBA, F.Y. BCA and F.Y M.Com by Mr. Pratap Govindrao Pawar, Chairman of Sakal Papers Limited and Inauguration of Activity Club
10	29/07/2015	Guest Lecture on “Entrepreneurship and Event Management” for S.Y and T.Y BBA by Mr. Siljith Mohan
11	31/07/2015	One day certified workshop on “Confidence Building and Emotional Intelligence” for BBA students by Mrs. Anne Anish
12	31/07/2015	Guest Lecture on “Developing a Career Personality” for FY BBA by Mr. Pushkar Aurangabadkar

Sr. No.	Date	Activity
13	1/08/2015	Obituary Programme on Late Dr. A P J Kalam organized by SY BBA and TY BBA
14	10/08/2015	Guest Lecture on “Team Building” for SY BBA and TY BBA by Mrs. Priya Agashe
15	11/08/2015	Fresher’s Welcome for F.Y. BBA jointly organized by S.Y. BBA and T.Y. BBA
16	12/08/2015–25/08/2015	International Youth Day / Week (Motivational Movies, Critical Review of the Movie, Art and Craft Exhibition, One Act Plays and Competition on Diversity in Culture) for B.Com, BBA, BCA and M.Com students
17	25/08/2015	Concluding Function of International Youth Week followed by cultural programmes and certificate distribution
18		Project on Research Methodology for T.Y.BBA
19	30/08/2015	Medical Check Up for FY BBA students
20	31/08/2015	PTA meet for BBA students
21	1/09/2015	Entrepreneurship Day for BBA and BCA students
22	2/09/2015	One day certified workshop on “Communication of clothes, attractive dressing as per body shape and appropriate dressing, grooming and body language for interviews” for BBA students by Mrs. Anne Anish and Miss Ritu Punjabi
23	3/09/2015	One day certified workshop on “Public Speaking and Interview Skills” for BBA students by Mrs. Anne Anish
24	4/09/2015	Guest Lecture on “Health Education for Girls” for BBA, BCA and B.Com by a team of doctors from The Rotary Club of Daund
25	8/10/2015	Guest Lecture on “Financial Planning for Young Investors by SEBI” for F.Y.BBA by Mr. Pradeep Thite
26	9/10/2015	Parents’-Students Meet for S.Y.BBA and T.Y.BBA
27	10/10/2015	Parents’-Students Meet for F.Y.BBA
28	11/10/2015	Guest Lecture on “Cyber Crime” for S.Y.BBA and T.Y.BBA by Mr.
29	16/10/2015	Guest Lecture on “HR Skills for Future Managers” for S.Y.BBA and T.Y.BBA (HR spl.)by Mr. Sudhindra Sarnobat
30	18/10/2015 – 23/10/2015	SOCIAL WEEK
31	19/10/2015	FDP on “Investment Awareness” by Kotak Mahindra
32	29/10/2015	Guest Lecture on “Study Overseas” for S.Y and T.Y BBA by SIEC
33	4/01/2016 - 9/01/2016	Annual College Fest “AAROHAN – EXPLORING THE LIMITLESS TALENT”
34	4/02/2016	Model Layout competition for S.Y. BBA
35	15/02/2016 - 16/02/2016	STATE LEVEL SEMINAR on ‘Role of E-Commerce in Modern Business’ for the BBA, BCA, B.Com and M.Com students
36	4/03/2016	Industrial Visit for S.Y. BBA (A and B) to Parle (Talegaon) and Max On Wheels (Chakan)
37	9/03/2016	Industrial Visit for S.Y. BBA (A and B) to Oxyrich and Jainam Industries (Kharadi)

Annual activities of BCA 2012-13

Date	Activity
26/06/2012	Guest lecture on ERD and DFD
13/07/2012	Importance of communication skills
1/8/2012	Importance of Ethics and etiquettes
10/8/2012	Personality Development
30/11/2012	Pre placement session by TCS.
18/12/2012	Seminar on Global Education by FOCUS Consultants for TY BBA and TY BCA
19/12/2012	Seminar on Career Opportunities Abroad for TY BBA and TY BCA
20/12/2012	Seminar on Social Media Mkt. and Public Speaking for SY BBA and SY BCA
22/12/2012	Seminar on interview skills by IT junction for TYBCA and TYBBA
27/12/2012	Going through MBA CET and CAP rounds by MIBM.
19/01/2013	Preparing for interview by Dinesh Nikam(Tech Mahindra)
18/02/2013	Guest lecture on “Project Development” by Shakila S.

Annual activities of BCA 2013-14

Date	Activity
4/7/2013	"Ice breaker"- Introduction followed by Quiz
29/07/2013	Guest lecture on "Management through communication" by Mr. Vilas Jagtap
7/8/2013	Guest lecture on "Developing DFD and ERD" by Prof. Shivendu Bhushan
12/08/2013 to 17/08/2013	"Youth Week" (Motivational Movies, Critical Review of the shown Movie, Art Exhibition) for BCA students.
21/08/2013	"Planning for Study for Examination" by Rajendra Rakhecha in association with Krip's foundation
21/8/2013	"Do's and Don'ts to be Successful" by Rajendra Rakhecha in association with Krip's foundation
22/8/2013	"How to make Resume" and "Facing an Interview" by Dr. Bhooshan Kelkar
27/8/2013	"Body Language and Presentation Skills" By Mrs. Yamini Mathur
30/11/2013	Placement activity for TYBCA (Wipro).
16/12/13 to 21/12/13	"Social week"
24/12/2013	Guest lecture by Dr. Ranjeet Patil.
4/1/2014	Felicitation of F.Y. BCA toppers and distinction holders and Parents-Teachers Meet.
13/01/ 2014	Seminar on "Entrepreneurship Development" by Hon'ble Shri D. S. Kulkarni for the BCA students.
21/01/ 2014	Workshop on mobile application development (android and iPhone) by Mr. Bharat Jagtap
4 and 5/02/2014	State Level Seminar on 'Emerging Trends in Service Sector' for the BBA and BCA students

Annual activities of BCA for 2014-15

Date	Particulars
01/07/2014	Counselling Programme for F.Y. BCA students
07 th to 12 th July 2014	TYBCA project topic submissions.
15/07/2014	Guest lecture on ERD and DFD by Prof. Shivendu Bhushan.
21/07/2014	Guest Lecture on "Importance of Ethics and etiquettes"
26/07/2014	Guest Lecture on "Database designing and Normalization"
02/08/2014	Guest Lecture on "Personality Development"
16/08/2014	Concluding Function of International Youth Week followed by cultural programmes and certificate distribution
06/12 to 07/12/2014	Placement by WIPRO at IICMR
12/12/2014	Guest Lecture on "Image Management through Appearance and Communication" for S.Y.BBA and T.Y.BBA by Anne Anish
19/12/2014	Guest Lecture on "Presentation Skills" by Dipti Inamdar
30/12/2014	Guest Lecture on "Basics of Photography" by Mr. Vivek Athani
07/01 to 10/01/2015	Annual College Fest "AAROHAN – EXPLORING THE LIMITLESS TALENT"
17/01/2015	Parent Teachers Meet
20/01/2015	One day workshop on "Understanding Linux "
03/02/2015	Guest Lecture on "Web Application Development and Global certification" by Aptech Computers
04/02 to 07/02/2015	SOCIAL WEEK
13 and 14/02/2015	STATE LEVEL SEMINAR on 'Business Innovation through Advanced IT' for the BBA, BCA, B.Com and M.Com students
20/02/2015	Lowe Lintas Recruitment Drive for TY BBA, TY BCA and TY B.Com

Annual activities of B.Com. 2012 -13

Date	Activity
17 /08/2012	Inauguration of Commerce Association by CA Dr. Y. R. Waghmare
3 /09/2012	Demonstration of Preparation of Eco-friendly Ganesh Idols By Prof. Swati Pathak
12/12/2012	Guest lecture on Practical Approach to Banking by Ms. Sandhya Deshpande
29 /12/ 2012	Guest lecture on Social Media in Advertising by Mr. Ankur Shrivastava

Date	Activity
7/01/ 2013	Guest Lecture on EVS By Ms. Yogita Chaoudhary
8/01/ 2013	Guest Lecture on Resume Writing By Prof. Bhushan Kelkar
9 /01/ 2013	Guest Lecture on Cost Audit by Dr. Sanjay Patankar How to write law paper by of Prof. Prakash Chaudhary

Annual activities of B.Com. 2013 -14

Date	Activity
18 /06/2013	Seminar on Six Sigma By Ms. Sandhya Deshpande
23/08/ 2013	Seminar on Career Guidance on CA and CS By CA. Bhushan Kotecha and CA. Mukesh Kunwad
26/08/ 2013	Inauguration of Commerce Association by CA. Dr. Y. R. Waghmare
28/08/2013	Seminar on Soft Skills by Krips Foundation
2/09/ 2013	Guest lecture on Career Opportunities in Marketing by Dr. P. V. Sathe
4/09/ 2013	Guest lecture on Interview Skills by Prof. Deepak Powdel
4/09/2013	Guest lecture on FDI in Indian economy by Dr. Sanhita Athawale
11/12/2013	Introduction to share market By Mrs. Ashwini Thorat
20 /12/2013	Competitions on Poster Competition with reference to Independence Day Essay and Pick and Speak Competitions
5/01/2014	Road Safety and Social Week

Annual activities of B.Com. 2014 -15

Date	Activity	Speaker
14 /07/2014	Group Discussion on Revamping Education System	NA
18 /07/2014	Guest Lecture on Environmental Awareness	Prof. P. B. Salunke
22 /07/2014	Guest lecture on Personality Development	Prof. Pushkar Aurangabadkar
25/ 07/2014	Commerce Quiz Competition	NA
8/08/2014	Visit to Aundh Military Station For Rakshabandhan	NA
19/08/2014 23/08/2014	Youth Week Celebration 1. Exhibition 2. Speech Competition 3. Cooking without fire 4. Face painting 5. Closing Ceremony	Prin. Dr. R S Zunjarrao
21/08/2014	Journalism: Widening Horizon in Commerce	Chandan Hygunde, The Indian Express
5 /09/2014	Teachers day celebration	NA
12/09/2014	Banking Poster Exhibition	Dr. J R Lanjekar Adv. Subhash Mohite
25/09/2014 27/09/2014	Lecture Series 1. Consumer Protection Act 2. RTI Act	Grahakteertha Bindhu Madhav Joshi
	3. Cyber Law 4. Lifestyle	Vivek Welankar
11/01/2014	Guest Lecture on "Self-Awareness"	Sr. Police Inspector Bhanupratap Barge Dr. R P Mane
15 /01/2014	Guest Lecture on Tally ERP	Prof. Omkar Natu
16 /01/2014	Guest lecture on Professional Courses preparation	Poonam Ghodake
23 /01/2014	Social Visit to <i>Gharata Prkalpa</i> at <i>Bholagiri Vidyalaya Pune</i>	Prof. Iyenger
24/01/2014	Commerce Fair 2014-15	NA
24/01/2014	Talk on Entrepreneurship	NA
31 /01/2014	Guest Lecture on Gandhi Fellowship Programme	Mr. Ram Khutwad, Urja Industries Mr. Mayur
12 /01/2015	Placement Activity-Prism Club	NA
13 /01/2015	Guest Lecture on Soft Skills	Prof. Dipti, ICAI
16 /01/2015	Placement Activity - Deutsche Bank	NA
17/01/ 2015	EVS Exhibition	ACP Bhanupratap Barge

Date	Activity	Speaker
17/01/ 2015	Guest lecture on Awareness of Anti-Terrorism	ACP Bhanupratap Barge
23 /01/ 2015	Industrial Visit to Ayurveda Rasashala	NA
23 /01/ 2015	Republic Day Celebration Kuch Yaad Unhe bhi Karlo	Col. Hasabnis and Team
30 /01/ 2015	Placement Activity-TJSB Bank	NA

Annual activities of B.Com. 2015 -16

Date	Details
10/07/2015	Academic visit to National Institute of Bank Management (NIBM)
13/07/2015	Guest Lecture on Time Management by Prof Onkar Natu
14/07/2015	Aptitude Test and guest lecture on Career Guidance by Mr Amitendra Kumar from
15/07/2015	Screening of Lokmanya Movie
27/07/ 2015	Debate competition on the topic “Smart Phones Panacea or Placebo”
31/07/ 2015	Guest lecture on Digital Entrepreneurship by Mr Nishant Mehta from Bajaj Allianz
5/08/ 2015	Guest lecture on Communication Skills by CA Priya Agashe
6/08/2015	Guest lecture on Know your Environment by Environmentalist Medha Sonawane
7/08/2015	Guest lecture on E-Banking By Mr Dhanajay Kulkarni from TJSB Sahakari Bank.
10/08/ 2015	Pick n Speak Competition
31/08/ 2015	Guest Lecture on E-Marketing by Dr P.V.Sathe
2/08/ 2015	Guest lecture on Relevance of New Economic Policy for Indian Economic Development by Dr Mukund Mahajan
3/08/2015	PPT Competition on communication skills
4/08/2015	Health Education for Girls by Rotary Club ,Daund
7/09/ 2015	Guest lecture on “Challenges for Entrepreneurs by Mr Shirish Karnik
8/09/2015	Inauguration of Commerce Association by Shirish Mohite
16/09/ 2015	Sudoku competition
18/09/ 2015	Hindi Day Celebration-Guest lecture from Prof. Sandeep Mulay.
22 nd Sept 2015	Guest Lecture on Resume writing and interview Techniques by Ms Reena Pawar and Mr Sumit Kumawat
29/09/ 2015	Grahakteertha Vyakhyamala-Lecture series by ACP Bhanupratap Barge on awareness on social networking, Lecture by Dr Milind Bhoi on Addiction free country, Lecture by Dr Renutai Gavaskar on Relationship between Parents, teachers and students.
5/10/ 2015	Guest lecture on Practical Courses for Accounting, Taxation and Finance by Ashok Budhkar
12/10/2015	Industrial visit to Katraj Dairy
5/12/2015	EVS exhibition inaugurated by Principal Dr Prof R.S.Zunjararao
9/12/ 2015	Guest Lecture on Soft skills by Kezia Cherian from ICA Pune
10/12/ 2015	Guest Lecture on Grooming Manners by Mr Vishal Agnihotri from ICA Pune.
11/12/ 2015	Guest Lecture on Cyber Crime by ACP Bhanupratap Barge
15/12/ 2015	Modern Presentation week inaugurated by Dr A.V.Kamble followed by various presentations by the students and guest lecture conducted by Dr sharayu Bhakare on presentation skills.
5/01/2015	Poetry recitation and Essay writing by the students Presided over by Prof Balaji Suryavanshi
12/01/2016	Youth Day Celebration –Inaugurated by Dr Sanjay Bharadwaj, Presided over by Principal Dr. R.S.Zunjarrao
22/ 01/ 2015	Comm. Fair- Costing Projects inaugurated by Principal Dr. R.S.Zunjarrao
30/ 01/ 2016	Meditation Session by Sahaj Yog by Mr Vinod Kumar Bhatnagar

M.COM ANNUAL ACTIVITIES 2013-2014

Date	Particulars
21/08/ 2013	Seminar on carrier in banking sector by IFBI Institute
28/08/2013	Soft Skills Workshop by Krips Foundation
17/09/2013	Guest Lecture on Strategic Management by Dr. Shashank Pol
20/09/ 2013	Workshop on Research Methodology
23/09/2013	Guest lecture on importance of business research by Dr. Sanjay Kaptan
26/09/2013	Group Discussion on F.D.I. Boon or Bane
30/09/2013	Guest lecture on Cost Audit by Dr. Nare
10 /01/2014	Guest lecture on Introduction to Capital Market and online trading
12 /02/2014	Group Discussion on Role of technology in banking Sector
13 /02/2014	Guest lecture on excise and vat audit by Dr. N. M. Vechalekar Guest lecture On Industrial Policies by Dr. Sanhita Athwale
14/02/2014	Guest lecture on service tax by Sumit Shah Guest lecture On guidance on project by Dr. Shashank Pol
26/02/ 2014	Guest lecture on Human Rights by Adv. Ajay Wagh Guest lecture On Cyber Law by Swanaand Shinde

M.COM ANNUAL ACTIVITIES 2014-2015

Date	Details
20/08/20 14	Guest Lecture(series) on Human rights and cyber law under credit system.by Adv. Ajay Wagh and Adv. Salunke
28 /08/2014	Guest lecture on "Introduction to Capital Market" by CA Kudwad
17/09/2014	Group Discussion on C.S.R
20/09/20 14	Guest lecture on" Tax Planning and Execution" by CA Gargote
23/09/2014	Presentation on Global Industrial Environment
30/09/20 14	Guest lecture on "Recent Advances in Cost Accounting and Cost System" by Dr. Nare
5/10/2014	Seminar on "Implementation of Accounting Standards" by CA Sumit Shah
12/10/20 14	Presentation on implementation of 5 S under Recent trends in Costing.
28/12/2014	Seminar on Industrial Economics. By Dr.Sanhita Athwale
10 /01/2015	Seminar on "IFRS" (International Financial Reporting Standard" By.CA Gargote
12/02/2015	Guest lecture on "Recent Advances in Auditing" by Gargote CA
18/02/2015	Guest lecture on Direct Tax under skill development syllabus To conducted under credit system.
20/02/2015	Industrial Visit to Maratha Chamber of commerce

33. Teaching methods adopted to improve student learning:

- Chalk and talk
- PowerPoint presentations
- Topic wise group discussion
- Audio-visual presentations
- Student mentoring and counselling sessions
- Practicals

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Students of BBA along with the BCA students have been organizing the 'Social Week' since December 2013. The core motive behind observing the 'Social Week' is to inculcate a sense of social responsibility amongst our students.
- Several NGOs like 'Make a Wish Foundation', 'Sanjivani Oldage Home', 'Punurutthan Sarmsamtam Gurukulum Sanstha', 'CRY', 'Tell Us' and 'Jankalyan Netrapedhi' visited our campus and interacted with the

students. They motivated students to get involved in various social activities like helping the poor, old people, help in abolishing the system of child labour, eye donation, AIDS awareness, blood donation camp, donations of clothes, books, shoes and toys, etc.

- The main motive of ‘Social Week’ in February 2015 was to imbibe a sense of social responsibility amongst students.
- Various NGO’s like Amhi Yuva, Eklavya Nyasa, Sahyog Trust, Netrajyoti Pratishthan, Drishti Group as well as eminent speakers like Shri. Vishwambhar Chaudhari, Shri. Milind Ekbote, Smt. Renutai Gawaskar, Adv. Asim Sarode, Dr.S.K.Lodha, Dr. Satish Desai, Shri. Bhanupratap Barge visited our campus to interact with the students and to motivate them in getting involved in various social activities like help the poor, save animals, empower women , Young Movement against drugs and alcohol, Social Networking , clothes and book donations, etc.
- Students of department of B Com actively participate in “Social Week” which is organized every year in the month of December. In this week students pay social visit to hospitals, Orphanages, Blood donation camps are organized.
- Our students also participate in “Road safety Week” in the month of January as directed by RTO. Students are actively involved in cleanliness drive .Street plays are organized creating awareness about various social issues.
- In order to sensitize the students towards martyr of freedom struggle various lectures were organized.

35. SWOC analysis of the department and future plans:

Strength:

- BBA, BCA and B.Com. programs provide the basic platform for the students. These courses aim at acquiring the skills, which are highly demanded in the industry.
- Students are trained according to the demands of the industry and economy. Teachers are young, dynamic and well qualified and have registered for PhD. They are also actively involved in syllabus framing, research activities, developing teaching techniques and organizing various curricular and co-curricular activities
- By inviting experts from various fields like IT, finance, marketing, HR, etc. the department provides professional touch to the courses offered.
- Numerous activities are conducted to develop and improve professional skills through presentations, group discussions, role-plays, etc.
- A system of Class Advisors is used to implement Mentorship.
- For overall development of students, we encourage them to participate as well as organise co-curricular and sports activities. Our students have achieved exemplary results in various sports events at zonal, state and National level.

- Youth week and ‘Aarohan - Exploring Limitless Talent’ (annual college fest) is celebrated to encourage engagement and participation of youth, essential to achieve sustainable human development.
- Department identify academically weak students and holds remedial classes.
- Student participation in NSS and NCC provides opportunity in serving the social and National Goal of education.
- To instil the sense of social responsibility amongst students, we have been organising Social Week since 2013. This motivates students to get involved in various social activities like helping the poor and old people, alleviating the system of child labour, eye donation awareness, AIDS awareness, blood donation camp, donations of clothes, books, shoes and toys, women empowerment, Environment Awareness, etc.
- Placement cell organises various skill based training programs on interview, GD, Image building, aptitude skill for the students to make them employable.
- Placement cell is well connected with different colleges to participate in pool campus placements as also with different companies engaged in campus recruitment. They are also well connected with the students in informing them about various placement activities through the social networking sites.
- The management is also equally supportive about initiating IT enabled classrooms, computer laboratory and other infrastructure for the students.

Weakness:

- Few students joining this course come from vernacular medium and a few from those countries where English is not their native language. BBA and BCA being professional courses, the medium of instructions is English. Therefore, these students find it difficult to understand the lectures and deliver the same during the exams.
- The students need to get practical exposure with reference to actual working of the industrial and commercial organizations.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Since commerce is a booming sector, lot of employment opportunities are available to the students.
- More practical oriented projects and employment-oriented programmes can be initiated with the support of the management.

Challenges:

- Motivating and enhancing the students’ merit is a challenge when the students seeking admission have lower scores at HSC.
- To mould the students as per the demands of the economy/society is the most challenging factor. Students who take admission are from traditional

background, motivating them to take up professional course.

- To improve communication skills of the students, particularly those coming from vernacular background.
- To make international students adapt to local academic environment.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plans:

- Department will associate with more experts from industrial and commercial sectors to enhance the employability of the students.
- Department will provide maximum lab hours for enhancing practical knowledgebase of student.
- To develop an effective network with industrial and commercial sectors in order to facilitate better training and placement activities.

□□□

Department of Computer Science

1. **Name of the department:** Computer Science
2. **Year of establishment :** 1986
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG Courses: B.Sc. (Computer Science)

B.Sc. (Animation)

PG Courses: M.Sc. Computer Science

4. **Names of interdisciplinary courses and the departments /units involved:**

Data Mining: Department of Statistics

DIP, Numerical Methods, Discrete Mathematics, Operational Research, Design and Analysis of Algorithm: Department of Mathematics

Technical English: Department of English

Fundamentals of Computers, Use of Computers: Department of Biotechnology

Computer Networks, Advanced Networking, Embedded Systems: Department of Electronic Science.

5. **Annual/ semester/choice based credit system (programme wise):**

UG: F.Y.: Annual Pattern

S.Y. and T.Y.: Semester Pattern

PG: Semester Pattern with Choice Based Credit System

6. **Participation of the department in the courses offered by other Departments:**

Sr. No.	Name of the staff member	Department	Subject Name	Year
1	Prof. Sangeeta Raut	Statistics	Data Mining	2014-15
2	Prof. Sonali Vetel	Biotechnology	Fundamentals of Computer	2010-11 2011-12
3	Prof. Supriya Wable	Biotechnology	Use of Computers	2012-13

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	--
Asst. Professors	30	23

10. Faculty profile with name, qualification, designation, specialization, D.Sc. /D.Litt./Ph.D. /M. Phil, etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience
Prof. Shamkant S. Deshmukh	M.C.S.	Head	Computer Science	21
Prof. Mrs. Manisha S. Suryawanshi	M.C.S., M.Phil.	Asst. Professor	Computer Science	21
Prof. Mrs. Sangeeta S. Raut	M.Sc. ADCSSA	Asst. Professor	Electronics	19
Prof. Mrs. Madhuri S. Ghanekar	B.Sc. Applied, M.C.M.	Asst. Professor	Computer Management	17
Prof. Abhijit V. Sathe	M.C.S.	Asst. Professor	Computer Science with Specialization in Scientific Computing	17
Prof. Mrs. Shilpa R. Dange	M.C.A. , M.Phil. Ph. D. perusing	Asst. Professor	Computer Science	14
Prof. Mrs. Anjali S. Sardesai	M.C.S., SET, NET	Asst. Professor	Computer Science	14
Prof. Mrs. Vaishali C. Bhoite	M.Sc. , SET	Asst. Professor	Computer Science	14
Dr. Mrs. Kalyani Salla	M.C.S., M. Phil. Ph. D.	Asst. Professor	Computer Science	12
Prof. Mrs. Shweta Khadse	M.Sc., NET	Asst. Professor	Computer Science	14
Prof. Sanjay Mahajan	M.Sc.	Asst. Professor	Computer Science	11
Prof. Mrs. Sheetal Patil	M.Sc.(Comp. Sci.) , SET	Asst. Professor	Computer Science	7
Prof. Mrs. Sonali Vetel	M.Sc. (Comp. Sci)	Asst. Professor	Computer Science	6
Prof. Mrs. Supriya Shinde	M.C.A.	Asst. Professor	Computer Science	5
Prof. Mrs. Jigisha Pawar	M.Sc. (Comp. Sci.) , SET	Asst. Professor	Computer Science	4
Prof. Mrs. Sonali Deshmukh	M.C.S., NET	Asst. Professor	Computer Science	9
Prof. Kiran Kulkarni	M.C.A.	Asst. Professor	Computer Science	6
Prof. Trupti Gohad	M.Sc. (Tech)	Asst. Professor	Industrial Maths with Computer Applications	4
Prof. Sameer Badmanji	M.C.M.	Asst. Professor		18
Prof. Sanjay Daf	M.Sc. (Elect) PGDCS	Asst. Professor	Electronics	20
Prof. Asha Sagar	M.C.M. M.C.A	Asst. Professor	Computer Applications	8
Prof. Smita Achalkar	MCM, MCA	Asst. Professor	Computer Application	7
Prof. Sameer Nerlekar	DPT, DACAD	Asst. Professor	Cinematography	3

11. List of Senior Visiting Faculty:

- Joshi Ravindra
- Girish Govardhan
- Hrishikesh Joshi
- Renuka Zope
- Mrs. Kalyani Attarde
- Vishal Pai Vernakar
- Anjali Bafna
- Joshi Ravindra
- Himmat Thombre
- Sonali Kulkarni
- Neeta Natekar
- Girinath Bharade
- Nikita Ananpara /Lohar
- Jaywant Desale
- Ms. Anupama Spencer
- Himmat Thombre

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Programme	Percentage of lectures delivered by temporary faculty	Percentage of practicals delivered by temporary faculty
B.Sc. (Comp. Sci.)	3%	Nil
B.Sc. (Animation)	40%	20%
M.Sc. (Comp. Sci.)	20%	Nil

13. Student -Teacher Ratio (programme wise):

UG : 18:1

PG : 20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3 (lab assistant, lab attendant, System Engineers, Laboratory Instructors)	14	14
Class 4	2	2

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	22	03	1 (3 pursuing)	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University:

The staff members are actively involved in the research activities. The process of starting recognized Post Graduate Research Centre by SPPU, Pune has been initiated.

19. Publications:

Name of the faculty	Papers			Books edited	Chapter in the book	Books with ISSN/ISBN No.	Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference							
Prof. Shilpa Pund	2	-	1	-	-	-	3	2.157	6	2
Prof. Anjali Sardesai	3	-	5	1	-	5	6	5.173	6	1
Dr. Kalyani Salla	2	-	3	-	1	-	5	4.089	3	1
Prof. Madhuri Ghanekar	-	-	2	-	-	-	2	-	-	-

Books published:

Name of Staff	Publisher Name	Book Name
Prof. S. S. Deshmukh	Member Editorial Board	‘Dnyanmay’ Research Journal ISSN 2395-6898
	SPPU	S.Y.B.Sc. Practical Workbook
Prof. Madhuri Ghanekar	SPPU	S.Y.B.Sc. Practical Workbook
		T.Y.B.Sc. Practical Workbook
Prof. A.V. Sathe	SPPU	S.Y.B.Sc. Practical Workbook
Prof. Sangeeta Raut	SPPU	T.Y.B.Sc. Practical Workbook
		T.Y.B.Sc. Practical Workbook
Prof. Vaishali Bhoite	SPPU	S.Y.B.Sc. Practical Workbook
Prof. Shilpa Dange	SPPU	S.Y.B.Sc. Practical Workbook
Prof. Anjali Sardesai	Editorial Assistance	‘Environment Observer’ ISSN 2320-5997
	Vision Publication	Soft Computing, 2014 ISBN 9789350161470
		Soft Computing, 2012 ISBN 9789350161470
		Theory of Computer Science, 2015
		Compiler Construction, 2015
		Operating System Concepts, 2015
		Theory of Computer Science, 2010
		Compiler Construction, 2010
		Operating System Concepts, 2010
	SPPU	T.Y.B.Sc. Practical Workbook
		F.Y. B.Sc. Animation Labbook 2015
		S.Y. B.Sc. Animation Labbook 2015
Prof. Sameer Nerlekar	SPPU	S.Y. B.Sc. Animation Labbook 2016

20. Areas of consultancy and income generated:

Non-remunerative consultancy : Lab development, installation of application, networking, laboratory set-up

21. Faculty as members in

a) National committees: Nil

b) International Committees: Nil

c) Editorial Boards :

1. Prof. S. S. Deshmukh

- Pune International Centre (PIC)
- Worked as Member of editorial board for publication of “Dnyanmay”, research journal, ISSN 2395-6898 Vol 1, Issue 1, June-August-2015.

2. Prof. Anjali Sardesai

- Worked as Editorial Assistant for publication of Environment Observer, Dec’ 2013, ISSN 2320-5997 Vol 17, Proceeding of the National Conference on Hazardous e-Waste Management.

22. Student projects

- a) Percentage of students who have done in house projects including inter departmental/programme:

Academic year	MSc
2014-15	1%
2013-14	8%
2012-13	6%
2011-12	9%
2010-11	8%

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

Academic year	MSc
2014-15	99%
2013-14	92%
2012-13	94%
2011-12	91%
2010-11	92%

23. Awards / Recognitions received by faculty and students:

- Prof. Mrs. Madhuri Ghanekar presented a research paper entitled 'Management of e-waste: A case study of Pune' at the National Conference on Hazardous E-Waste Management at Modern College in Dec'13 and also received '2nd Best Paper Award'.
- Prof. Mrs. Anjali Sardesai presented a research paper entitled 'Initial screening of gynaecological diseases in a patient, experts knowledgebase and fuzzy set theory: A case study in India' at the second World Conference on Soft computing, Baku, in Dec' 2012. Paper received 'Best Paper Award'.
- Prof. Mrs. Anjali Sardesai has been awarded 'Excellence in Teaching' award by *Uttar Bharati Sangh* in 2015.
- Prof. Kalyani Sambhoo, Sanjay Kadam, Ashok Deshpande, 2011, 'Fuzzy Logic in EIA', National Conference on Soft Computing. Poster Received Cash Prize.
- Prof. Mrs. Kalyani Salla presented a research paper entitled 'Efficacy of selected soft computing techniques for ranking of hazardous industrial installation' at the 2nd World Conference on Soft Computing, Baku in Dec' 2012. Paper received 'Certificate of Merit'.

25. List of eminent academicians and scientists / visitors to the department:

- Dr. Ashok Deshpande, BISC, University of California, Berkeley, USA
- Dr. Pawan Lingras, Saint Mary's University, Halifax, Canada

- Dr. S. R. Chaudhari, Shivaji University, Kolhapur.
- Mr. R.S. Deodhar, Department of Applied Mathematics, Defense Institute of Advanced Technology, Pune
- Dr.Sanjay Kadam, Senior Scientist, C-DAC,Pune
- Mr.Atul Kahate, Sr. Consultant, Oracle Financial Ltd.
- Prof.A.E.Lagad, Ahmednagar College, Nagar
- Dr. Jyoti Yadav, Dept. of Computer Science, SPPU, Pune
- Prof. Anjali Pendse, SKNCOE, Pune

25. Seminars/ Conferences/Workshops organized and the source of funding:

- National: 01 (funded by Savitribai Phule Pune University under QIP)
- International: 01 (funded by Savitribai Phule Pune University under QIP)
- State: 02 (funded by Savitribai Phule Pune University under QIP and Word Press)

26. Student profile programme/course wise:

Under Graduate (B.Sc. Computer Science)

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010-2011	1079	176	79	97	75.38
2011-2012	1890	184	82	102	60.15
2012-2013	943	141	65	76	58.77
2013-2014	821	166	85	81	67.82
2014-2015	912	179	95	84	49.28
2015-2016	911	176	97	79	RA

Under Graduate (B.Sc. Animation)

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2013-2014	17	5	2	3	80
2014-2015	32	10	8	2	70
2015-2016	50	15	14	1	RA

Post Graduate (M.Sc. Computer Science)

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010-2011	2061	104	66	38	82.28
2011-2012	2200	95	64	31	91.04
2012-2013	1207	93	66	27	78.57
2013-2014	1047	94	66	28	87.50
2014-2015	659	88	58	30	100
2015-2016	279	89	60	29	RA

27. Diversity of Students:

Under Graduate (B.Sc. Computer Science)

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
2010-2011	100	-	-
2011-2012	100	-	-
2012-2013	100	-	-
2013-2014	100	-	-
2014-2015	100	-	-
2015-2016	98.68	0.44	0.88

Under Graduate (B.Sc. Animation)

Name of the course B.Sc. Animation	% of students from the same state	% of students from other states	% of students from abroad
2013-2014	100	-	-
2014-2015	100	-	-
2015-2016	100	-	-

Post Graduate M.Sc. Computer Science

Name of the course	% of students from the same state	% of students from other states	% of students from abroad
2010-2011	100	-	-
2011-2012	100	-	-
2012-2013	100	-	-
2013-2014	100	-	-
2014-2015	100	-	-
2015-2016	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:

Vijaya Kumbhar, Rekha Maliyalli,

29. Student progression

Student progression	Against % enrolled
UG to PG	80%
PG to M.Phil.	03
PG to Ph.D.	03
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus selection	94%
• Other than campus Recruitment	5%
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities:

a) Library- Apart from the central library, books are also available for each course in the department.

B.Sc.(Computer Science) : 1942

B.Sc. (Animation) : 153

M.Sc. (Computer Science) :1633

b) Internet facilities for Staff and Students:

- Four Mbps separate leased line available for students and teachers.
- Students can access internet from each and every PC in laboratory.

c) Class rooms with ICT facility: 100%

- Two digital classrooms are available for the students
- Each classroom contains projector and internet facility

d) Laboratories: 100%

- Separate laboratories are available for B.Sc. Computer Science, B.Sc. Animation and M.Sc. Computer Science.
- Following are the details of the computers available in all laboratories:

Sr. No.	Hardware Configuration	QTY	Sr. No.	Hardware Configuration	QTY
1	PIV 2.53 C2D DG 33 M/B	35	10	P4 2.8 GHZ 845 GVSR	10
	1 GB RAM, 160 HDD, 15 TFT			80 GB HDD 256 MB RAM	
2	P4 3.0 DUAL CORE 946 GZ M/B	27	11	P4 2.4 GHZ, GVSR M/B	23
	80 GB HDD, 256 RAM			80 GB HDD, 256 RAM	
	WIRELESS LAN		12	P4 3.0 GHZ, INTEL 915 M/B	1
3	P4 3.0 HT, D102 GCC M/B	10		1 GB RAM, 120 GB HDD	
	160 HDD, 256 MB RAM		13	P4 3.2 915 GAVL M/B	1
4	P4 3.0 D102 MB 512*2 RAM	3		1 GB RAM, 120 GB HDD	
	160 * 2 HDD		14	P4 1.8 GHZ GLAD M/B	8
5	P4 3.0 D102, 256 * 2 RAM, 160 HDD	2		256 MB RAM, 40 GB HDD	
6	P4 2.4 D865 GBF M/B		15	CELERON 1.1 GHZ 810 GIGABYTE M/B	12
	512 RAM, 40 GBHDD	2		256 MB RAM, 40 GB HDD	
7	P4 1.8, GVSR M/B		16	P4 1.7 GHZ, D845 GBV	2
	256 RAM, 40 GBHDD	4		256 RAM, 40 GB HDD	
8	CELERON 1.7 GHZ, GVSR M/B		17	P4 2.8 GHZ CORE TO DUO	20
	256 RAM, 40 GB HDD	13		DG 41 TY, 250 GB HDD, 2 GB RAM	
9	HP ML-350 SERVER		18	SERVER HP ML 150 G6 MODEL	2
	PROLIANT ML 350 G-5 E-5310, 1.66 GHZ 1066 FSB	1		INTEL XEON 2.00 GHZ	
	Total 176				

- Laptops : 6
- Backup Facilities

Sr. No.	Particulars	Qty
1	5 KVA online UPS	1
2	10 KVA online UPS	1
3	10 KVA online UPS	1
4	10 KVA online UPS	1
5	10 KVA online UPS	1
	Total	5

- Fire Extinguishers

Sr. No.	Particulars	Qty
1	Fire Extinguishers	2
	Total	2

- Printers

Sr. No.	Particulars	Qty
1	Epson LX 800 without tractor	2
2	Lx 800 Printer	14
3	Lx 800 Printer	2
4	HP 1319 all in one	1
5	HP 1020 printer	2
6	HP 1010 printer	1
7	Total	22

- Microprocessor Kits

Sr. No.	Particulars	Qty
1	8085 Microprocessor Kit	26
	Total	26

- Mobile Phones

Sr. No.	Particulars	Qty
1	Nokia N 72	1
2	Nokia E51	1
	Total	2

- Projectors

Sr. No.	Particulars	Qty
1	Optoma DLP projector	3
2	Sony ELP Projector	1
3	NEC projector	1
	Total	5

- Air Conditioners**

Sr. No.	Particulars	Qty
1	Airtemp Air conditioner	1
2	Blue Star AC	2
3	Airtemp Air conditioner	4
4	LG Air conditioner	1
	Total	8

- Licensed Softwares**

Sr. No.	Particulars	QTY	Sr. No.	Particulars	QTY
1	Visual Basic A.E	1	16	Quick heal Enterprise Edition	1
2	Visual C++ A.E	1	17	Quick heal Desktop Edition	5
3	Windows for Workgroup	1	18	Quick heal Novell Edition	1
4	Ms office 4.2 with FoxPro	1	19	Quick heal Dos Edition	1
5	Lotus 123 upgrade to 3.4	1	20	MS windows NT workstation 4.0 AE	22
6	Sco-unix 16 users cross upgrade	1	21	MS windows 98 SE	5
7	Quick heal	1	22	Ms windows 2000 server	1
8	Novell Netware 25 users 4.11	1	23	Ms Windows 2000 cal AE OLP	22
9	Novell Netware 25 users Small business	1	24	Ms Windows Office XP Pro OLP	22
10	Quick heal Antivirus 3 yrs	100	25	Ms Visual Studio 6.0 Ent Olp	22
11	Quick heal Antivirus 3 yrs	20	26	Oracle 7.x on Novell Platform	1
12	Microsoft Windows XP Professional	1	27	Developers 2000 Enterprise	1
13	Red Hat Enterprise Server Edition	1	28	Power Builder 5.0 Desktop	1
14	Red Hat Client	1	29	Novell Dos 7	1
15	Quick heal Antivirus 3 yrs	5	30	Sybase NLM 8 users	1

31. Number of students receiving financial assistance from college, University, government or other agencies:

Academic Year	Number of students
2010-11	86
2011-12	75
2012-13	172
2013-14	98
2014-15	73
2015-16	90

Apart from this data, the Kartikeya Rindani Scholarship is offered to deserving students every year. The details are as follows:

Year	Name of the student
2011-12	Swapna A Devendra
	Abhijit Pachpor

Year	Name of the student
	Amol Bhalerao
2012-13	Sagar Shinde
	Aishwarya Risbood
	Shweta Sathe
	Rashmi Dhamale
2013-14	Tanuja Gholap
	Sachin Gahrewar
	Pooja Deokar
	Darshana Jadhav
2014-15	Poonam Avhad
	Shubhada Maratkar
	Pankaj Bagad
	Neeta Sanas
	Snehal Roman

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

Year	Name of Institute / University / Department/ Agency / Industry	Topic
2011-12	Mr. Harold D`Costa CTO, Intelligent Quotient Security System	Current and future trends in Ethical Hacking
	Mr. Gautam Rege, Director Josh Tech	Ruby On Rails
	Mr. Amit Bagaitkar, Manager, Symphony	Bioinformatics and genetic Algorithm
	Dr.Sanjay Kadam, Senior Scientist, C-DAC,Pune	Neural Networks
	Mr. Sushant Poundrik, Senior System Analyst, ,United Software Associates	Web services and Applications
	Lecture Series	
	1.Mr.Sanjay Katkar, CTO, Quick Heal Technologies	
	2. Mr. Anand Das, CTO, PubMatic Pvt. Ltd.	
	3. Mr.Atul Kahate, Sr.Consultant, Oracle Financial Ltd	
	4. Mr. Gautam Rege, Director Josh Tech	
	5.Ms.Shraddha Joshi, Senior Software Engineer, PSL.	
2012-13	Prof.A.E.Lagad, Ahmednagar College, Nagar	Comp. Programming C Prg. Bitwise Operator
	Ms.Shraddha Joshi, Senior Software Engineer,PSL	Adv. .net
	Mr. Swapnil Dharmadhikari, CEO,Splashgain Technologies	Cloud Computing, Google Search Engine
	Mr. Vikrant Sukhtankar, Director, Gyanteerth	Aptitude Test Preparation ,Soft Skills
	Dr. Sanjay Kadam, Senior Scientices, C-DAC, Pune	Applications of Artificial Neural Networks
	Indian Air force	Seminar on Placement opportunities in Indian Air Force
	C-DAC Advance Computing Training School	Participation in Tech-Sangam C-DAC Academic (collaboration Initiative Program)
2013-14	Amol Abhyankar (KPIT Cummins)	SAP/BI
	Chetan Patki (GE, USA)	Program Management
	Abhijit Patwardhan (Barclays)	Project Management
	Nitin Kudale (Wipro USA)	Web Development
2014-15	Sunil Yenpure, Tata Consulting Services (Europe)	Microsoft Technologies

Year	Name of Institute / University / Department/ Agency / Industry	Topic
	Mayura Patil (IGATE - Bangalore)	Cloud Computing
	Shashank Joshi (Technoforth Technologies pvt. Ltd.)	.Net orchard
	Tauseef Ansari (Energia Wellbeing Pvt. Ltd.)	Career Exhibition
	Harshal Zende (IBM)	Databases
	Sachin Khaimar (Credit Suisse Europe Ltd)	Unix, C++, C#
	Vishal Pai (Founder, Lumos –Creating Independent Programmers)	Android , PHP
2015-16	Sagar Dasalkar (Microsoft)	.net

33. Teaching methods adopted to improve student learning:

- Chalk and talk, interactive sessions, practical sessions, power-point presentations, topic wise group discussion, audio-visual presentations, student mentoring and counselling sessions (seminars, workshops and guest Lectures).

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

The department is organizing various events in collaboration with Industry.

1. 'QH CONNECT' :

The department conducts this activity every year since 2011. The students from different colleges in Pune city are shortlisted based on following criteria:

- Aptitude Test
- College can recommend maximum two students.
- Personal Interview of all shortlisted as well as recommended students and out of those, we select approx. 45 students for 'QH CONNECT ' program.
- On successfully completion of the program, final interview process will be conducted.
- Selected candidate will be offered for Placement.

2. CAREER FEST

Career Fest is organized in the college since last two years. Different universities visit college and give guidance about the entrepreneurship to the students. The list of universities visited college is:

- ITM Hotel Management
- Ecole Hoteliere
- Livewires
- LTA School of Beauty
- Columbus Travel Academy
- GIA
- Akemi B-School
- Seam Edu
- INIFD
- Krishjay Infotech

3. CAREER EXHIBITION by "Energia Wellbeing Pvt. Ltd"

Career Exhibition is organized for college students from **11th Std. to TY** Students. Approximately 250 students participated in this Career Exhibition. The Team Members Consisting of Clinical Psychologists and Counsellors addressed the students in the Career Exhibition to make them understand the higher education options and areas of career specialization. It was an insightful program for the students on career planning and new age careers, which helped them to begin their career planning.

4. GRE / TOEFL “QUIZTHON”

The GRE test is the most widely accepted test when it comes to studying or working in a foreign country. MBA, engineering anything can be pursued after taking this test and not only that in case you want to work abroad, the GRE scores help you there as well.

The test is divided into 4 parts: verbal reasoning, quantitative reasoning, critical thinking and analytical writing. Advantages of the GRE test are that it can be taken at an interval of 21 days and 5 times in one year. Therefore, in case you feel you have not done too well the first time, your second attempt is not too far away.

On 4th August’14, ETS organized GRE Radio show at Modern College of Arts, Science and Commerce, Shivajinagar, Pune.

The Event was arranged for Graduate and Post Graduate students in order to generate awareness of future career prospects abroad and highlight the significance of GRE.

The activity was conducted with fun filled Quiz competitions for students. Mrs. Geraldine Debrass, Head, Client operations, Ms. Sarita Falcan, Lead, Client operations and Mr. Sushant Malhotra, Director, Satan’s paradise addressed the audience and organized the Quiz.

The most happening and surprise event was the release of “GRE Anthem” at Modern College, Shivajinagar, Pune, the Anthem would be played world – wide. Audience were delighted with the motivational theme of the Anthem.

Attractive prizes :

First Prize: JBL Wireless Bluetooth Speakers

Second Prize and Third Prize: Power Bank (Portable Mobile charger)

5. WORDCAMP

The Word Press Community in collaboration with the Department of Computer Science has organized a ‘WORDCAMP’. The workshop covered Technical and Theoretical sessions for Customized Website Development Using ‘WORDPRESS’- A Content Management System.

35. SWOC analysis of the department and future plans:

Strengths :

- Well known IT companies regularly visit this department for placements in the IT industry on a preferred basis.
- Pune being IT hub, growing opportunities for the placement of the students are available.
- The department has young, experienced qualified and highly motivated staff.
- Adequate infrastructural facilities
- Well-equipped laboratories with licensed software, 10 mbps leased line facility and Wi-Fi.
- The department has strong and active alumni support.
- The central location of the college and easy accessibility from all corners.
- Established in 1986, the Department of Computer Science is a pioneering department in the field of computer science.

Weaknesses :

- The college has to give direct admissions to students passing 12th standard from same college as per the university rule. This at times adversely affects the merit criteria for the course.
- Due to certain changes in admission policies of the related courses, the overall percentage for students applying for first year has decreased

Opportunities :

- Looking at the growing IT industry, huge manpower requirement is one of the major opportunities.
- The department conducts B.Sc. (Computer Science), B.Sc. (Animation) and M.Sc. (Computer Science) courses through which students get ample opportunities of their progression.
- The department organises various activities such as seminars, guest lectures, workshops in which the IT experts are invited to guide the staff and students. This provides students easy access to eminent IT professionals and experts.
- The infrastructure and other facilities provided inculcate the research culture among teachers and students.
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges :

- To cope with the pace of technological advancement in the IT sector
- Uncertainty in the IT field.
- To meet industry specific demand with respect to manpower requirement.

- Big challenge of cyber security, malware, viruses.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plans:

- Strengthen the facilities for B.Sc. Animation course.
- To establish a recognized Post Graduate Research Centre.
- To enhance the infrastructural facilities and equipment.
- To upgrade platform and resources in accordance with the changes in technology and syllabi.
- To start course B.C.A. (Science Faculty).
- To develop a Computer Museum.

□□□

Department of Economics

1. **Name of the department:** Department of Economics
2. **Year of establishment :** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.)**
 B.A. Economics
 M.A. Economics
 Ph.D.: PG Research Centre in Economics from 2013
 Post Graduate Diploma in Banking and Finance
4. **Names of interdisciplinary courses and the departments /units involved**
 Post Graduate Diploma in Banking and Finance
5. **Annual/ semester/choice based credit system (programme wise)**
 B.A.: Annual Pattern
 M.A.: Semester Pattern with Choice Based Credit System.
6. **Participation of the department in the courses offered by other departments**
 Business Economics, Banking and Finance, Industrial Economics, Industrial Economic Environment, and Research Methodology courses by the Department of Commerce.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:** -
9. **Number of teaching posts**

	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Asst. Professors	3	3

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. M.M. Satam	M.A. M.Phil. Ph.D., MBS(HR)	HOD Associate Professor	Economics	30 yrs	7
Dr. A. H.Shende	M.A. Ph.D. NET, SET	Associate Professor	Economics	17 yrs	1

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. S.S.Deshmukh	M.A. Ph.D. SET	Asst. Professor	Economics	14yrs	NA
Mrs. S.A. Vartak	M.A. M Phil. SET	Asst. Professor	Economics	25yrs	NA
Miss Padmashri Mujumdar	M.A. M Phil. SET	Asst. Professor	Economics	13yrs	NA
Dr. J.P. Nambiar	M.A. M.Phil. Ph.D.,	Asst. Professor	Economics	8 yrs	NA

11. List of senior visiting faculty:

- Dr. Mrs. Yojana Karve, Ex-Principal Garware College of Commerce
- Mr. Misal Prakash, Sr Bank Officer, BOM
- Mr. Vijay Haldankar, Retired Bank Officer
- Mrs. Kaptan, Retired Bank Officer, BOI

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

All the lectures of Grantable Course are engaged by permanent faculty and the lectures of Non-Grantable Course are handled by temporary faculty.

13. Student -Teacher Ratio (programme wise)

B.A. : 20:1

M.A.: 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

One post of Faculty Clerk, in the college office is sanctioned and filled

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil / PG.

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	-	2	3	1	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: National 02

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

- **Dr. M.M.Satam**

UGC Minor Research Project sanctioned of Rs. 1,70,000 for 2014- 2016, entitled 'Financial Services And Women Empowerment In Rural Maharashtra'.

BCUD Minor Research on Financial Inclusion and Unemployed Youth, Rs. 75000/-

- **Dr.A.H. Shende**

Major Research Project, ICSSR (Grant- Rs. 800,000), 2014-15 Dr. A.H. Shende- ICSSR “A Study of Competition, Cooperation and Conflict of India and China with special reference to Trade and Commerce Rs.8,00,000

18. Research Centre /facility recognized by the University

Ph.D. Research Centre in Economics is recognized by the SPPU, Pune, from December 2013.

20. Publications:

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/ Local	Book chapter	
Dr. M.M. Satam	4	8	12	-	3	9	18
Dr. A. H. Shende	-	11	-	-	1	-	12
Dr. S.S.Deshmukh	-	1	-	-	-	-	1
Miss Padmashri Mujumdar	-	-	1	-	-	-	1
Dr. J. P. Nambiar	-	-	2	-	-	-	2

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards

- Following members are members of editorial board ‘RESECO’, a research annual of Department of Economics -
 - i) Chief Editor Dr.M.M.Satam
 - ii) Members : Dr.A.H.Shende, Dr. S.S. Deshmukh, Mrs. S.A. Vartak, Ms. P.B. Mujumdar, Dr. N.P. Nambiar, Mr. Sameer Thakur

22. Student projects

a) Percentage of students who have done in house projects including inter departmental/programme: 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

- Miss. Sayani Biswas, a student of T.Y.B.A did a project on ‘e shopping and consumer behaviour’ for Avishkar 2015
- Sudarshan Patil , a student of MA Economics did a project for Avishkar 2015 on ‘Slowdown in China: Lessons for India’.

23. Awards / Recognitions received by faculty and students:

Students:

- Ms. Sayani Biswas awarded second prize in AVISHKAR state level research competition in 2015.
- Kanhayya Babar : National Shooter
- Priyadarshini Padher: Pursuing post-graduation in Economics in USA

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Santosh Dastane, Director IBMR, Pune.
- Dr. Medha Dubhashi
- Dr. Akshay Dabi
- Dr. Jugale HoD, Economics Department, Kolhapur University.

25. Seminars/ Conferences/Workshops organized and the source of funding:

a. State:

- i. State Level Seminar on Research in Social Sciences – Techniques and Trends Under Quality Improvement Programme Of Savitribai Phule Pune University.
- ii. A two-day seminar on Research in Social Sciences – Techniques and Trends was organized at Modern College of Arts, Sciences and Commerce, Shivajinagar, Pune, on 7th and 8th of January 2011.
- iii. Department of Social Sciences, Modern College of Arts, Science and Commerce, Shivajinagar, Pune 5, had organized one day Seminar on “Current Status of Social Sciences and future scope”, on Wednesday, 11th of January 2012.
- iv. Workshop on T.Y.B.A syllabus restructuring of SPPU in Jan 2015

26. Student profile programme/course wise:

B.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			*M	*F	
2010- 2011	239	161	102	59	48.14
2011-2012	246	173	99	74	96.96
2012-2013	282	207	120	87	64.00
2013-2014	314	219	136	83	85.71
2014-2015	364	201	118	83	100
2015-2016	378	193	108	85	RA

M.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	72	48	38	10	48.00
2011-2012	58	30	19	11	99.00
2012-2013	73	34	19	15	64.00
2013-2014	45	22	16	6	86.00
2014-2015	55	31	16	15	100
2015-2016	82	48	30	18	RA

27. Diversity of Students:**B.A.**

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	98.24	1.32	0.44
2012-2013	97.82	1.82	0.36
2013-2014	100	Nil	Nil
2014-2015	94.1	1.24	4.66
2015-2016	96.56	0.52	2.92

M.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	94.03	4.48	1.49
2011-2012	91.30	5.80	2.90
2012-2013	89.39	3.03	7.58
2013-2014	92.59	3.70	3.70
2014-2015	87.76	4.08	8.16
2015-2016	89.39	2.02	8.59

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Peggu Dinesh, a student of M.A. Passed SET exam in 2014

29. Student progression

Student progression	Against % enrolled
UG to PG	50
PG to M.Phil.	30
PG to Ph.D.	10
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	-
• Other than campus recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- a) Library: Yes, Central Library
- b) Internet facilities for Staff and Students: Internet facility is available with 10 mbps leased line
- c) Class rooms with ICT facility: Some of the classes have ICT facility

31. Number of students receiving financial assistance from college, university, Government or other agencies:

The figures represent the total number of students of the Arts Faculty and Post Graduate students of the department.

Year	Total number of students
2010-11	60
2011-12	29
2012-13	71
2013-14	164
2014-15	124
2015-16	119

32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts:

- Remedial course for F.Y.B.Com. students was conducted in the academic year 2012-13.
- Dr. Santosh Dastane, Eminent Economist and Former Director of Wadia Management Institute, Pune
- Dr. Medha Dubhashi Professor and Chair (Pratibha Patil Chair for Women Development), Head Centre for Gender Studies, Vekunthbhai Mehta National Institute of Cooperative Management, Pune.

33. Teaching methods adopted to improve student learning:

- Effective use of ICT
- Visits to organization like RBI, NABARD, and *Adarsh Gaon* (Hivare Bazar)
- Activity based learning (Exhibitions and Financial Literacy Campaign)

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

The Department organizes Financial Literacy Campaign every year to create awareness about the financial system of India. The neighbourhood community visits such exhibitions and campaigns .

35. SWOC analysis of the department and Future plans

Strengths:

- Students preparing for Civil Services Examination and other competitive examinations prefer Economics as a major subject.
- The department offers M.A. Economics course along with Statistics, Mathematical Economics and Econometrics as optional subjects.

Weakness:

- Students from vernacular medium
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- To educate students in current banking practices to enhance their employability and to prepare them for competitive exams
- Participation in interdisciplinary education

Challenges:

- To inculcate the research aptitude among the students
- To enhance the job opportunities for the students
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plans:

- Association with Centre for Sustainable Village Development (College to Village Scheme) at Gokhale Institute, Pune.
- To develop an e-brochure for better placement of the students
- To develop a Finance Laboratory
- To publish second volume of Research Annual RESECO.

□□□

Department of Electronic Science

- 1. Name of the Department :** Department of Electronic Science
- 2. Year of establishment :**
B.Sc. Electronic Science : June 1985
M.Sc. Electronic Science : June 1993
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.Sc. Electronic Science
B.Sc. Electronic Science (Vocational)
Post Graduate : M.Sc. Electronic Science
Research : Ph.D. Electronic Science
- 4. Names of Interdisciplinary courses and the departments / units involved :** Nil
- 5. Annual / semester / choice based credit system (programme wise) :**
B.Sc. Electronic Science: Semester Pattern
B.Sc. Electronics (Vocational): Semester Pattern
M.Sc. Electronic Science: Choice Based Credit system
Ph.D. Electronic Science Six month reports /presentation
- 6. Participation of the department in the courses offered by other departments :**
M.Sc. Chemistry: Analytical Chemistry
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc. :** Nil
- 8. Details of courses / programmes discontinued (if any) with reasons :-**
- 9. Number of Teaching posts**

	Sanctioned	Filled
Professors	-	-
Associate Professors	03	03
Asst. Professors	10	10

- 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.)**

Name	Qualification	Designation	Specialization	No. Of Years of Experience	No. Of Ph.D. Students Guided for the last 4 year
Prof. S.R.Chaudhari	M.Sc. M.Phil.	Associate Professor	M.Sc. Physics M.Phil. Electronic Science	28	-
Prof. D.B.Gaikwad	M.Sc. A.D.C.S.S.A.	Associate Professor	Electronic Science	28	-

Name	Qualification	Designation	Specialization	No. Of Years of Experience	No. Of Ph.D. Students Guided for the last 4 year
Prof. B.B.Yenage	M.Sc. A.D.C.S.S.A.	Associate Professor	Physics	28	-
Prof. T.B.Sonawane	M.Sc. SET	Assistant Professor	Electronic Science	08	-
Prof. T.R.Kumbhar	M.Sc. SET	Assistant Professor	Electronic Science	06	-
Prof. M.R. Bodke	M.Sc.	Assistant Professor	Electronic Science	10	-
Prof. A.V.Kamble	M.Sc.	Assistant Professor	Electronic Science	14	-
Prof. P.S.Varade	M.Sc. SET	Assistant Professor	Electronic Science	14	-
Prof. R.V.Vidap	M.Sc.	Assistant Professor	Electronic Science	10	-
Prof. Ameeta A Kulkarni	M.Sc.	Assistant Professor	Electronic Science	14	-
Prof. V.A. Chaudhari	M.Sc.	Assistant Professor	Electronic Science	01	-
Prof. G.M.Tarte	M.Sc. SET	Assistant Professor	Electronic Science	08	-
Prof. U.N.Kothavade	M.Sc.	Assistant Professor	Electronic Science	08	-

11. List of senior visiting faculty :

- Dr U N Hivarkar, IGATE
- Dr A D Shaligram, Professor and Head of the Department of Electronic Science, Savitribai Phule Pune University.
- Dr. Smt. Damayanti C. Gharpure, Professor, Department of Electronic Science, Savitribai Phule Pune University, Pune.
- Prof. S.B. Bhagwat , Associate Professor , Fergusson College , Pune-5.
- Dr. SATISH SHARMA , Associate Professor and Head, Department of Electronics and Computer Science, Rashtrasant Tukadoji Maharaj Nagpur University.
- Dr.P.K.Bhadane , Head of the Department Nowrosjee Wadia College , Pune-1
- Mr Ganesh V. Shinde (KPIT).

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :

UG : 5%

PG : 10 %

13. Student-Teacher Ratio (programme wise) :

UG 15:1

PG 16:1

14. Number of academic support staff (technical) and administrative staff ; sanctioned and filled :

One post of Faculty Clerk, in the college office is sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	6	5

15. Qualification of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil. / P.G. :

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. Of Staff	12	1	-	-	-

16. Number of faculty with ongoing projects from a) national b) International funding agencies and grants received :

Prof. P.S. Varade: Design and development of surface acoustic wave based gas sensors”, 2014-2016, BCUD, Savitribai Phule Pune University, Grants Rs. 1,90,000/-

17. Departmental projects funded by DST-FIST; UGC,DBT, ICSSR, etc. And total grants received : -

Sr No	Name of the project	Year/Funding Agency	Name of Principal Investigator	Major /Minor	Amount Sanctioned
1	Effect of RF radiation on plant growth	2008-2010 BCUD	Prof. R.V. Vidap (PI) Prof. A.V. Kamble (CO I)	Minor	Rs. 1,00,000/-
2	“Modelling, Simulation and experimental study of Fiber Optic Tilt Sensors and their applications”	2009-11 BCUD	Prof . S. R Chaudhari (PI) Prof. D. B. Gaikwad (CO I)	Minor	Rs. 2,50,000/-

18. Research Centre / facility recognized by the University

Post Graduate Research Centre in Electronic Science is recognized by the Savitribai Phule University, Pune -411007 (Maharashtra)

19. Publications :

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference	International	National/ Local	Book chapter				
Prof. S.R.Chaudhari	1	2	2	0	23	0	28	-	-	-
Prof. T.B.Sonawane	4	2	1	-	-	-	6	7.921	2	1
Prof. T.R.Kumbhar	2	-	-	-	-	-	2	1.1	2	1
Prof. M.R. Bodke	3	2	-	-	-	-	-	-	-	-
Prof. P.S.Varade	-	1	1	-	-	-	2	-	-	-
Prof. R.V.Vidap	3	0	7	-	-	-	10	6.277	6	1

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards

Nil

22. Student projects

a) Percentage of students who have done in house projects including inter departmental/programme: 80%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 20%

23. Awards / Recognitions received by faculty and students:

Faculty		
1	B.B.Yenage	Captain NCC
2	A.V.Kamble	NCC
3	P.S.Varade	Best NSS Officer by SPPU
4	S.R.Chaudhari	Vice Principal
Students		
1	Mrs. Varsha Bapat	SET., Assistant Professor, Modern College ,Ganeshkhind, Pune-53
2	Mr. Rajesh Joshi.	Sr. Manager ,Business Development Dynalog India Ltd.
3	Mr. Sandesh Kashikar	Engineering Manager at Ericsson Austin, Texas Information Technology and Services.
4	Miss. Richa Deshpande	Proprietor ,Eltech Electrodesigns, at Lonavala
5	Mr.Manoj Nerlekar	Police Inspector , Samarth Police Station , Pune
6	Mr. Mangesh Dayaphule	Project Staff, CMET , Pashan Pune
7	Mr.Pravin Rane	M/s. Prowiz Systems
8	Mr. Kapil Hole	SET , NET , Lecturer A.T.S.S. I.I.C.M.R., Chinchwad
9	Mr. Gajanan Tarate	NET, Lecturer, Modern College , Pune-5
10	Mr. Yogesh Darekar	Sr. Software Engineer IBM , Pune
11	Mr. Rajesh Wagle	Pcsmile Technology , IT Firm
12	Mr. Babasaheb Kadam	Asst. Manager Intelux Electronics Pvt. Ltd.
13	Mr. Vikram Upadhye	Sr. ASIC Engineer, Intel India Private Limited.
14	Mr. Rahul Deo	Design Engineer,Minda Stoneridge Ins. Ltd.
15	Mr. Rajendra Thombre	Deputy Manager at UNO MINDA,NK Minda Group
16	Mr. Mayur Gaikwad	Software Developer, Minda Stoneridge Instruments Limited.
17	Mr. Sameer Kelkar	Manufacturing Engineer , Honeywell Automation India Ltd
18	Mr.Piyush Manavar	Project Engineer , IIT Bombay
19	Mr. Bhaven	Senior Research Associate, IIT Mumbai
20	Mr.Avinash Shingte	M.Phil. Asst. Professor , Indira College of Commerce and Sc.
21	Mrs. Jyoti Shrote	SET,Asst. Professor, College of Commerce and Science, Pune
22	Dr. Harshad J. Gelada	B.Ed., Ph.D. Asst. Professor, Sinhgad College of science,
23	Ms. Shruti Deshmukh	Asst. Prof. In Electronics,Sinhgad College of Science.
24	Ms. Jayashri Bangali	M.Phil. Asst. Professor, Kaveri College of Science and Commerce
25	Mr. Anand Buddhikot	M.Phil. Asst. Professor, Kaveri College of Science and Commerce

Students		
26	Mrs. Poonam R Kadam	Lecturer, Abasaheb Garware College, Pune
27	Mrs. Meghana Palkar	NET, Asst. Professor, Abasaheb Garware College, Pune
28	Mrs. Archana Apte	SET, Lecturer, Modern College Pune-5
29	Mr. Walunj Madhukar B.	SET., Lecturer, Abasaheb Garware College, Pune
30	Mrs. Misar Medha S	SET, Asst. Professor, B R Gholap College, Sangavi
31	Mr. Varade Prabhakar S.	SET, Asst. Professor, Modern College Pune-5
32	Mrs. Hailkar Pallavi B.	SET., Assistant Lecturer, MIT ASC, Alandi
33	Mrs. Shaikh Atiya Irfan	SET., M.Phil., Assistant Professor, Abeda Inamdar College, Pune
34	Mrs. Kishori Kasat	M.B.A., M.Phil., NET, Lecturer, Symbiosis College of Arts and Com.
35	Mr. P. K. Shinde	NET-JRF, Assistant Professor, Sangamner College
36	Mr. Kurne Inamdar Faizahmed Hamid	Asst. Professor, Head DOES, Abeda Inamdar College

24. List of eminent academicians and scientist / visitors to the department:

- Dr. A. D. Shaligram, Head of the Department of Electronic Science Savitribai Phule Pune University, Pune 411 007
- Prof. Z.B. Pathan, AKI's Poona College of Arts, Science and Commerce, Camp, Pune-411001
- Prof. M. B. Patil, Professor, IIT, Mumbai
- Dr. K. S. Chari, Scientist G, DIT, New Delhi
- Kuber Madhav, Scientist F, DIAT Pune
- Dr. Satish Sharma, Associate Professor and Head, Department of Electronics and Computer Science, Rashtrasant Tukadoji Maharaj Nagpur University.
- Prof. D. S. Patil, Department of Electronics, North Maharashtra University, Jalgaon [Maharashtra], India.
- Dr. Sharad Pustake, Advisor, Department of Science and Technology Park, Pune
- Dr. R. K. Kamat, Department of Electronics, Shivaji University, Kolhapur – 416 004.
- Dr. M. D. Uplane, Department of Electronics, Shivaji University, Kolhapur – 416 004
- Dr. Mangesh Kashyap, Society for Environment Education, Research and Management (SEERAM) Varad, 250/A/8, Shaniwar Peth, Pune-411030 Maharashtra, India.
- Dr. Arvind Joshi, President, CanArian International Inc., Toronto, Canada.
- Prof. P. B. Buchade, Head of the Department Electronic Science, Abasaheb Garware College, Karve Road, Pune - 411004.
- Prof. Bhimrao Ladgaonkar, Professor and Head, Post Graduate Department of Electronics, S.M. Mahavidyalaya, Akulj
- Dr. Girish Phatak, Scientist, CMET, Pune.
- Dr. Neelima Iyer, Scientist, NCL, Pune.
- Prof. J. V. Khedkar, Head, Department of Electronic Science, Fergusson College, Pune.
- Dr. R. R. Mali, Director, Instrumentation, IMD, Pune

- Mr V N Savant, Maintenance manager, Vishay Component, Pune.
- Dr M N Awatade, Vasantdada Sugar Institute, Manjri , Pune.
- Mr.Sandip Thange, Krish Infotech, Pune.
- Shri Madhav Kuber, Sc-F, Defense Institute of Advanced Technology, (Deemed University), Pune.
- Dr. S. S. Sadistap Dy. Director CEERI Pilani.

25. Seminars / Conferences / Workshops organized and the source of funding

a. National:

- National Conference on Hazardous e-waste management was held on 23rd and 24th December 2013., BCUD Rs. 100000/-
- National workshop on Embedded system Design using ARM processor was held on 2-22 Oct 2008., BCUD Rs. 125000/-

26. Student profile programme / course wise :

B.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	95	61	34	51.35
2011-2012	361	79	57	22	48.38
2012-2013	326	60	30	30	25.71
2013-2014	402	64	28	36	77.77
2014-2015	396	64	29	35	60
2015-2016	427	100	52	48	RA

M.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	59	26	9	17	86.95
2011-2012	62	26	19	7	76
2012-2013	48	20	11	9	95.60
2013-2014	55	23	10	13	84.21
2014-2015	48	23	8	15	95
2015-2016	26	12	11	11	RA

27. Diversity of Students

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	0.5	0.05
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	98.08	1.92	0.00
2011-2012	94.44	5.56	0.00
2012-2013	95.56	4.44	0.00
2013-2014	100.00	0.00	0.00
2014-2015	100.00	0.00	0.00
2015-2016	100.00	0.00	0.00

28. How many students have cleared national and state competitive examination such as NET,SLET,GATE, Civil Services, Defense Services, etc.?: - NET /

SET/NET Qualified Students:

1.	Tarate G M	NET
2.	Walunj M B	SET
3.	Mr. P. K. Shinde	NET
4.	Mrs.Shaikh Atiya Irfan	SET
5.	Mrs.Jyoti Shrote	SET

29. Student progression

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	1%
PG to Ph.D.	0
Ph.D. to Post-Doctoral	0
Employed	
• Campus selection	2%
• Other than campus recruitment	10%
Entrepreneurship/ Self-employment	2%

30. Details of Infrastructural facilities

- Library- Total Books: Central library and e-books in the department
- Internet facilities for Staff and Students: Wi-Fi and 24 computers with 10 mbps leased line Internet
- Class rooms with ICT facility: 2
- Laboratories: 5

31. Number of students receiving financial assistance from college, University , Government or other agencies:

The figures represent the total number of students of the Science Faculty and the Post Graduate students of the department.

Year	Total number of students
2010-11	50
2011-12	74
2012-13	65
2013-14	132
2014-15	163
2015-16	153

Two students are receiving financial assistance from SPPU under the Earn and Learn Scheme.

32. Details on student enrichment programmes (special lectures /workshops / seminar) with external experts

Course	Duration	Batches
Embedded System Development with Hands-on training using ARM processor	20- 22 October 2008.	One
State Level PLC Training Program with hands-on Experience	20-24 March 2008	one
Digital System Design Using VHDL	13 March 2010	one
Robot Workshop 8051 based Firebird robot as a platform to study embedded C for 8051.	24 Sept 2011	one
one day college level Imagine 2011 poster competition cum presentation	25 th February 2012.	One
one day college level Imagine 2012 poster competition cum presentation	25 th February 2012.	One
This two day state level workshop on Digital System Design using VHDL on CPLD board	10 and 11 February 2012.	One
Two days training program on ROBOT using 8051	5 th and 6 th January 2015	one
Two days training program on ROBOT using 8051	10,11 February 2016	One

33. Teaching methods adopted to improve student learning :

- Use of ICT
- Online examination for internal assessment
- Recorded lectures , online NPTEL lectures

34. Participation in Institutional Social Responsibility (ISR) and Extension activities :

- Tree plantation program
- E-waste management Campaign
- E-waste collection centre

35. SWOC analysis of the department and future plans :

Strength:

- Well-equipped laboratories
- Well qualified, proficient in techniques, and research oriented staff
- ICT based Laboratories and Digital Classroom
- Virtual Laboratory.

Weakness:

- The students enrolled at first year are generally of average percentage.
- Busy schedule of the labs and space constraint restrict number of extra activity programs.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- To avail of the ever emerging opportunities in the field of electronic science and its applications by:
 - Conducting certificate courses
 - Conducting more hands-on training programs
 - Organizing industry academia meets
 - Preparing e-brochure of students for enhancing student employability
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.
- The department has initiated virtual laboratory facility in collaboration with IIT Mumbai, enabling quality-improved practical based teaching-learning activity.

Challenges:

- To enhance student employability and to motivate them for establishing their own business
- To establish research and development culture in such a way that the students will acquire positions in national /international research laboratories/industries.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- Further improvement in the infrastructural facilities in the PG laboratory and the recognized research centre.
- More effective and efficient use of the Virtual Laboratory developed in the collaboration with IIT, Mumbai.
- Publishing a research annual about the research activities carried out in the department.
- More add-on courses.
- E-brochure for better placement of the students.

□□□

Department of English

1. **Name of the department:** Department of English
2. **Year of establishment :** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.A. English
M.A. English
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
B.A. English: Annual Pattern
M.A. English: Semester Pattern with Choice Based Credit System
6. **Participation of the department in the courses offered by other Departments:**
Participation in teaching to:
 - B.Sc. Bio-Technology, B.Sc. Animation, and M.Sc. Zoology
 - Papers on Soft Skills, Human Rights and Cyber Security for all PG departments
7. **Courses in Collaboration with Universities/Industries/Foreign Institutions:**
 - Blended English Course with the British Council Library,
 - A course in Translation Studies in collaboration with BITS, Pune, for PG students
 - Technoknit, Pune, conducts training sessions for MA students
8. **Details of courses / programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts:**

Post	Sanctioned	Filled
Professors	-	-
Associate Professor	1	1
Assistant Professor	4	4

10. **Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	Experience	No. Of Ph.D. students guided
Prof. Mrs. Alka A. Kamble	M.A.(Pursuing Ph.D.)	Head of the Department	ELT / Dalit and Marginalised Feminism	18 years	-
Prof.Dipali Lodh	M.A. SET	Asst. Prof.	Literature	5 years	-

Name	Qualification	Designation	Specialization	Experience	No. Of Ph.D. students guided
Prof.Pallavi S. Math	M.A. SET	Asst.Prof.	Literature	3 years	-
Prof.Sangita Sarma	M.A., M.Phil., L.L.B, L.L.M	Asst.Prof.	Language and Literature	8 Years	-
Prof. Pankaj Lokhande	M.A. (Pursuing Ph.D.)	Asst.Prof.	Literature	2 year	-

11. List of Senior Visiting Faculty

- Dr. P. F. Patil, Former Principal, Arts, Science and Commerce, Lasalgaon, Dist. Nasik.
- Dr. Deepaneeta Bhanja, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-7
- Dr. Triveni Goswami Mathur, Freelancer Teacher and Creative Writer, Director, Symbiosis Studies of Mass Media, Pune.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

B.A. English: Nil

M.A. English: 25%

13. Student Teacher Ratio (Programme wise)

B.A. English: 20:1

M.A. English: 16:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

One post of Faculty Clerk, in the college office is sanctioned and filled.

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	4	1	-	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University:

Few of the staff members are actively involved in research and research publications. The department intends to apply for the Research Centre in the near future.

19. Publications:

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/ Local	Book chapter	
Prof. Mrs. Alka A. Kamble	-	-	3	-	-	-	3
Prof.Dipali Lodh	-	-	6	-	-	-	6
Prof.Sangita Sarma	-	-	2	-	-	-	2
Prof. Pankaj Lokhande	-	-	1	-	-	-	1

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees :

b) International Committees

Prof. Alka Kamble is associated with Retract International for coordinating various programmes for students in the college.

c) Editorial Boards

Prof. Alka Kamble

- Associated with Dr. Nicole Thiara, Centre for Postcolonial Studies, Nottingham Trent University, UK.
- Member of the Editorial Board of an international conference on 'Employability Enhancement through proficiency in Indian and foreign languages'.
- Member of HR Lingua, New Delhi, Association of Language Professionals regarding language employability.

22. Student projects

a) Percentage of students who have done in house projects including inter departmental/programme: Nil

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students:

Two students from the department have received the 'Best Student Award' of the college.

24. List of eminent academicians and scientists/visitors to the department :

- Prof. W.N.Herbert, Professor of Creative Writing and eminent poet
- Leah Guren, Owner of Cow T.C., Israel, associated with World

Technical Writing Association

- Prof. Christina DeCoursey, HongKong Polytechnic, HongKong
- Dr. Roger Nunn, Petroleum University, Abu Dhabi.
- Dr. Dhirawit P Nathangarn, Suranaree University, Thailand
- Dr. Rajul Bhargava, Jaipur University, Jaipur

25. Seminars/Conferences/Workshops organised and the source of funding

- International:** International Conference on ‘Employability Enhancement through proficiency in Indian and foreign languages’, funded by ICSSR, Delhi and BCUD, Savitribai Phule Pune University, Pune.
- State:**
 - Workshop organised in January 2011, on Career Opportunities in Languages in association with the daily newspaper Maharashtra Times, Pune.
 - Workshop arranged on Review Writing

26. Student profile programme/course wise:

B.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	239	234	143	91	100.00
2011-2012	246	227	124	103	100.00
2012-2013	282	271	152	119	100.00
2013-2014	314	295	170	125	89.79
2014-2015	364	328	173	155	91.30
2015-2016	376	327	178	149	RA

M.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	95	60	28	32	100
2011-2012	98	60	35	25	100
2012-2013	110	60	20	40	100
2013-2014	92	54	34	20	89.79
2014-2015	80	44	22	22	91.30
2015-2016	102	61	37	24	RA

27. Diversity of Students:

B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	98.24	1.32	0.44
2012-2013	97.82	1.82	0.36
2013-2014	100	Nil	Nil
2014-2015	94.1	1.24	4.66
2015-2016	96.56	0.52	2.90

M.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	94.87	4.27	0.85
2011-2012	97.37	0.88	1.75
2012-2013	95.54	3.57	0.89
2013-2014	88.18	3.64	8.18
2014-2015	89.87	2.53	7.59
2015-2016	95.56	1.32	3.12

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: Nil

29. Student progression

Student progression	Against % enrolled
UG to PG	70%
PG to M.Phil.	05%
PG to Ph.D.	05%
Ph.D. to Post-Doctoral	-
Employed • Campus selection • Other than campus Recruitment	10% 50%
Entrepreneurship/Self-employment	30%

30. Details of Infrastructural facilities:

- a) Library: Common library
- b) Internet facility for staff and students: Available, 10 mbps leased line
- c) Class room with ICT facility: Available
- d) Language laboratories: Available (10 cubicles with PCs on which Language Lab Software is installed)

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represent the total number of students of the Arts Faculty and Post Graduate students of the department.

Year	Total number of students
2010-11	68
2011-12	36
2012-13	83
2013-14	177
2014-15	131
2015-16	120

- Nothangarn- Sureenaree University, Thailand, and Sandeep Nulkar- BITS, Pune, for North-East Student who is first in MA

- Post matric Scholarship for students from North-East regions, Funds given by Dr. Dhirawit P.

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

- Conduct remedial coaching classes and workshops
- Association with BCL Pune for Blended English Course
- Spoken English Sessions for weak students

33. Teaching methods adopted to improve student learning:

- Group Discussion in M.A., S.Y.B.Sc. And T.Y.B.A. classes
- Film shows related to the literature prescribed
- Field visit: EFLU Hyderabad and Deccan College, Pune
- Reference skills study material for assignments and presentations
- Poster Competition
- 'Book Club' for undergraduate students.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Spoken English sessions for communicatively weak students

35. SWOC analysis of the department and future plans:

Strength

- Team work
- Association with language industry professionals

Weakness

- Placement activity at departmental level needs to be strengthened.

Opportunities

- Ample scope for promotional activities in the area of multilingual communication skills, translation and interpretation skills

Challenges

- Meeting the requirements of multilingual communication skills emerging out of globalization process
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans

- To introduce new courses
 - A Certificate Course in Industrial Translation and Content Writing
 - Certificate Course in Appreciation of Literature
- To conduct the sessions for NET and SET examination preparation in the subject English Language and Literature
- Remunerative services about counselling on career in languages.

□□□

Department of Fashion Technology

1. **Name of the department:** Department of Fashion Technology
2. **Year of establishment :** 2015
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
Community College
Certificate and Diploma course in Dress Designing and Tailoring
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
Semester Pattern
6. **Participation of the department in the courses offered by other Departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons:-**
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	--
Asst. Professors	1	1

10. **Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Manasi Thakur	M Sc	Head of the Department	Fashion Design	15	-

11. **List of Senior Visiting Faculty:**

Mr. C. N. Vartak, Retd. Professor, School of Fashion Technology, Pune.

12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**

Certificate and Diploma course in Dress Designing and Tailoring: 20%

13. **Student -Teacher Ratio (programme wise):**

Certificate and Diploma course in Dress Designing and Tailoring: 25:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

One post of Faculty Clerk, in the college office is sanctioned and filled.

Technical	Filled
Class 3	1
Class 4	-

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	2	-	-	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications: Nil

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees:

b) International Committees:

c) Editorial Boards :

Nil

22. Student projects

a. Percentage of students who have done in house projects including inter departmental/programme: 100%

b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students: Nil

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized and the source of funding:

a) National: Nil

b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application received	Selected	Enrolled		Pass %
			M	F	
Certificate and Diploma in Dress Designing and Tailoring	70	50	0	50	RA

27. Diversity of Students:

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
Certificate and Diploma in Dress Designing and Tailoring	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:

Nil

29. Student progression

Student progression	Against % enrolled
UG to PG	-
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed • Campus selection • Other than campus Recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- Library- College Library
- Internet facilities for Staff and Students: Yes
- Class rooms with ICT facility: Yes
- Laboratories: Yes

31. Number of students receiving financial assistance from college, University, government or other agencies:

100% of the students have received scholarship of Rs. 12,000/- from University Grants Commission.

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

- A workshop on 'Careers in Design' organised by MIT and Rotary International Club

- A workshop on ‘Eco-friendly bags and Folders’ was organized for the students.
- A workshop on ‘Gent’s Shirt’ Drafting, cutting and stitching was organized for the students.

33. Teaching methods adopted to improve student learning:

- Hands-on practical oriented methods
- Chalk and talk method

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

35. SWOC analysis of the department and future plans:

Strength:

- Industrial collaborations
- Well-equipped Laboratory
- Experienced staff
- Expert guest faculty
- Strong practical orientation in teaching

Weakness:

- Limited floor space for students to work freely
- Infrastructure in its formation phase

Opportunities:

- Can take up more courses in the similar fields
- Manufacturing and supply of readymade garments

Challenges:

- Sustenance of the course without grants from UGC
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- To create infrastructure at par with industry for designing, manufacturing and selling products, apparels and accessories.
- To start B.Voc. in Dress Designing and Tailoring under the UGC’s initiative of the Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (KAUSHAL).

□□□

Department of Geography

1. **Name of the department:** Department of Geography
2. **Year of Establishment :** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.A. Geography
M.A/M.Sc. Geography
4. **Names of Interdisciplinary courses and the departments / units involved :**
The department is involved in the teaching and coordination of a course on 'Environmental Awareness'.
5. **Annual / semester / choice based credit system (programme wise) :**
B.A. Geography: Annual Pattern
B.Sc. Geography: Semester Pattern
M.A./M.Sc. Geography: Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:**
The faculty is involved in teaching Remote Sensing and GIS to the Post Graduate students of the Department of Botany.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons : -**
9. **Number of Teaching posts :**

	Sanctioned	Filled
Professors	-	-
Associate Professors	02	02
Asst. Professors	02	02

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the last 4 year
Dr. Mrs. N. J. Kulkarni	M.A., .A(Mar)., M.Phil., Ph.D.	Associate Professor	Economic Geography	35	-
Dr. V. B. Kamble	M.A., M.Ed. Ph.D., SET	Associate Professor	Economic Geography	25	-
Prof. N. L. Wayal	M.A., NET	Assistant Professor	Economic Geography	09	-
Dr. A. E. Sonawane	M.A., B.Ed., SET, Ph.D.	Assistant Professor	Population Geography	06	-

11. List of senior visiting faculty :

- Dr. S. W. Gaikwad, S.P. College, Pune.
- Dr. J. A. Jadhav, D.Y.Patil College, Pimpri, Pune.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

U.G.: 34% lectures and 25% Practicals.

P.G.: 33% lectures and 50% Practicals.

13. Student-Teacher Ratio (programme wise) :

UG.: 20: 1

PG.: 12: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled :

One post of Faculty Clerk, in the college office is sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	2	2

15. Qualification of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil. / P.G.

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	1	-	3	-	-

16. Number of faculty with ongoing projects from a) national b) International funding agencies and grants received : One (National), Rs, 1,40,000/-

17. Departmental projects funded by DST-FIST; UGC,DBT, ICSSR, etc. and total grants received :

Prof. N. L. Wayal: 'Ground Water Management for Sustainable Agricultural Development: A case Study of Akole Tahsil District Ahmednagar, Western Maharashtra'. Funds granted Rs. 1,40,000/- by UGC under Minor Research Project.

18. Research Centre / facility recognized by the University:

The staff members are actively involved in the research activities. However, the department is yet to be recognized as a Research Centre in Geography by the SPPU, Pune.

19. Publications :

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/Local	Book chapter	
Dr. Mrs. N.J.Kulkarni	1	-	1	-	6	-	8
Dr. V.B. Kamble	-	-	2	-	-	-	2
Dr. A. E. Sonawane	-	5	1	-	1	-	7

20. Areas of consultancy and income generated:

Every year, the department conducts village surveys at nearby villages. The finding of socio-economic nature from such surveys are discussed with the villagers and they are advised to take appropriate measures to overcome the problems they face. This consultancy by the department is of non-remunerative nature.

21. Faculty as members in

- National committees
- International Committees
- Editorial Boards

Sr. No.	Name	Membership
1.	Dr.Mrs.N.J. Kulkarni	Life Member of - Indian Institute of Geography - National Geographer Association India - Deccan Geographer - Maharashtra Bhoogol Shastra Parishad - Member of Editorial Board of 'Earth Exploration', Research Journal July, 2011.
2.	Prof. N. L. Wayal	Maharashtra Bhoogol Shastra Parishad
3.	Dr. A. E. Sonawane	Maharashtra Bhoogol Shastra Parishad

22. Student Projects :

- Percentage of students who have done in house projects including inter departmental/programme: Nil
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students: Nil

24. List of eminent academicians and scientist / visitors to the department:

- Dr. V.C. Vaidya, JNU, New Delhi.
- Dr. Praveen Saptarshi, Indsearch Institute

- Dr. Abhay Deswandikar, IB, Australia
- Dr. Ramhotra, Head, Department of Geography, Shivaji University, Kolhapur.
- Dr. Y. S. Khan, Department of Geography, Solapur University, Solapur.
- Dr. Mrs. P. S. Arkasali, Head, Department of Geography, Mahatma Phule College, Pimpri, Pune.

25. Seminars / Conferences / Workshops organized and the source of funding

- a) National: Nil
- b) International: Nil
- c) State: 01
- 'A state level conference on Role of Tourism in the Regional Development' was organized on 27th and 28th February 2012. It was sponsored by BCUD University Of Pune (Under Quality Improvement Programme). One hundred and twenty five participants attended the conference and nearly fifty research papers were presented in the conference.
- The department had organized two days workshop on SET and NET Examinations on 27th and 28th October 2010.

26. Student profile programme / course wise :

B.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	239	204	134	79	57.89
2011-2012	246	207	111	96	56.52
2012-2013	282	251	141	110	95.00
2013-2014	314	267	162	105	89.47
2014-2015	364	262	136	126	87.50
2015-2016	378	237	125	112	RA

M.A./M.Sc.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	77	26	15	11	86.66
2011-2012	65	24	18	6	85.71
2012-2013	89	24	13	11	95.00
2013-2014	48	21	13	8	89.47
2014-2015	18	14	9	5	93.75
2015-2016	20	14	5	9	RA

27. Diversity of Students

B.A., B.Sc., B.Com

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	98.24	1.32	0.44
2012-2013	97.82	1.82	0.36

Year	% of students from the same state	% of students from other States	% of students from abroad
2013-2014	100	Nil	Nil
2014-2015	94.1	1.24	4.66
2015-2016	96.56	0.52	2.90

M.A./M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100.00	0.00	0.00
2011-2012	100.00	0.00	0.00
2012-2013	97.73	2.27	0.00
2013-2014	93.02	4.65	2.33
2014-2015	96.88	3.13	0.00
2015-2016	100.00	0.00	0.00

28. How many students have cleared national and state competitive examination such as NET,SLET,GATE, Civil Services, Defense Services, etc.?:

NET / SET Qualified Students: 09

29. Student progression :

Student progression	Against % enrolled
UG to PG	10 %
PG to M.Phil.	-
PG to Ph.D.	1%
Ph.D. to Post-Doctoral	-
Employed	-
• Campus selection	20%
• Other than campus recruitment	-
Entrepreneurship/ Self-employment	-

30. Details of Infrastructural facilities :

- Library: Central library with separate section of Geography. Digital library is also available.
- Internet facilities for staff and students: Internet facility is available for staff and students with 10 Mbps internet connection.
- Class rooms with ICT facility: Yes
- Laboratories : 03 equipped with ICT facility.

31. Number of students receiving financial assistance from college, University Government or other agencies:

The figures represent the total number of students of the Arts Faculty and the Post Graduate students of the department.

Year	Total number of students
2010-11	51
2011-12	35
2012-13	82
2013-14	178
2014-15	136
2015-16	104

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts :

Enrichment Programme

- Career development programme in NET/ SET: 27th and 28th October, 2006.
- Research in Social Sciences.
- Competitive Exam Guidance Workshop: - 17th, 18th and 27th January ,2011.

Experts :

- Shri. Amol Gaikwad
- Prof. Sachin Thiswandkar
- Prof. Ramesh Dhumal
- Prof. Yusuf Shaikh
- Shri. R. K, Kane
- Prof. Tukaram Jadhav
- One day workshop on ‘Application of GIS in Population and Settlement Planning and Management’ on 5th February 2011.

33. Teaching methods adopted to improve student learning:

- Chalk and talk method
- Use of ICT
- Discussion Method
- Film show on certain topics

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- A rain water harvesting unit installed by the college is maintained by the Department of Geography.
- Village Surveys are completed to find out Socio-economic characteristics and problems.

35. SWOC analysis of the department and future plans :

Strength :

- Well qualified and experienced staff
- Enriched collection of departmental books, periodicals and equipment
- Well-equipped and upgraded laboratories.
- Abundant educational aids for teaching Geography.

Weakness:

- Constraints arising out of syllabus.
- Traditional evaluation method as per the university policy.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Shaping the careers of students through self-employment courses like Travel and Tourism, GIS, etc.
- Soft skill development programmes to improve overall development of the student
- Improving communication skills of students of Geography to facilitate their employment prospects

Challenges:

- To improve overall personality of students
- To inculcate research aptitude among the students
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans

- Certificate Course in GIS
- Certificate Course in Travel and Tourism
- Post Graduate Research Centre in Geography
- Research Annual in Geography.

□□□

Department of German

1. **Name of the department:** Department of German
2. **Year of establishment :** 2010
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 B.A. German (General): 2010
 B.A. German (Special): 2015
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise)**
 B.A. German: Annual Pattern
6. **Participation of the department in the courses offered by other departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
 - A1 and A2 courses in collaboration with Max Mueller Bhavan, Goethe Institute.
 - Summer course in German Language with the support of Humboldt University, Berlin, June 2016.
8. **Details of courses/programmes discontinued (if any) with reasons:** Nil
9. **Number of Teaching posts.**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	2	1

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Prof. Sanjeevani Kuvalekar	M.A.	Asst. Professor	German	34	-

11. List of senior visiting faculty

Dr. Sunanda Mahajan, Professor, Department of German, SPPU, Pune.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

B.A. German : 35%

13. Student -Teacher Ratio (programme wise)

BA : 20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

One post of Faculty Clerk, in the college office is sanctioned and filled.

15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil./PG.

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	1	-	-	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/ Local	Book chapter	
Prof. Sanjeevani Kuvalekar	-	1	1	-	4	-	6

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees:

Mrs. Sanjeevani Kuvalekar is a member of Der Indische Deutschlehrerverband (InDaF), and Goeth Society of India.

b) International Committees:

Mrs. Sanjeevani Kuvalekar is a member of **PASCH (Partner Schulen, Germany)**

c) Editorial Boards:

Member of Board of Studies of Tilak Maharashtra Vidyapeeth and Member of Maharashtra State Board

22. Student projects

a) Percentage of students who have done in house projects including inter departmental/programme:

- Eight students participated in a project on Environment (Waste Management) in collaboration with Goethe Institute, Bangalore. (2013-2014)
- Twelve students participated in a project on Environment (Waste Management) in collaboration with Goethe Institute, Bangalore. (2012-2013)

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards/ Recognitions received by faculty and students

- Member of Board of Studies for German Language in Tilak Maharashtra Vidyapeeth.
- Convener, Board of Studies of Foreign Languages, Maharashtra State Board.

24. List of eminent academicians and scientists/ visitors to the department

- Dr. Christoph Senft (DAAD)
- Dr. Anja Hallacker (DAAD)
- Dr. Sunanda Mahajan, Department of German, SPPU, Pune.
- Dr. Manjiri Paranjape, HOD German, SPPU, Pune.
- Dr. Pramod Talgeri, Ex-Vice Chancellor, CIEFL.

25. Seminars/ Conferences/Workshops organized and the source of funding

- a. National: Nil
- b. International: International Conference on Employability Enhancement through proficiency in Indian and foreign languages (Funding from ICSSR and SPPU).

26. Student profile programme/course wise:

Name of the Course/programme B.A. German	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	7	7	3	4	-
2011-2012	8	8	0	8	-
2012-2013	9	9	4	5	100
2013-2014	20	20	6	14	100
2014-2015	46	46	15	31	-
2015-2016	29	29	1	28	RA

27. Diversity of Students

B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	98.24	1.32	0.44
2012-2013	97.82	1.82	0.36
2013-2014	100	Nil	Nil
2014-2015	94.1	1.24	4.66
2015-2016	96.56	0.52	2.90

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: Nil

29. Student progression

Student progression	Against % enrolled
UG to PG	---
PG to M.Phil.	---
PG to Ph.D.	---
Ph.D. to Post-Doctoral	---
Employed	---
• Campus selection	
• Other than campus Recruitment	
Entrepreneurship/Self-employment	---

30. Details of Infrastructural facilities

- a) Library: Central Library of the college
- b) Internet facilities for Staff and Students: Yes
- c) Class rooms with ICT facility: Yes
- d) Laboratory: Yes

31. Number of students receiving financial assistance from college, university, government or other agencies

The figures represent the data of the Arts Faculty.

Academic year	Number of students
2010-11	42
2011-12	23
2012-13	63
2013-14	159
2014-15	120
2015-16	99

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- An innovative activity 'Stamm Tisch', under which the students of German Special from Modern College, Fergusson College and S.P.College

meet every Saturday at 5.00 pm in Kamal Nehru Park and interact in German language on a particular topic in the presence of a native German and German teachers. Students learn German through games and songs under this activity.

- Lectures by German Experts for Students on the topic ‘German Culture’.
- Cultural Activity: Christmas Celebration, where German learning students from India, Afghanistan and Mauritius presented ways of Christmas celebration in their countries, Sing a Song Competition, German recipe competition, etc.

33. Teaching methods adopted to improve student learning

- Interactive Teaching with the use of audio-visual aids and internet.
- Use of online material regarding German language

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Eight students participated in a project on Environment (Waste Management) in collaboration with Goethe Institute, Bangalore (2013-2014).
- Twelve students participated in a project on Environment (Waste Management) in collaboration with Goethe Institute, Bangalore (2012-2013).

35. SWOC analysis of the department and Future plans

Strength

- Add on language courses
- Support through MOU of PASCH, Max Mueller Bhavan and college authorities
- Good collection of books and teaching aids
- Organization of workshops, conferences and lectures by experts

Weakness

- Shortage of adequate competent faculty
- Placement activity at departmental level needs to be strengthened.

Opportunities

- To have MOUs with foreign universities
- To establish Foreign Language Cell which will be beneficial for all professional courses like engineering
- To attract students other than Maharashtra and India

Challenges

- Floating faculties
- Genuine multifactorial limitations of the students coming from varied

socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans

- To undertake research projects and involve students in research
- To start a Film Club
- To develop collaborations with other German Universities for research projects
- Collaborating with the Max Mueller Bhavan, the department will be offering Level 2 and Level 3 courses in German language.
- To have Faculty Exchange Programme with German, Austrian and Swiss universities.

□□□

Department of Hindi

1. **Name of the department:** Department of Hindi
2. **Year of establishment :** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.A. Hindi (Special): 2006
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise) :**
B.A.: Annual Pattern, F.Y.B.Com.: Annual Pattern
6. **Participation of the department in the courses offered by other departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:** Nil
9. **Number of Teaching posts**

	Sanctioned	Filled
Professors	-	-
Associate Professors	01	01
Assistant Professors	01	01

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Prof. Sunita D Purohit	M.A. B. Ed	Head of the Department	Hindi Literature	36	NA
Dr. Prerana Ubale (From 2015)	M.A. NET, M.Phil. Diploma in Translation, Ph.D.	Lecturer	Hindi Literature	7	NA

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty:** Nil
13. **Student -Teacher Ratio (programme wise)**
B.A.: 20:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

One post of Faculty Clerk, in the college office is sanctioned and filled.

15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil./PG.:

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	1	-	1	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Name of the faculty	Papers			Total publications
	International	National	Presented in Conference	
Dr. Sunita D. Purohit	2	2	-	4
Dr. Prerana Ubale	2	3	2	7

• Books:

Prof. Prerana Ubale

- A poetry book: *Vishwavyapi Ani Vishwavikrami Pratinidhik Kavyakhand* (October 2012).
- Poetry book: *Kavyakasturi* (May 2016)
- Book chapter 'Bharatiya Sanskriti Aur Aadhyatmik Chetana' in the book 'Bharatiya Sanskriti Ke Vividha Aayam'.

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards

- Dr. Sunita Purohit is a member of Board of Studies in Hindi and Examination Board at St. Mira's College, Pune.
- Dr. Sunita Purohit was a member of Editorial Board of International Conference on Employability Enhancement through proficiency in Indian and Foreign languages, organized by the Language Departments of the college.

22. Student projects

a) Percentage of students who have done in house projects including inter departmental/programme: 30%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

Departmental Projects (F.Y.B.Com. students, 2015-16): 90%

23. Awards/ Recognitions received by faculty and students

Students

- First Prize for play and two prizes for Best Actor in a competition held by Maharashtra Rashtrabhasha Sabha, Pune. Prof Sunita Purohit won the First Prize for direction.
- In the year 2014, we received a prize for acting at Maharashtra Rashtrabhasha Sabha, Pune. Prof. Sunita Purohit won the First Prize for writing the play.
- Miss Sujata Bhalerao, a student from SY BA got First Prize in essay writing competition organized by Poona College, Pune, in 2010. She also received First Prize in 2011 in an essay competition organized by Modern College, Ganeshkhind, Pune.
- Brahamnadev Shukla got a Consolation Prize in 2014 in an essay competition organized by Modern College, Ganeshkhind, Pune.

Teachers

Dr. Sunita Purohit:

- Awarded 'Best Teacher Award' by the Progressive Education Society, Pune-5, for the year 2012-13.

Dr. Prerana Ubale

- Invited as a Chief Guest for the '*Hindi Din*' at SNDT College, Pune, 2015-16.

24. List of eminent academicians and scientists/ visitors to the department:

- Prof S.M Shah, Ex- Principal and President, Maharashtra Rashtrabhasha Sabha
- Dr. Kanti Lodhi, Head, Department of Hindi, N.Wadia College, Pune.
- Prof. Neela Mahadik, Department of Hindi, Garware College, Pune.
- Dr. Rajani Ranapise, Head, Department of Hindi, Fergusson College, Pune.
- Dr. Neela Borwankar, Head, Department of Hindi , Garware College, Pune.
- Dr. Shubhada Moghe, Head, Department of Hindi, St. Mira's College, Pune.
- Dr. Omprakash Sharma, Department of Hindi, Garware College, Pune.
- Prof. Shailaja Mandke, Head, Department of Hindi, Garware College, Pune.

- Dr. Sunil K. Deodhar, Hindi Officer, Akashwani Kendra, Pune.
- Dr. Padmaja Ghorpade, Head, Department of Hindi, S.P. College, Pune.

25. Seminars/ Conferences/Workshops organized and the source of funding

- International: International Conference on 'Employability Enhancement through proficiency in Indian and foreign languages' (Funding from ICSSR and SPPU).
- Workshops on Hindi Grammar (2013-14, 2014-15, 2015-16)

26. Student profile programme/course wise:

Name of the Course/programme B.A. Hindi	Application received	Selected	Enrolled		Pass %
			*M	*F	
2010- 2011	239	75	33	42	100
2011-2012	246	88	46	42	100
2012-2013	282	89	35	54	100
2013-2014	314	75	42	33	100
2014-2015	364	143	75	68	100
2015-2016	378	156	97	59	RA

27. Diversity of Students

B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	0	Nil
2011-2012	100	0	Nil
2012-2013	99.39	0.61	Nil
2013-2014	97.76	2.24	Nil
2014-2015	97.72	2.28	Nil
2015-2016	96.56	0.52	2.90

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: Nil

29. Student progression

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	5%
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	-
• Other than campus recruitment	5%
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities

- a) Library: Centralized Library
- b) Internet facilities for Staff and Students: Yes
- c) Class rooms with ICT facility: Available
- d) Laboratories: Language laboratory available

31. Number of students receiving financial assistance from college, university, government or other agencies:

The figures represent the total number of students of Arts Faculty.

Academic Year	Total number of students
2010-11	42
2011-12	23
2012-13	63
2013-14	159
2014-15	120
2015-16	99

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

- Workshops for Hindi Grammar
- Lecture Series (2013-14, 2014-15, 2015-16)
- Handwritten Magazine (2013-14, 2016)
- Essay and Advertisement Writing Competition (2010-2015)
- Expert Lectures for students. (2010-2014)
- Projects on syllabus for F.Y.B.Com. students 2015-16

33. Teaching methods adopted to improve student learning:

- Lectures, discussions in classes, Group Activities, Competitions like Essay Writing, Grammar Workshops, and activities like 'Multiple Words for One'

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Participation in various One-Act Plays for social awareness and current social issues, organized by Maharashtra Rashtrabhasha Sabha.
- Donations offered to various NGO's.

35. SWOC analysis of the department and Future plans:

Strength:

- A good collection of reference books on Hindi literature
- Contribution of the department faculty in co-curricular and extra-curricular activities

Weaknesses

- Limited job opportunities for students
- Placement activity at departmental level needs to be strengthened.

Opportunities

- To achieve proficiency in Hindi language and thereby contribute to National Integration

Challenges

- To overcome the difficulties in introducing Post Graduate course in Hindi
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans

- Hindi Translation Course.
- Spoken Hindi Course for foreign students.

□□□

Department of History

1. **Name of the department:** Department of History
2. **Year of establishment :** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.A. History (Special)
4. **Names of interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
B.A. History: Annual Pattern
6. **Participation of the department in the courses offered by other Departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons:** -
9. **Number of Teaching posts:**

Posts	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Assistant Professors	2 (1 FT, 1 PT)	2 (1 FT, 1 PT)

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. / Ph.D. / M.Phil. etc.)**

Name	Qualification	Designation	Specialization	Experience in years	No. of Ph.D. Students are working Under guidance for the last 4 years
Dr. Rajesh Kulkarni	M.A.(History) M.A. (Communication) , Ph.D.	Head of the Department	Traditional Knowledge	20	-
Dr. M. K. Admane	M.A.,(History) M.Phil. Ph.D.	Assistant Professor	Medieval and Modern India	23	-

11. **List of Senior Visiting Faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty:** Nil
13. **Student – Teacher Ratio (program wise):**
B.A.: 20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled- Administrative Staff:

One post of Faculty Clerk, in the college office is sanctioned and filled.

15. Qualification of teaching faculty with DSc / D.Litt. / Ph.D. / MPhil / PG.- Ph.D., PG:

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	-	-	2	-	-

16. Number of faculty with ongoing projects from a) National b) International Funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/ Local	Book chapter	
Dr. Rajesh Kulkarni	-	-	1	-	8	-	9
Dr. M. K. Admane	-	-	3	-	-	-	3

20. Areas of consultancy and income generated:

Non-remunerative consultancy on Indian Cultural Heritage and Traditional Knowledge of Meditation has been provided to various sectors of society.

21. Faculty as members in

a) National committees

b) International Committees

c) Editorial Boards

Nil

22. Student Projects:

Students on their own internet created two projects

a) Percentage of students who have done in house projects including inter departmental/programme: 100%

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students: Nil

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized and the source of funding:

- National: Nil
- International: Nil

26. Student profile programme/course wise:

Name of the Course/programme B.A.	Application received	Selected	Enrolled		Pass %
			*M	*F	
2010- 2011	239	168	117	51	100
2011-2012	246	153	91	62	100
2012-2013	282	209	137	72	100
2013-2014	314	255	160	95	100
2014-2015	364	254	144	110	100
2015-2016	378	278	164	114	RA

27. Diversity of Students:

B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	98.24	1.32	0.44
2012-2013	97.82	1.82	0.36
2013-2014	100	Nil	Nil
2014-2015	94.1	1.24	4.66
2015-2016	96.56	0.52	2.90

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.: Nil

29. Student progression

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	10%
PG to Ph.D.	1%
Ph.D. to Post-Doctoral	-
Employed • Campus selection • Other than campus Recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- a) Library: Yes. Main Library has reference books, textbooks, special references
- b) Internet facilities for staff and Students: Yes, 10 mbps leased line
- c) Class room with ICT facility: Yes
- d) Laboratories: History museum.

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represents the total number of students of the Arts Faculty.

Year	Total number of students
2010-11	42
2011-12	23
2012-13	63
2013-14	159
2014-15	120
2015-16	99

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

The department conducts an add-on Certificate Course on *Modi* script.

33. Teaching methods adopted to improve student learning:

- Use of ICT
- Visits to historical places and museums

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Through NSS
- Dr. Rajesh Kulkarni has written books, and prepared CDs on various topics of social relevance.

35. SWOC analysis of the department and future plans:

Strength:

- History museum
- A document on a brief Historical account of the college since its inception
- Hundred percent staff is Ph.D. qualified
- Consistently hundred percent result in last five years
- Collection of traditional knowledge (books, scripts, etc.)
- Linkage with NGO 'Satya Sangha'

Weaknesses:

- Subject offered at UG level only.

- Limited job opportunities for the subject.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Students inclined towards competitive examinations have added advantage of opting History.
- Students and staff can provide technical support and services to nearby private History museums.

Challenges:

- To encourage the students to develop the appropriate perspective of studying History
- To inculcate research aptitude among the students
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plans:

- To start Post Graduate Centre in History.
- A compilation of information on historical monuments in the city
- To prepare e-brochure for better placement
- To establish linkages with historical monuments and film archive institutes and other research institutes to create awareness about the importance of studying History
- To provide guidance to students for preparation of competitive examinations
- Starting a Meditation Course for the students preparing for Competitive Examinations.

□□□

Department of Marathi

- Name of the department:** Department of Marathi
- Year of establishment :** 1970
- Names of Programs / Courses offered**
B.A. Marathi
M.A. Marathi
Ph.D. Marathi
Add-on course on Translation (English to Marathi)
- Names of interdisciplinary courses and the departments /units involved:** Nil
- Annual / semester / choice based credit system (Programme wise)**
B.A.: Annual Pattern
M.A.: Semester Pattern with Choice Based Credit System
Add-on on Translation: Annual Pattern
- Participation of the department in the courses offered by other departments:**
 - Department of Commerce: Functional Marathi
 - Faculty of Science: Prescribed Text and Functional Marathi
- Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
- Details of courses / programmes discontinued (if any) with reasons:** -
- Number of teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	1	1
Assistant Professors	2	2

- Faculty profile with name, qualification, designation, specialization, D.Sc. /D.Litt. /Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	Experience in years	No. of Ph.D. Students are working Under guidance for the last 4 years
Dr. Snehal Tawre	M.A., Ph.D.	Associate Professor	Modern-Ancient Marathi Literature, Linguistics	34	7 and One Foreign Student (Open University, Mauritius)

Name	Qualification	Designation	Specialization	Experience in years	No. of Ph.D. Students are working Under guidance for the last 4 years
Prof. Nisha Bhandare *	M.A., NET, M.Phil.	Associate Professor	Modern Marathi Literature, Novel	20	-
Dr. Madhura Koranne	M.A., Ph. D.	Associate Professor	Modern Marathi Literature, Drama	19	-
Dr. Vaijayantimala Jadhav *	M.A., NET, SET, Ph.D.	Assistant Professor	Modern Marathi Literature	9	-

(* Worked in the Leave Vacancy of Prof. Nisha Bhandare, who was on a sabbatical leave of UGC-FIP for pursuing Ph.D.)

11. List of Senior Visiting Faculty: Nil

12. Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty:

B.A. Marathi: Nil
M.A. Marathi: 37%

13. Student -Teacher Ratio (programme wise):

B.A.: 20:1
M.A.: 13:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled- Administrative Staff

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

15. Qualification of teaching faculty with DSc / D.Litt. / Ph.D. / MPhil / PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	-	1	2	-	-

16. Number of faculty with ongoing projects from a) National b) International Funding agencies and grants received.

Under the guidance of Dr. Snehal Tawre, Dr. Vaijayantimala Jadhav is pursuing her Post-Doctoral Research supported by fellowship from UGC, New Delhi.

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University:

Post Graduate Research Centre in Marathi is recognized by the Savitribai Phule Pune University

19. Publications:

- **Books Edited:**

Dr. Snehal Tawre - 9

- **Books with ISBN/ISSN numbers with details of publishers:**

1. Snehavardhan Prakashan , Pune.
2. Yashawant Publication, Nasik.

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/Local	Book chapter	
Dr. Snehal Tawre	6	5	5	-	15	7	38
Prof. Mrs. Nisha Bhandare	-	-	1	-	-	-	1
Dr. Madhura Koranne	0	3	-	-	3	1	7
Dr. Vaijayantimala Jadhav	1	2	-	-	-	1	4
Dr. G. R. Apine	0	2	-	-	-	1	3

20. Areas of consultancy and income generated:

The department provides non-remunerative consultancy in publication business.

21. Faculty as members in

a) **National committees:** Nil

b) **International Committees:**

- External Guide - Open University of Mauritius
- Dr. Snehal Tawre is a Director of Snehavardhan Research Institute Trust, Pune.

c) **Editorial Boards:**

- Editor at Snehavardhan Prakashan, Pune.
- Member of Editorial Committee for an International Conference on 'Employability Enhancement through proficiency in Indian and foreign languages'.
- Editor of an International Interdisciplinary Conference on 'Contribution of Indian Saints', at Mahatma Gandhi Institute, Mauritius.
- Editor of an International Interdisciplinary Conference on 'Contribution of Management Gurus and Eminent Personalities in India and Abroad' at Manipal University, Dubai.
- Editor of an International Interdisciplinary Conference on 'Contribution of Folk Culture in Various Aspects of Literature', at India-Thai Chamber of Commerce, Bangkok, Thailand.

22. Student Projects

- a) Percentage of students who have done in house projects including inter departmental/programme: 100%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students:

Awards by teachers:

Dr. Snehal Tawre

- Edited books prescribed as text and reference books in the curricula of various universities in Maharashtra, Telangana, Karnataka, Gujarat, and Goa.
- Recipient of the 'Best Teacher Award' in 2011, by Dr. D.T.Bhosale Social Foundation, Pandharpur.
- 'Best Performance Award in Education' by Progressive Education Society, Pune.

Dr. Madhura Koranne

- 'Best Performance Award in Education' by Progressive Education Society, Pune, in 2010.
- Received 'Madhav Manohar Smriti Puraskar' (2010) from Rangat Sangat Pratishthan and Sahil Foundation Pune.
- Received 'Sahitya Sakhi Sanjiwani Marathe Puraskar' (2014) for the book 'Natyagandh'

Awards by students:

Mrs. Vandana Joshi

- Received three Gold Medals from SPPU, Pune, in M.A. Marathi in 2014
- 'Best Performance Award in Education' by Modern Education Society, Pune.

24. List of eminent academicians and scientists / visitors to the department:

2010-11

- Mr. Ashok Kotawal, Eminent Writer in Marathi Literature

2011-12

- Mrs. Nalini Spiraling, Germany
- Dr. P.C. Shejawalkar, Director, Shejawalkar Institute, Pune.
- Satish Alekar, Renowned stage and silver screen artist.
- Kedar Bhagwat, Renowned stage and silver screen artist.
- Pramod Ranade, Renowned stage and silver screen artist.

- Swati Patankar, Renowned stage and silver screen artist.
- Pratibha Shahu Modak, Author in Marathi Literature
- Dr. Raja Okharapurkar, Expert in Agriculture, College of Agriculture, Pune.
- Dr. Vidhyagouri Tilak, Ex-Head, Department of Marathi, SPPU, Pune.
- Dr. Madhavi Vaidya, Ex-President, Maharashtra Sahitya Parishad, Pune.
- Anant Bhave, famous newsreader, Doordarshan, Government of India.
- Kamlesh Chordia, famous businessman.
- Lalan Sarang, a well-known stage artist.
- Dr. Ashok Chasakar, Ex-Dean, Faculty of Arts, SPPU, Pune.
- Vishwas Mehandale, renowned Press Reporter and Artist associated with Doordarshan, Government of India.

2012-13

- Dr. D.T. Bhosale, eminent writer, Pandharpur.
- Dr. Leela Govilkar, eminent writer, Pune.
- Dr. Mangala Godabole, eminent writer, Pune.
- Vishwas Mehandale, renowned Press Reporter and Artist associated with Doordarshan, Government of India.
- Chandras Mirasdar, Press Reporter, Pune.
- Dr. N. M. Jhoshi, eminent writer, Pune.
- Dr. Veenita Apte, Director, TEER Environmental Organisation
- Makarand Tillu, Famous Mono Acting Artist
- Dr. Kakasaheb Mohite, Ex-Dean, Faculty of Science, SPPU, Pune.

2013-14

- F.M. Shinde, Ex-President, Akhil Bharati Sahitya Sammelan.
- Dr. Nagnath Kottapalle, Ex-President, Akhil Bharati Sahitya Sammelan.
- Uttam Kambale Ex-President, Akhil Bharati Sahitya Sammelan.
- Dr. P. L. Gawade, Senior Educationalist, Pune.

2014-15

- Swati Mhalank, News Reader, Pune Akashwani, Government of India.
- Dr. Leela Vedpathak, Ex-HOD, Anant Rao Thopate College, Bhore.

25. Seminars/ Conferences / Workshops organized and the source of funding

a. National: 01 (funded by Savitribai Phule Pune University under QIP)

b. International:

- Two days International Conference on 'Bharati Sahitya Yagadan' in January 2015, organized in collaboration with Mahatma Gandhi Institute, Marathi Speaking Union, Mauritius and Snehavardhan Research Institute, Pune, funded by Mahatma Gandhi Institute, Mauritius.

- International Interdisciplinary Conference organized in collaboration with Manipal University, Dubai on ‘Contribution of Management Gurus and Eminent Personalities in India and Abroad’ at Manipal University, Dubai, in May 2015.
- International Interdisciplinary Conference organized in collaboration with India-Thai Chamber of Commerce, Bangkok, Thailand, on ‘Contribution of Folk Culture in Various Aspects of Literature’, at India-Thai Chamber of Commerce, Bangkok, Thailand, in November 2015.

c. State:

- Two days seminar on ‘*Druk-Shravya Mahitipatanchi Nirmutiprakriya*’ on 5th and 6th March 2012. The source of funding SPPU, Pune.
- Two days seminar on ‘*Marathi Vinodi Katha: Swarup aani Sadarikaran*’ on 4th and 5th Feb. 2013. The source of funding SPPU, Pune.
- One day Seminar on ‘*Mazi Jadanghadan*’ on 26th Feb. 2014. The source of funding SPPU, Pune.

26. Students profile program / course wise:

B.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	239	153	100	53	75.00
2011-2012	246	161	91	70	90.00
2012-2013	282	195	115	80	74.19
2013-2014	314	197	124	73	80.00
2014-2015	364	203	124	79	100
2015-2016	378	236	146	90	RA

M.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	32	15	11	4	75.00
2011-2012	45	23	16	7	90.00
2012-2013	72	53	26	27	74.19
2013-2014	53	29	16	13	80.00
2014-2015	59	37	17	20	100
2015-2016	35	23	8	15	RA

27. Diversity of Students

B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	99.39	0.61	Nil
2013-2014	97.76	2.24	Nil
2014-2015	97.72	2.28	Nil
2015-2016	96.56	0.52	2.90

M.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100.00	Nil	Nil
2011-2012	100.00	Nil	Nil
2012-2013	100.00	Nil	Nil
2013-2014	98.51	1.49	Nil
2014-2015	100.00	Nil	Nil
2015-2016	100.00	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.: 01

29. Student progression

Student progression	Against % enrolled
UG to PG	PG strength is less as compared to UG. Out of Total students admitted for PG, more than 70% are our UG students.
PG to M.Phil.	-
PG to Ph.D.	2%
Ph.D. to post –Doctoral	-
Employed - Campus selection - Other than campus recruitment	-
Entrepreneurship / Self-Employment	20%

30. Details of infrastructural facilities

- a) Library - Yes
- b) Internet facilities for staff and Students – Yes, 10 mbps leased line
- c) Class room with ICT facility – Yes
- d) Laboratories – Language laboratory available

31. Number of students receiving financial assistance from college, university, government or other agencies:

The figures represent the total number of students of the Arts Faculty and Post Graduate students of the department.

Academic Year	Total number of students
2010-11	51
2011-12	31
2012-13	75
2013-14	176
2014-15	133
2015-16	133

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

- Guest lectures
- Seminars
- Soft Skills Development Workshop

2010-11

- Organized a lecture by Mr. Ashok Kotwal on 'Prathanechi Granth'

2011-12

- Organised a lecture by Nalini Spiraling on '*Germany aani Bharat Yanchyatil Shaikshanik Prawas*'.
- Organised two days Seminar on 'Druk-Shravya Mahitipatanichi Nirmaitiprakriya'
- Organized Diploma in Translation Course.

2012-13

- Organized two days seminar on '*Marathi Vinodi Katha : Swarup aani Sadarikaran*'

2013-14

- Organized a lecture by D.T. Bhosale on 'Vinodi Katha'
- Organized One-day seminar on 'Mazi Jadanghadan'.
- Organized Handwriting competition on 'Marathi Bhasha Din'
- Organized Orator Competition on Aapali Utsavpriyata, Dhwanipradushan, Yek Peth Yek Ganapati, Udyog Vyavsay aani Utsavpriyata.

2014-15

- The Translation Course that started since 2011-12 has consistently and successfully been run by the department.

33. Teaching methods adopted to improve student learning:

- Traditional method
- Use of ICT in few classrooms
- Debate competitions
- Essay writing sessions and competitions

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Through NCC and NSS, Vidyarthini Manch.
- Proof Reading Course for neighbourhood community

35. SWOC analysis of the department and future plans:

Strength:

- Every member of the staff has PG teaching recognition
- Books written by the staff members are prescribed by SPPU and other universities.
- Members of the department have published many research articles in various research journals.

Weaknesses:

- In Maharashtra, less number of students offers Marathi at BA special level.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Involving more number of students in curricular and extracurricular activities leading to improved abilities and personalities
- Improving fluency in the language and communication skills among the students
- Teaching Marathi to non-Marathi people coming in large number due to employment and other opportunities in Maharashtra

Challenges:

- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans:

- Better infrastructure for research.
- The Post Graduate Research Centre in Marathi will be publishing a research journal '*Samshodhan Vishwa*'.
- The department will start an add-on course named '*Vani*' to improve the knowledge of Marathi for the international students as well as for the local students.
- Add-on course on
- Drama and Stage Performance
- Event Management.

□□□

Department of Mathematics

1. **Name of the department:** Department of Mathematics
2. **Year of establishment :** UG: 1970, PG: 2014
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.Sc. Mathematics
M.Sc. Mathematics
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
B.Sc. Mathematics: Semester Pattern
M.Sc. Mathematics: Semester Pattern with Choice Based Credit System
6. **Participation of the department in the courses offered by other Departments:**
 - Design and Analysis of Algorithms, Numerical Analysis, Discrete Mathematics, and Operational Research from the Department of Computer Science
 - Business Mathematics and Statistics from the Department of Commerce
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors		
Associate Professors	1	1
Asst. Professors	6	6

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc. / D.Litt. /Ph.D. / M. Phil. etc.)**

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided
Prof. D. S. Mane	M.Sc.	Associate Professor	Mathematics	24 yrs	-
Dr. A.N. Bhavale	M.Sc., Ph.D. NET	Head of the Department	Mathematics	17 yrs	-
Prof. P.V. Gadagkar	M.Sc. NET, SET	Assistant Professor	Mathematics	7 yrs	-
Prof. P.M. Paratane	M.Sc., NET, SET	Assistant Professor	Mathematics	21 yrs	-
Dr. N.H. Mahajan	M.Sc., M.Phil. Ph.D.	Assistant Professor	Mathematics	23 yrs	-
Prof. M.S. Rane	M.Sc. NET	Assistant Professor	Mathematics	7 yrs	-
Prof. R.K. Gawade	M.Sc. NET	Assistant Professor	Mathematics	4 yrs	-

11. List of Senior Visiting Faculty:

- Dr. B.N.Waphare, Ex-Head and Professor, Department of Mathematics, SPPU, Pune.
- Dr. M.M.Shikare, Ex-Head and Professor, Department of Mathematics, SPPU, Pune.
- Dr. V.V.Joshi, Associate Professor, Department of Mathematics, SPPU, Pune.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : UG: 0% PG: 80%

13. Student -Teacher Ratio (programme wise):

B.Sc.: 15:1

M.Sc.: 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

15. Qualifications of teaching faculty with DSc/ D.Litt. / Ph.D. / MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	5	-	2	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Dr. A. N. Bhavale: Principal Investigator of one Minor Research Project (2009 - 2012) from BCUD, SPPU, Pune. Grants received Rs. 1,00,000/-.

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University:

Two faculty members have completed the Ph.D. degree and two are pursuing their Ph.D. from SPPU, Pune. The department intends to apply for the Research Centre in the near future.

19. Publications:

Name of the faculty	Papers			Total publications
	International	National	Presented in Conference	
Dr. A.N. Bhavale	-	-	11	11
Prof. P.V. Gadagkar	-	-	1	1
Prof. P.M. Paratane	-	-	1	1

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees
- b) International Committees
- c) Editorial Boards

Dr. A.N.Bhavale is a Life Member of Indian Mathematical Society (IMS) and Indian Science Congress Association (ISCA).

22. Student projects

- a) Percentage of students who have done in house projects including inter departmental/programme: Nil
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students:

Prof. A. N. Bhavale was awarded Doctor of Philosophy (Ph.D.) in July 2014.

24. List of eminent academicians and scientists / visitors to the department:

- Dr. B.N.Waphare, Ex. Head and Professor, Department of Mathematics, SPPU.
- Dr. M M Shikare, Ex. Head and Professor, Department of Mathematics, SPPU.
- Prof. M. Prakash, Director, IIT Coaching Institute, Pune.
- Prof. T.T. Raghunathan, Retd. Professor, Department of Mathematics, SPPU.
- Prof. P.P. Chikate., Ex. Head of the Mathematics Department, Modern College of Arts, Science and Commerce, Shivajinagar, Pune-5.

25. Seminars/ Conferences/Workshops organized and the source of funding:

- a. National: Nil
- b. International: Nil
- c. State: 03
 - A one-day workshop on 'Scilab for Teachers' in the year 2011.
 - A State Level Workshop on 'Fuzzy Logic and Related Topics' organized in the year 2012, funded by BCUD, SPPU, Pune.
 - A one-day workshop on 'Scilab Programming' in the year 2014

26. Student profile programme/course wise:

B.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	106	65	41	74.36
2011-2012	361	143	86	57	64.58

Name of the	Applications	Selected	Enrolled		Pass %
2012-2013	326	135	67	68	57.14
2013-2014	402	151	77	74	66.23
2014-2015	396	165	79	86	70.59
2015-2016	427	153	82	71	RA

M.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2014-2015	50	31	11	20	22.58
2015-2016	550	59	24	35	RA

27. Diversity of Students:

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	0.5	0.05
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: 03 NET + 01 Civil Services

29. Student progression

Student progression	Against %enrolled
UG to PG	40%
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	-
• Campus selection	
• Other than campus recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- Library: Central Library along with Digital Library is available for the students
- Internet facilities for Staff and Students : The department has six PCs and one laptop all of which are equipped with internet facility of 10 mbps leased line.
- Class rooms with ICT facility: One for F.Y.B.Sc.(Science) and two for M.Sc. Mathematics. One LCD projector is installed in the department and

- one stand by LCD projector is also available
- d) Laboratories: Common Computing Laboratory available

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represent the total number of students of the Science Faculty and Post Graduate students of the department.

Year	Total number of students
2010-11	49
2011-12	67
2012-13	57
2013-14	123
2014-15	164
2015-16	177

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

- A workshop entitled ‘How to be independent in study habits?’ was arranged with the help of Psychology Department. Prof. Mrs. Shraddha Sakatkar guided the students.
- Two eminent guest speakers: Prof. Bhambre and Dr. V. V. Acharya delivered lectures on ‘Ring Theory’.
- The students of M.Sc. Part I attended a workshop on Group Theory arranged by *Bhaskaracharya Pratisthan*.
- Prof. Deepali Lodh from Department of English guided the students on ‘How to face the seminar’
- The former head of the department and an eminent professor Mrs. P. P. Chikate delivered a talk focused on ‘Independent Study Methods’.
- Mr. A. K. Bhosale (Alumni of The College), Director L. K. Infotech guided the students for the job opportunities in IT field. He elaborated the structure of different units of the IT industry.
- Celebration of National Mathematics Day, 22nd December 2015: Activities arranged included Poster Competition, Project Competition and Quiz Competition, followed by a Guest Lecture on the topic of ‘Number Theory’ by Ex-Head of the Department of Mathematics, Prof. A.V.Rayarikar.
- Four guest lectures by eminent mathematicians from SPPU, Pune, were arranged for M.Sc. students.
- Conducted three counselling sessions for S.Y.B.Sc. students to help and facilitate them to overcome their difficulties regarding study methods and related areas.

33. Teaching methods adopted to improve student learning:

- Chalk and Board
- Use of ICT
- Group Discussions
- Assignments and Seminars

34. Participation in Institutional Social Responsibility (ISR) and

Extension activities: Through NSS and NCC activities

35. SWOC analysis of the department and future plans:

Strength:

- Very encouraging response for Mathematics at B.Sc. since the introduction of the subject by the college and many of these students were in the merit order of the university.
- Post Graduate course in Mathematics is available in very few colleges and ours is one of them.

Weakness:

- The subject is in great demand at UG as well as PG. However, due to limited intake capacity, the demand cannot be fulfilled.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- The staff members have opportunities to undertake Minor/Major Research Projects
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- To inculcate research aptitude in students
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- To start a Research Centre in Mathematics
- To conduct State/ National level Workshops/Seminars/Conferences
- To start a Certificate Course on 'Latex', a mathematics type setting package for undergraduate students.

□□□

Department of Microbiology

1. **Name of the department:** Department of Microbiology
2. **Year of establishment :** 2005
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.Sc. Microbiology
M.Sc. Microbiology
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
B.Sc.: Semester Pattern
M.Sc.: Semester Pattern with Choice Based Credit System
6. **Participation of the department in the courses offered by other Departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
An add-on course on 'Pharmaceutical Techniques' in collaboration with various pharmaceutical industries.
8. **Details of courses/programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts**

	Sanctioned	Filled
Professors	-	-
Associate Professors	01	01
Assistant Professors	08	08

10. **Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided
Dr. Shilpa Mujumdar	Ph.D.	Head	Molecular Biology, PGPR	09	-
Prof. Vivek Bobade	M.Sc. NET	Asst. Professor	Biochemistry, Pharmaceutical Biology	08	-
Dr. Smita Bhuyan	Ph. D, Post Doc	Asst. Professor	Molecular Biology, Fermentation Technology	07	-
Prof. Sheetal Pardeshi	M.Sc. NET	Asst. Professor	Taxonomy, Fermentation Technology	05	-
Prof. Anushka Devale	M.Sc.	Asst. Professor	Immunology	07	-

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided
Prof. Rupali Sawant	M.Sc.	Asst. Professor	Medical Biology	07	-
Prof. Madhuri Kothawade	M.Sc. NET	Asst. Professor	Biochemistry, Applied Microbiology	05	-
Prof. Shradha Bashetti	M.Sc. NET	Asst. Professor	Genetics, Quantitative Biology	04	-
Prof. Jyoti Mohite	M.Sc.	Asst. Professor	Soil and agricultural microbiology	06 months	-

11. List of Senior Visiting Faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

B. Sc. Microbiology: Theory: 10% Practical: 10%
M. Sc Microbiology: Theory: Nil Practical: Nil

13. Student -Teacher Ratio (programme wise):

B.Sc. Microbiology: 15:1
M.Sc. Microbiology: 16:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two post of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	3	3

14. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil/PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	07	-	02	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received:

Sr. No	Title of Project	Principal Investigator	Amount received ₹	Funding agency	Duration of project	Status
1	Studies on characterization and production of biosurfactant/s by bacteria isolated from Mangrove rhizosphere	Dr. Shilpa Mujumdar	2,00,000/-	UGC	2 years (2012-14)	Completed
2	Comparative studies on prodigiosin production and characterization by <i>S. marcescens</i> using various crude fatty acids and its applications	Ms. Sheetal Pardeshi	2,00,000/-	UGC	2 years (2012-14)	Completed

18. Research Centre /facility recognized by the University:

The department has a recognized laboratory by SPPU, Pune, for research leading to M.Phil.in Microbiology.

19. Publications:

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference	International	National/ Local	Book chapter				
Dr. Shilpa Mujumdar	13	2	11	-	-	2	27	40	40	16
Dr. Smita Bhuyan	4	2	3	-	-	4	13	4.5	28	3
Prof. Sheetal Pardeshi	2	-	1	-	-	1	4	-	-	-
Prof. Anushka Devale	3	-	-	-	-	-	3	-	-	-
Prof. Rupali Sawant	1	-	-	-	-	-	1	-	-	-
Prof. Madhuri Kothawade	2	-	-	-	-	-	2	-	-	-
Prof. Shradha Bashetti	1	2	-	-	-	-	3	-	-	-
Prof. Jyoti Mohite	1	1	-	-	-	-	2	-	-	-

20. Areas of consultancy and income generated:

Consultancy to Biofertilizer industry.

Project consultancy to student of the Tilak Maharashtra University.

21. Faculty as members in

a) **National committees:** Dr. Shilpa Mujumdar, AMI, EC member

b) **International Committees** Nil

c) **Editorial Boards** Nil

21. Student projects

a) **Percentage of students who have done in house projects including inter departmental/programme:** 75%

b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:** 25%

23. Awards / Recognitions received by faculty and students: Nil

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Yogesh Shouche, NCCS, Pune
- Dr. B. B. Nath, Department of Zoology, Savitribai Phule Pune University
- Dr. Kamlesh Jangid, NCCS, Pune
- Dr. Pranay Goel, IISER, Pune
- Dr. Chetan Gadgil, NCL, Pune
- Dr. Milind Watve, IISER, Pune

- Dr.P.K.Dhakephalkar, ARI, Pune
- Dr. Sharad Kale, Scientist, BARC, Mumbai.
- Dr. N. Gore, NIV, Pune.

26. Seminars/ Conferences/Workshops organized and the source of funding:

- National: 01 (funded by BCUD , Pune and ICAR, New Delhi)
- State: 01 (Funded by BCUD, Pune)

26. Student profile programme/course wise:

B.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	42	6	36	93
2011-2012	361	47	9	38	75
2012-2013	326	46	7	39	90
2013-2014	402	41	9	32	90
2014-2015	396	46	8	38	100
2015-2016	427	58	10	48	RA

M.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	200	40	7	33	95.84
2011-2012	135	37	5	32	97.91
2012-2013	190	45	14	31	95.84
2013-2014	192	43	7	36	100
2014-2015	162	44	8	36	97.70
2015-2016	280	48	3	45	RA

28. Diversity of Students:

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	1.45	Nil
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	94.74	3.95	1.32
2011-2012	93.51	6.49	0.00
2012-2013	93.83	6.17	0.00
2013-2014	98.86	1.14	0.00
2014-2015	100.00	0.00	0.00
2015-2016	100.00	0.00	0.00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: 08

29. Student progression

Student progression	Against % enrolled
UG to PG	95
PG to M.Phil.	-
PG to Ph.D.	04
Ph.D. to Post-Doctoral	01
Employed	20
• Campus selection	80
• Other than campus recruitment	
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities:

- a) Library: Yes
- b) Internet facilities for Staff and Students: Yes
- c) Class rooms with ICT facility: Yes
- d) Laboratories: Yes (4 Laboratories)

31. Number of students receiving financial assistance from college, University, government or other agencies:

Year	Total number of students
2010-11	3
2011-12	10
2012-13	12
2013-14	45
2014-15	15
2015-16	29

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

- Departmental Activities
- Model and Poster competition
- Microcreativity (Documentary and Microtoons)
- Lecture Series
- Quiz Competition
- Salad Dressing

33. Teaching methods adopted to improve student learning:

- Use of LCD projector,
- Animated videos ,
- Review writing,
- Group discussion,
- Presentation.
- Assignments

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Teachers and students visit to orphanage and aware them with personal hygiene also, donate cloths, grocery and stationary

Signed MOUs with

1. Satara College of Pharmacy, Satara
2. Nigdi College of Pharmacy, Pune
3. National Toxicology Centre, Pune
4. Ayurved Rasshala, Pune

35. SWOC analysis of the department and future plans:

Strength:

- Well-equipped labs
- Result mostly above 80 %
- Add-on course in collaboration with industry

Weaknesses:

- Placement activity at departmental level needs to be strengthened

Opportunities:

- Collaboration with international Pharma and Biotech industry
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- Higher studies and hands-on training are must for better job profile.
- Continuous advancement in the field demands frequent updation of the curriculum.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future Plans:

- To strengthen placement activity
- To set up a Microbial Culture Collection Centre in the department.
- To improve research facilities in the department.
- To get funds from various funding agencies for research activities.

□□□

Department of Physics

1. **Name of the department:** Department of Physics
2. **Year of establishment :**
B.Sc. Physics 1970
M.Sc. Physics 2015
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.Sc. Physics
M.Sc. Physics
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
F.Y. B.Sc. : Annual Pattern
S.Y. and T.Y. B.Sc.: Semester Pattern
M.Sc.: Semester Pattern with Choice Based Credit System
6. **Participation of the department in the courses offered by other Departments:**
A course in Physics and Biophysics in the Department of Biotechnology of our College.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons:** -
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Assistant Professors	8	6

10. **Faculty profile with name, qualification, designation, specialization, D.Sc. /D.Litt. /Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided
Prof. A. V. Deshpande (Upto 31 st August 2015)	M. Sc. D. H. E.	Associate Professor and Ex-Head	Material Science	37	-
Prof.S. S. Thengadi (From 1 st September 2015)	M. Sc.	Associate Professor and Head	Applied Electronics	28	-

Prof. S. R. Wagh	M. Sc., M. Phil, ADCSSA	Associate Professor	Electronics	30	-
Prof. V. T. Shelke	M. Sc.	Associate Professor	Electronics	28	-
Prof. Nileshkumar Pardeshi	M. Sc. SET	Assistant Professor	Material Science	6	-
Dr. S. S. Patil	M. Sc. Ph. D.	Assistant Professor	Material Science	3	-
Dr. V. S. Waman	M. Sc. Ph. D.	Assistant Professor	Nanotechnology	3	-
Prof. S. R. Gogte	M. Sc. NET	Assistant Professor	Quantum Field Theory	3	-
Prof. Amishi Rindani	M.Sc. M.Phil. SET	Assistant Professor	Quantum Mechanics	13	-
Prof. Hrishikesh Khatri (till 29 th February 2016)	M.Sc. GATE, SET	Assistant Professor	Experimental Techniques	01	-

11. List of Senior Visiting Faculty:

- Dr. Devayani Patil, Department of Physics, SPPU, Pune-7.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

B.Sc.: 28%

M.Sc.: Nil

13. Student -Teacher Ratio (programme wise):

B.Sc. Physics: 15:1

M.Sc. Physics: 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	2	2
Class 4	13	11

15. Qualifications of teaching faculty with D.Sc/ D.Litt./ Ph.D./ MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	5	2	2	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: 02

- Systematic synthesis, characterization and field emission investigations of novel metal oxide nanostructures/heterostructures – Sanctioned by BCUD, (SPPU), 2014-2016.
- Development of CZTS based low cost thin film solar cells by electrochemical deposition method, Sanctioned by BCUD, (SPPU), 2014-2016.

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: 02, Grants sanctioned Rs. 4,60,000/- (2014-2016)

18. Research Centre /facility recognized by the University:

Applied to SPPU for Research Centre in Physics.

19. Publications:

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference	International	National/ Local	Book chapter				
Prof.Nileshkumar Pardeshi	01	-	-	-	-	-	01	3.5	1	1
Dr. S. S. Patil	18	-	09	-	-	-	27	46.2	153	7
Dr. V. S. Waman	30	-	09	-	-	-	30	47	142	6

• **Books with ISBN/ISSN numbers with details of publishers:**

National Conference on Energy and Environment (NC2E-2014) on 'Energy and Environment Security through Cutting Edge Technology' ISBN No.: 978-93-83993-10-9, Success Publication, website: www.sharpmultinational.com

20. Areas of consultancy and income generated:

Few staff members of the Department of Physics are on the panel of consultants on Siddhivinayak Technologies, Bhosari, Pune and Prowiz Systems, Pune. The consultancy is of non-remunerative nature.

21. Faculty as members in

a) National committees: Nil

b) International Committees: Nil

c) Editorial Boards:

Dr. Vaishali Waman was a member of the editorial board Proceedings of National Conference on Energy and Environment, NC2E-2014, Savitribai Phule Pune University ISBN: 978-93-83993-10-9

22. Student projects

a) Percentage of students who have done in house projects including inter departmental/programme: 73 %

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 27 %

23. Awards / Recognitions received by faculty and students:

Achievements of Teaching Staff:

Prof. S.S.Thengadi was awarded the “Best Teacher” award by the Progressive Education Society, Pune on 25th January 2012.

Achievements of Non-Teaching Staff:

Mr. S. S. Kamthe has been elected as

- Member, All India Federation of Non-Teaching Staff of colleges and Universities.
- Chairman, Maharashtra State Federation of Non-Teaching staff of non-agricultural colleges.

Other Achievements:

Participation of students in other Institute:

- Mr. Shriram Ramane completed a course in Experimental Physics at IISER, Pune in December 2014
- Mr. Jitin P. completed winter course in Karnataka University on Experimental / Theoretical Physics.

24. List of eminent academicians and scientists / visitors to the department:

Following academicians and scientists visited the Department during 1/4/2010 to 31/3/ 2014:

- Prof. C. V. Dharmadikari, Emeritus Professor from IISER, Pune
- Prof. S. D. Dhole, Department of Physics, Savitribai Phule Pune University.
- Dr. Priyadarshani Karve, Director, Appropriate Rural Technological Institute (ARTI), Phaltan, Pune.
- Dr. Uday Tade, Scientist from ISRO, Pune
- Shri M. L. Soman, Head, Training Division, TATA MOTORS, Pune
- Shri Mayuresh Prabhune, Science Editor, Times Group, Pune

25. Seminars / Conferences / Workshops organized and the source of funding:

- a. National: 01 (National Conference on Hazardous e-waste Management)
- b. International: 01

26. Student profile programme / course wise:

B.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	197	108	89	58.82
2011-2012	361	216	111	105	65.71
2012-2013	326	191	89	102	68.42
2013-2014	402	213	91	122	76.92
2014-2015	396	225	109	116	72.22
2015-2016	427	236	121	115	RA

M.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2015-2016	257	24	10	14	RA

27. Diversity of Students:

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	1.45	Nil
2015-2016	98.59	1.19	0.22

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:

Four students from our department have cleared Defense Service Examination

29. Student progression

Student progression	Against % enrolled
UG to PG	25 %
PG to M.Phil.	Nil
PG to Ph.D.	5%
Ph.D. to Post-Doctoral	Nil
Employed	-
• Campus selection	
• Other than campus Recruitment	10%
Entrepreneurship/Self-employment	Nil

30. Details of Infrastructural facilities:

- Library- Departmental library
- Internet facilities for Staff and Students:
Yes, Speed: 10 MBPS and Wi-Fi, No. of Nodes: 14
- Class rooms with ICT facility: Yes (02)
- Laboratories: Number of Labs: 04 (Dark room-01, General lab-02, and computer lab-01)

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represent the total number of students of the Science Faculty and the Post Graduate students of the department.

Year	Total number of students
2010-11	47
2011-12	35
2012-13	70
2013-14	168
2014-15	120
2015-16	161

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

Lectures:

- Prof. C. V. Dharmadikari, Emeritus Professor from IISER, Pune
- Prof. S. D. Dhole, Department of Physics, Savitribai Phule Pune University.
- Dr. Priyadarshani Karve, Director, Appropriate Rural Technological Institute (ARTI), Phaltan, Pune.
- Dr. Uday Tade, Scientist from ISRO, Pune
- Shri M. L. Soman, Head, Training Division, TATA MOTORS, Pune
- Shri Mayuresh Prabhune, Science Editor, Times Group, Pune
- Workshop: Star Gazing at Paud, Panshet

33. Teaching methods adopted to improve student learning:

- Poster Exhibition/Competition
- Power point presentation competition
- Project competition
- Demonstration method
- Use of ICT
- Seminar Activity
- Chalk and Talk

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

35. SWOC analysis of the department and future plans:

Strength:

- Well-equipped laboratories
- Several student centric co-curricular activities
- Very effective use of ICT

Weakness:

- Placement activity at departmental level needs to be strengthen.

Opportunities:

- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- Establishing Post Graduate Research Centre in Physics
- To inculcate Research Culture among under graduate students through research proposals undertaken by teachers
- To start an add-on course on Instrumentation with reference to Automation of Control System (PLC).

□□□

Department of Political Science

1. **Name of the department:** Department of Political Science
2. **Year of establishment :** 1970
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.A. Political Science
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
B.A. Political Science: Annual Pattern
6. **Participation of the department in the courses offered by other Departments:** Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses / programmes discontinued (if any) with reasons:** -
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	--
Asst. Professors	1	1

10. **Faculty profile with name, qualification, designation, specialization, D.Sc. /D.Litt. /Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Prof. Khokle D. L.	M.A. M.Phil.	Asst. Professor	Political Science	19	-

11. **List of Senior Visiting Faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**
B.A. Political Science: 28%
13. **Student -Teacher Ratio (programme wise):**
B.A. Political Science: 20:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

One post of Faculty Clerk, in the college office is sanctioned and filled.

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	-	1	-	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications: Nil

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees, b) International Committees, c) Editorial Boards

Nil

22. Student projects

- a) Percentage of students who have done in house projects including inter departmental/programme: Nil
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students: Nil

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized and the source of funding:

- a) National: Nil b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme B.A. Political Science	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	239	212	131	81	100.00
2011-2012	246	202	114	88	66.66
2012-2013	282	233	138	95	100.00
2013-2014	314	267	159	108	86.84
2014-2015	364	287	165	122	90.19
2015-2016	378	276	162	114	RA

27. Diversity of Students:

B.A.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	98.24	1.32	0.44
2012-2013	97.82	1.82	0.36
2013-2014	100	Nil	Nil
2014-2015	94.1	1.24	4.66
2014-2015	96.56	0.52	2.90

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: 01

29. Student progression

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed • Campus selection • Other than campus	-
Recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- Library: College Library
- Internet facilities for Staff and Students: Common Computing facility in the College Library
- Class rooms with ICT facility: Yes
- Laboratories: -

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represent the total number of students of the Arts Faculty.

Academic Year	Total number of students
2010-11	42
2011-12	23
2012-13	63
2013-14	159
2014-15	120
2015-16	99

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts: Nil

33. Teaching methods adopted to improve student learning:

- Traditional method
- Group Discussions
- Seminars by students on subjects related to current issues in state politics.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Students participation in social work through NSS and NCC

35. SWOC analysis of the department and future plans:

Strength:

- Student's enthusiasm for opting this subject for Civil Services Examinations

Weakness:

- Subject offered at UG level only.
- Limited job opportunities for the subject.
- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Increased participation in the activities of Competitive Exams Guidance Centre can improve the success rate of students in the competitive examinations.

Challenges:

- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- The department will be offering a Postgraduate Course- M.A. Political Science- from the academic year 2016-17.
- With the help of NSS students, the department will be reaching villages near by Pune city and make the villagers aware of the importance of different schemes of the state and central governments.
- The department will be arranging regular visits of the students to various Social Sciences institutes in and around Pune city.

□□□

Department of Psychology

1. **Name of the department:** Department of Psychology
2. **Year of establishment :** 1971
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 B.A. Psychology
 M.A. Psychology (Clinical Psychology, Counselling Psychology)
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/ semester/choice based credit system (programme wise):**
 B.A: Annual Pattern
 M.A.: Semester Pattern with Choice Based Credit System
6. **Participation of the department in the courses offered by other Departments:**
 Faculty is involved in teaching courses like Personality Development and Bargaining Skills for P.G. students of the Department of Economics, Geography, Marathi, and English.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
 Nil. However, the department conducts skill development training workshops on Graphology, Flower Remedy, HIV AIDS counselling, Diagnostic Testing and Research Methodology by inviting experts from hospitals and other institutions.
8. **Details of courses / programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	1	1
Assistant Professors	4	4

10. **Faculty profile with name, qualification, designation, specialization, D.Sc. /D.Litt. /Ph.D. /M. Phil, etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Dr. Amruta Oke	M.A., M. Phil, Ph.D.	Associate Professor	Clinical Psychology	33	-
Prof. Smt. Vijaya Jagtap	M.A., M.Ed.	Assistant Professor	Clinical Psychology	16	-

Prof. Smt. Smita Vaidya	M.A., SET	Assistant Professor	Clinical Psychology	14	-
Prof. Mrs. Shradha Sakatkar	M.A., SET, B.Ed.	Assistant Professor	Counselling Psychology	08	-
Prof. Sairaj Patki	M.A., SET, Ph.D.	Assistant Professor	Clinical Psychology	04	-
Prof. Apeksha Gawade (Till 2014-15)	M.A.	Assistant Professor	Counselling Psychology	03	-
Prof. Sumedha Chandekar (Till 2014-15)	M.A., NET	Assistant Professor	Counselling Psychology	02	-

11. List of Senior Visiting Faculty:

- Dr. Ujjwal Nene, Clinical Psychologist, KEM Hospital, Pune.
- Dr. Vaishali Mardhekar, Academic Counsellor, IGNOU,

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

UG: Nil

PG: 4%

13. Student -Teacher Ratio (programme wise):

UG: 20:1

PG: 16:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

One post of Faculty Clerk, in the college office is sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	2	2

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ MPhil /PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	5	-	2	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: 02

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received:

Dr. Amruta Oke: Principal Director

Dr. Sairaj Patki: Joint-Director

ICSSR sponsored research project entitled 'Emotional Intelligence Among Adolescents: Tool Development, Enhancement through Training, and Study of Correlates', for the period of two years, commencing from 20/12/2015, with the approved funds of Rs. 17,00,000/-.

18. Research Centre /facility recognized by the University:

Dr. Amruta Oke is a recognized guide for M. Phil. course of SPPU. The staff members are actively involved in the research activities. The department intends to apply for the Research Centre in the near future.

19. Publications:

Name of the faculty	Papers			Total publications
	International	National	Presented in Conference	
Dr. Amruta Oke	-	-	2	2
Prof. Smt. Vijaya Jagtap	-	-	1	1
Prof. Smt. Smita Vaidya	-	-	3	2
Prof. Mrs. Shradha Sakatkar	-	-	2	3
Dr. Sairaj Patki	4	-	4	8

• Books with ISBN/ISSN numbers with details of publishers:

Dr. Amruta Oke has written two books with ISBN number.

- *Manasshastra*, co-author 2010 Dorling Kindersley (India) Pvt. Ltd. ISBN
- *Manasshastra- Vartanche Shastra* (2015) Dorling Kindersley (India) Pvt. Ltd. ISBN- 987-93-325 1936-7

20. Areas of consultancy and income generated:

Non-remunerative consultancy on Psychological Counselling, Aptitude Testing and Career Guidance till March 2016, after which, the consultancy is given on remunerative basis. Revenue generated through the remunerative consultancy is Rs. 11,200/-.

21. Faculty as members in

- a) **National committees:** Nil
- b) **International Committees:** Nil
- c) **Editorial Boards:**

Dr. Amruta Oke

- Joint Secretary of Indian Association of Human Behaviour, which is a multidisciplinary national organization.
- A member of an Editorial Board of a National journal *Manas Shastra Patrika* with ISSN-2394-4730.

Prof. Vijaya Jagtap, Prof. Smita Vaidya, Prof. Shradha Sakatkar and Dr. Sairaj Patki were the members of Editorial Board for a national conference on 'Emotional Intelligence – Role in Human Life' organized by the department.

22. Student projects

- a) **Percentage of students who have done in house projects including inter departmental/programme:** 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

However, the faculty guides 100% students for data collection from organizations like NGOs, hospitals, schools, BPOs and rehab centres.

23. Awards / Recognitions received by faculty and students:

- Ms Monika Mishra, a student of M.A. II was awarded First Prize for the paper presentation in the national conference on 'Emotional Intelligence – Role in Human Life' organized by the department.

24. List of eminent academicians and scientists / visitors to the department:

- Dr. C. G. Deshpande Department of Applied Psychology, Mumbai University
- Dr. Medha Kumthekar Department of Psychology, S.N.D. T. University, Pune
- Dr. Jitendra Mohan Panjab University
- Dr. C. R. Mukundan Institute of Behavioural Science, Gujarat Forensic Sciences University, Management Development Institute, Gurgaon.
- Dr. Radha Sharma JPIP, Pune
- Dr. Anagha Lavlekar Fergusson College, Pune
- Dr. Shobhana Abhyankar Equipkids, Thane
- Dr. Kelkar Sandeep Department of Psychology, SPPU, Pune
- Dr. Alka Wadkar

25. Seminars/ Conferences/Workshops organized and the source of funding:

- a. National: National Conference on 'Emotional Intelligence: Role in Human Life' (5th and 6th February, 2016) funded by BCUD, SPPU, Pune.
- b. International: Nil
- c. State: A preconference workshop on 'Bringing Emotional Intelligence in classroom' funded by BCUD.

26. Student profile programme/course wise:

B.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	239	134	68	66	90.62
2011-2012	246	109	50	59	94.73
2012-2013	282	126	50	76	100
2013-2014	314	137	50	87	93.75
2014-2015	364	189	71	118	100
2015-2016	378	168	69	99	RA

M.A.

Name of the Course/programme	Application received	Selected	Enrolled		Pass %
			M	F	
2010- 2011	72	52	5	47	88.88
2011-2012	68	46	11	35	100
2012-2013	45	38	9	29	90.90
2013-2014	59	42	12	30	100
2014-2015	55	29	6	23	97.05
2015-2016	82	48	4	44	RA

27. Diversity of Students:**B.A.**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2010-11	100	Nil	Nil
2011-12	98.24	1.32	0.44
2012-13	97.82	1.82	0.36
2013-14	100	Nil	Nil
2014-15	94.1	1.24	4.66
2015-16	96.56	0.52	2.90

M.A.

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2010-11	86.21	6.90	6.90
2011-12	93.00	5.00	2.00
2012-13	91.46	7.32	1.22
2013-14	90.12	6.17	3.70
2014-15	94.12	4.41	1.47
2015-16	94.56	5.22	0.22

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:

Two students from our department have cleared NET Examination

29. Student progression

Student progression	Against % enrolled
UG to PG	25-30
PG to M.Phil.	-
PG to Ph.D.	4-5%
Ph.D. to Post-Doctoral	-
Employed	20-25%
• Campus selection	60-70%
• Other than campus Recruitment	-
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities:

a) Library- Yes, Central Library

- In-house Remote Access to e-resources: facility available under teacher's supervision
- Assistance in searching Database: provided by respective research guides/ subject teachers

b) Internet facilities for Staff and Students:

- Internet available: 10 mbps leased line
- LAN Facility: available
- Number of computers with internet facility: 6
- The department staff has access a total of 4 desktop computers and 2 laptops, all having internet connection via LAN and Wi-Fi. Two desktops and one laptop are available for use by post-graduate students under the supervision of staff members for statistical analyses, and accessing online resources.

c) Class rooms with ICT facility: Yes

- Lectures are frequently conducted using power-point presentations in the laptop and projector-enabled classrooms. As the classroom is Wi-Fi-enabled, the teachers can introduce the students to online resources like educational documentaries, e-books, etc.
- The department has educational CDs that are useful in better understanding of subject and in making the teaching-learning experience more effective
- The department has 7 movie CDs related to psychological aspects that are, on some occasions used for screening to educate the students about psychological phenomena in a more interesting audio-visual manner. Such screenings are followed by discussion with students by subject teachers/ experts in the field, or assignments based upon the screened movie.

d) Laboratories: Eight cubicles for conducting practical

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represent the total number of students of Arts Faculty and the Post Graduate students of the department.

Year	Total number of students
2010-11	47
2011-12	35
2012-13	70
2013-14	168
2014-15	120
2015-16	99

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

- **Quiz Competitions**
- **Seminars**
- **Guest lectures**
 - Suicide - Dr. C.G.Deshpande, Dr. Ulhas Luktuke, Dr. Medha Kumthekar
 - Psychological Research - Dr. Vaishali Mardhekar
 - NEO-PI - Dr. Savita Deo
 - Psychology testing application - Dr. Sucharita Gadre
 - Neurocognitive Science - Dr. Awasthi
- **Workshops**
 - Pre-marital counselling workshop – Mrs. Haldankar
 - HIV –AIDS Workshop – Dr. Ujjwal Nene
 - Diagnostic Psychological Assessment - Dr. Ujjwal Nene
 - Dance Therapy - Mr. Tonmoy Haldar
 - Rorschach Administration - Dr. Ujjwal Nene
 - Geriatric Counselling - Mrs. Vanita Jadhav
 - School Counselling - Mr. Pawan Gaikwad
 - Soft Skills - Smita Dongare and Anuja Kolhatkar
 - Career Counselling - Dr. Shreeram Geet
 - Yoga Therapy - Mr. Shankar Khedkar
 - Drug Addiction and Rehabilitation - Mr. Indrajeet Deshmukh
- **Visits**
 - Prasana Autism centre
 - Christian Counselling Centre, Vellore
 - Sumpark Balgram
 - Mukhtangan
 - Schizophrenia Awareness Association (SAA)
 - Ratnagiri, Mental Hospital
 - Kavalyadham and Manshakti
 - Delhi, Hypnotherapy-National seminar -JNU
 - Kripa Foundation, Pune Drug De-addiction Centre IPH, Thane
 - Schizophrenia Awareness Association (SAA)
 - Bal Kalyan Sanstha, Pune
 - Little Kingdom Montessori School, Pune.
- **Other Activities and Programs**
 - Ernst and Young Foundation Career Awareness program in Corporation schools
 - Organized a “Psychology Book Exhibition” by Forward books Counselling camp
 - Pragatee Foundation Group Testing and Career Awareness Program Ernst and Young Foundation Career Awareness program in Corporation schools.

33. Teaching methods adopted to improve student learning:

- Role plays
- ICT
- Activity-based assessment
- Hands-on experience
- Collaborative learning
- Learning through play

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Sr. No.	Institutional Social Responsibility (ISR) Activities
I.	Counselling Service (Free counselling service provided throughout the year to stake holders, special cases identified during counselling camp, and cases requiring further sessions)
II.	Counselling Camp (Free counselling service provided every year since 2008)
III.	Aptitude Testing and Career Counselling (Free computer-based aptitude testing followed by career counselling by experts provided throughout the year since 2011)
IV.	Pragati Foundation Group Testing and Career Awareness (M.A.-II students of the department provide psychological testing services and career awareness to children of brick-kiln laborers (2012, 2013))

Sr. No.	Extension activities
I.	Guest lecture on Suicide- C.G.Deshpande Vilas Luktuke Kumthekar Ma'am (27/01/10)
II.	Visit to Prasanna Autism centre (27/07/11)
III.	Visit to Schizophrenia Awareness Association (SAA) (20/07/11)
IV.	HIV –AIDS Awareness Workshops (Each year)
V.	Guest Lecture by Paramheet members (12/08/12)
VI.	Study visit to Muktangam (17/02/12)
VII.	Study Tour- Sumpark Balgram (24/08/13)
VIII.	Study Visit to Kripa Foundation Drug De-addiction Centre (03/09/13)
IX.	Visit to Schizophrenia Awareness Association (SAA)
X.	HIV –AIDS Awareness Workshops (Each year)

35. SWOC analysis of the department and future plans:

Strength:

- Many co-curricular activities with emphasis on practical skills and applications of theoretical concepts not covered in the syllabus
- Staff is encouraged and sponsored to participate in seminars and workshops

Weakness:

- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Active participation in revision of syllabi of SPPU.
- Provide psychological counselling to nearby communities

Challenges:

- Mentoring students with average performance and students from diverse backgrounds
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plans:

- To publish an annual Research Journal
- Establishment of Consultancy-cum-Training Centre-‘Centre for Excellence’
- To strive for seeking recognition for Post Graduate Research Centre from SPPU, Pune.
- To start a Diploma Course in ‘Industrial Psychology’.

□□□

Department of Statistics

- 1. Name of the department:** Department of Statistics
- 2. Year of establishment :**
B.Sc. Statistics 1979
B.Com. Statistics (Special) 1970
M.Com. Statistics (Special) 1979
M.Sc. Statistics 2009
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.Sc. Statistics B.Com. Statistics (Special)
M.Com. Statistics (Special) M.Sc. Statistics
- 4. Names of interdisciplinary courses and the departments /units involved:**
Computer Science: A theory paper on Data Mining at M.Sc. Statistics
Department of Mathematics: A theory paper on Mathematical Analysis at M.Sc. Statistics
- 5. Annual/ semester/choice based credit system (programme wise):**
B.Sc. Statistics: Semester pattern
B.Com. Statistics : Annual Pattern
M.Com. Statistics: Semester Pattern with Choice Based Credit System
M.Sc. Statistics: Semester Pattern with Choice Based Credit System
- 6. Participation of the department in the courses offered by other Departments:**
Faculty is involved in teaching courses on Biostatistics in the Departments of Botany, Biotechnology, Microbiology and Zoology
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:**
 - The Department has organized a course entitled 'A certificate course in SAS software' in collaboration with CYTEL Software Company Ltd., Pune.
 - The Department has organized a course entitled 'A certificate course in SAS software' in collaboration with Data Science Company Ltd., Pune.
- 8. Details of courses / programmes discontinued (if any) with reasons: -**
- 9. Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Assistant Professors	8	8

10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. /M. Phil, etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Prof. P. G. Dixit	M.Sc. M.Phil.	Associate Professor and Head of the Department	Statistical Process Control and Stochastic Process	36	-
Prof. P.S. Kapre	M.Sc. M.Phil.	Associate Professor	Actuarial Statistics	36	-
Dr. M.M. Sane	M.Sc. M.Phil. Ph.D.NET	Associate Professor	Statistical Inference	20	-
Prof. R.M. Umrani	M.Sc. SET M.Phil.	Assistant Professor	Sampling Methods	17	-
Prof. A.T.Kamble	M.Sc. M.Phil., SET	Assistant Professor	Directional Data Analysis, Survival Analysis	09	-
Prof. T.N. Choudhary	M.Sc. M.Phil.	Assistant Professor	Clinical Trials	11	-
Prof. P.S. Waldhe	M.Sc. SET	Assistant Professor	Linear Algebra and Actuarial Statistics	5	-
Prof. A. S. Chinchanihar	M.Sc.	Assistant Professor	Probability Distributions	6	-
Prof. M.A. Kanade	M.Sc.	Assistant Professor	Probability Distributions	5	-
Prof. A. V. Kulkarni	M.Sc.	Assistant Professor	Clinical Trails	3	-
Prof. M. S. Deo	M.Sc.	Assistant Professor	Biostatistics	2	-

11. List of Senior Visiting Faculty:

- Dr. G. B. Marathe (Savitribai Phule University, Pune)
- Dr. M.S. Prasad (Bharati Vidyapeeth, Pune)
- Dr. S.S. Deo (Savitribai Phule University, Pune)
- Prof. A. R. Darekar (Abasaheb Garware College, Pune)
- Prof. M.S. Kasture (New Arts, Commerce Science college, Ahmednagar)
- Mr. Kotkar M.S. (CYTEL Software Pvt. Ltd. Pune)
- Dr. Sachin Adnaik (S.P. College, Pune)
- Dr. S. G. Purohit (Savitribai Phule University, Pune)
- Dr. S. R. Deshmukh (Savitribai Phule University, Pune)

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student -Teacher Ratio (programme wise):

B.Sc.: 15:1; M.Sc.: 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	3	3

15. Qualifications of teaching faculty with DSc/ D.Litt./ Ph.D./ M.Phil./PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	5	4	2	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST – FIST, UGC, DBT, ICSSR, etc. and total grants received:

Prof. P.S.Kapare

Co-Director of a Major Research Project entitled ‘Emotional Intelligence Among Adolescents: Tool Development Enhancement Through Training and Study of Correlates’ funded by ICSSR. Grants approved Rs. 17,00,000/-

18. Research Centre /facility recognized by the University:

The staff members are actively involved in the research activities. The department intends to apply for the Research Centre in the near future.

19. Publications:

Name of the faculty	Papers			Books			Total publications
	International	National	Presented in Conference	International	National/ Local	Book chapter	
Prof. P. G. Dixit	-	1	11	-	37	-	49
Prof. P.S. Kapre	-	-	-	-	9	-	9
Prof. A.T.Kamble	5	-	-	-	-	0	5

20. Areas of consultancy and income generated:

Statistical analysis consultancy activity is of non-remunerative and is offered to research students of various faculties. It is not done as a professional service.

21. Faculty as members in

- a) National committees:
- b) International Committees:
- c) Editorial Boards :

Prof. P. G. Dixit is working on an Editorial Board of research journal 'Dnyanomay' published by Progressive Education Society.

22. Student projects

- a) Percentage of students who have done in house projects including inter departmental/programme: 90% for T.Y. B.Sc. and M.Sc.
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Industry 10% with NSSO, NIBM and Gokhale Institute

23. Awards / Recognitions received by faculty and students:

Teachers:

- Prof. P. S. Kapre received 'Best Teacher Award' for academic year 2015-16 from Progressive Education Society
- Working as Nodal Officer, AISHE, Delhi.

Students:

- Dr. Rajendra Gurav, a past student of the department was awarded Ph.D. in Statistics from SPPU, Pune-7.
- Ms. Kirti Gaikwad, a past student is appointed in the Central Government in Indian Statistical Services (ISS) as Statistical Officer.
- Mr. Chandrashekhar Potnis, a past student is awarded "Exemplary Industrialist" by K.B. Alias Anna Talwalkar Memorial Trust in February 2014.
- Mr. Pande Dilip promoted to the post of colonel in Indian Army currently posted in Pune.
- Santosh Payas promoted to Deputy Director in the office of Census. He received appreciation award in the form of medal by President of India for Best Population Census Work.

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Date	Name of the guest
1.	29/06/2011	Dr. Anant Patki, Retd. Scientist, ISRO, Bangalore.
2.	27/07/2011	Dr. Vijay Kulkarni, Bharati Vidyapeeth Social Science Department, Pune.
3.	17/12/2011	Dr. J.K.Wani, Calgeri University, Alberta Canada
4.	20/12/2011	Dr. Jayraman, Kerala Forest Research Institute, Kerala.
5.	27/07/2012	Dr. J. V. Deshpande, Former Head, Department Statistics, University of Pune and Professor at Mathematical Institute , Chennai
6.	22/08/2012	Mr. Akshay Dixit, Sonal Dhand, Alpna Dwivedi, Rajaraman (Ultramax Infonet, Pune)
7.	23/08/2012	Dr. M. B. Kulkarni, BYK College, Nasik.

Sr. No.	Date	Name of the guest
8.	07/09/2012	Dr. M. N. Deshpande, Director and Former Head, Institute of Science, Nagpur.
9.	12/10/2012	Dr. Mohan Kale, Professor of Statistics, Department of Statistics, SPPU.
10.	28/12/2012	Mrs. Sahinta Yeolekar, CYTEL Software Ltd., Pune.
11.	11/02/2013	Dr. Waman H. J., Former Professor of Statistics, Bangalore University, Bangalore.
12.	16/03/2013	Dr. Ashok Shanbhague, Head, Department of Statistics, Sardar Patel University, Anand, Gujrat.
13.	01/05/2013	Dr. M. N. Deshpande and Mr. Gokhale, Ex-Head, Institute of Science , Nagpur.
14.	29/06/2013	Dr. Onkarehwara Prasad, Director, Bureau of Economics and Statistics, Pune.
15.	27/07/2013	Mr. H.N. Patil, Senior Statistician, MSRTC, Pune.
16.	24/08/2013	Mr. Potnis, CEO, NITOR Software Company, Pune. Ms. Kirti Gaikwad, ISS Officer, ISI, Delhi.
17.	17/01/2014	Mr. Akash Rughani Ms. Hemal Thakkar Ms. Deepti Pujari Mr. Lavesh Pillai (FINSTAT Training Personelle in ACTUARIAL Statistics)
18.	18/01/2014	Dr. A. P. Gore, Vice-President, CYTEL, Pune.
19.	18/01/2014	Prof. A. G. Gosavi, Retd. Principal, Modern College of Arts, Science and Commerce, Shivajinagar, Pune-5.
20.	26/06/2014	Dr. V. Parmeswaran, Deputy Director General, NSSO, Pune.
21.	13/12/2014	Dr. Palanichami, Director, PRA Health Science, Chennai.
22.	17/10/2014	Dr. D.T. Shirke, Professor of Statistics, Department of Statistics, Shivaji University, Kolhapur.
23.	Lecture Series	Mr. Nitin Pawar, Tech-Mahindra Infotech, Pune.
24.	16/12/2014	Prof. Akanksha Kashikar, Professor, Department of Statistics, SPPU.
25.	Started SAS course	Mrs. Priti Pandhu, Data Science laboratory, Pune.
26.	11/12/2014	Dr. Ketkar Anant, Adviser, OASIS Institute, Pune.
27.	16/12/2014	Prof. V. C. Kakade, Professor of Statistics, TC College, Baramati.
28.	29/06/2015	Prof. A.S. Prabhu Former professor of Fergusson College, Pune
29.	28/07/2015	Dr. Sudhir Kulkarni, Professor at Botswana
30.	23/12/2015	Ms. Deepti Pujari Mr. Akash Rughani, Finstat Academy,
31.	30/12/2015	Dr. J.V. Deshpande, Former Head, Department Statistics, University of Pune and Professor at Mathematical Institute , Chennai
32.	13/02/2016	Dr. L. B. Thakur, Former professor and Head of Statistics Department Dr. B.R. Ambedkar Marathwada University, Aurangabad
33.	23/02/2016	Dr. M. N. Deshpande, Former Director, and Head, Department of Statistics, Institute of Science, Nagpur

25. Seminars/ Conferences/Workshops organized and the source of funding:

- National: 3 Workshops
- International: 1 Pre-conference
- State: 1 Workshop
- District: 3 Workshops (At University Level)

Sr. No.	Year	Name	Source of Funding
1	2009-10	Five days Refresher training on Biostatistics for ISS officers.	Ministry of Statistics and Programme Implementation, Delhi.
2	2010-11	National Workshop on Medical Statistics and Clinical Trials (Dr. P.V. Sukhatme Birth centenary memorial)	Savitribai Phule Pune University
3	2012-13	National Workshop on Careers in Statistics (International Statistics Year)	Students' Welfare Savitribai Phule Pune University

Sr. No.	Year	Name	Source of Funding
4	2013-14	Workshop on revision of M.Sc. I Sem I and II (Choice based credit system) syllabi	Savitribai Phule Pune University
5	2013-14	Workshop on revision of M.Sc. II Sem III and IV (Choice based credit system) syllabi	Savitribai Phule Pune University
6	2014-15	i. S.Y. B.Sc. Quiz Final Round ii. T. Y. B.Com. Syllabi Revision	Board of Students' Welfare Savitribai Phule Savitribai Phule Pune University BCUD, Savitribai Phule Savitribai Phule Pune University
7	2015-16	i. Preconference organised before International Conference ii. S.Y. B.Sc. Quiz Final Round iii. State level workshop on 'Survival and Reliability Analysis'	Board of Students' Welfare Savitribai Phule Savitribai Phule Pune University Board of College and University Development

26. Student profile programme/course wise:

B.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	81	55	26	84.21
2011-2012	361	92	46	46	100
2012-2013	326	79	35	44	96.42
2013-2014	402	96	42	54	92.00
2014-2015	396	94	36	58	89.28
2015-2016	427	124	59	65	RA

M.Sc.

Name of the Course/programme	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	145	26	8	18	63.15
2011-2012	135	30	7	23	80.00
2012-2013	155	30	9	21	55.55
2013-2014	145	34	9	25	72.41
2014-2015	158	32	11	21	79.31
2015-2016	143	30	10	20	RA

27. Diversity of Students:

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	1.45	Nil
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	98.21	1.79	0.00
2011-2012	98.21	1.79	0.00
2012-2013	100.00	0.00	0.00
2013-2014	98.41	0.00	1.59
2014-2015	96.97	0.00	3.03
2015-2016	96.97	3.03	0.00

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:

Name of examination	No. of students
SET	02
Civil Services	01

29. Student progression

Student progression	Against % enrolled
UG to PG	50-55%
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	22-25%
• Other than campus Recruitment	20%
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities:

- Library: Central Library of the college
- Internet facilities for Staff and Students: Yes, 10 mbps leased line for internet
- Class rooms with ICT facility: 03
- Laboratory: Yes

31. Number of students receiving financial assistance from college, University, government or other agencies:

The figures represent the total number of students of the Science Faculty and the Post Graduate students of the department.

Year	Total number of students
2010-11	52
2011-12	69
2012-13	63
2013-14	128
2014-15	172
2015-16	164

- In the academic year 2014-15, CYTEL Software Ltd. Company under their Corporate Social Responsibility (CSR) Scheme has given the financial assistance worth Rs.1,70,560/- to 20 students of UG and PG classes.
- In the academic year 2015-16, CYTEL Software Ltd. Company under their Corporate Social Responsibility (CSR) Scheme has given the financial assistance worth Rs.1,82,000/- to 24 students of UG and PG classes.

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

- Guest lectures by eminent resource person in statistical field are organized by the department for students.

- Statistics Fest : Department organizes every year a Statistical Fest for S.Y., T.Y. B.Sc., M.Sc.(I and II) Students. Case studies, Quiz, Statistical Crossword, puzzle solving and Guest Lectures are the events of this fest.
- Quiz Competition for F.Y. B.Sc., F.Y. B.Sc. (Computer Science) and S. Y. B.Sc. is organized every year.
- Final round of Intercollegiate Quiz Competition was arranged for two years.

33. Teaching methods adopted to improve student learning:

- Assignments
- Problem Corner
- Seminars
- Power Point Presentations
- Projects

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Prof. P.G. Dixit is Secretary of Advisory Board for NGO Students Welfare Association, Pune. He is also a member of Executive Council of Schizophrenia Awareness Association, Pune.

35. SWOC analysis of the department and future plans:

Strength:

- Laptops are provided to all the student for the practical sessions
- Availability of statistical softwares like SPSS, R, Minitab and Matlab
- Varied and enriched co-curricular activities

Weakness:

- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Increasing demand of statisticians in various fields including IT sector
- The department has potential to give remunerative consultancy
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- It is difficult to obtain real data from industries for the projects by students
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- Enhancing the placement activity
- Prepare study material for newly introduced theory papers in the syllabi
- To use statistical softwares for conducting all the practicals of UG classes

□□□

Department of Zoology

1. **Name of the department:** Department of Zoology
2. **Year of establishment :** 1970
3. **Names of Programmes/Courses offered(UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
B.Sc. Zoology
M.Sc. Zoology
Ph.D. Zoology
4. **Names of interdisciplinary courses and the departments /units involved:** Nil
5. **Annual/semester/choice based credit system(programme wise):**
F.Y. B.Sc. : Annual Pattern
S.Y. and T.Y. B.Sc.: Semester Pattern
M.Sc. Zoology – Semester Pattern with Choice based credit system
6. **Participation of the department in the courses offered by other Departments:**
Few of staff members conduct lectures and practical sessions in Zoology for the UG and PG students at the departments of Biotechnology, Agri-Biotechnology and Microbiology.
Animal Diversity and Systematics, Embryology, Applied Zoology: Department of Biotechnology
Developmental Biology: Department of Microbiology
Applied Zoology, Entomology: Department of Agri-Biotechnology
7. **Courses in collaboration with other universities, industries, foreign institutions,:**
Our department conducts Integrated Vermitechnology Training Course (IVTC), two batches per year in collaboration with Praj Foundation, Pune and Institute of Natural Organic Agriculture (INORA), Pune.
8. **Details of courses / programmes discontinued (if any) with reasons: -**
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	01	01
Asst. Professors	08	08

10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. /M.Phil., etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph. D Students guided for the last 4 years
Dr. H.V.Ghate (Up to 2012)	M.Sc., Ph.D.	Ex-Head of the department	Developmental Biology	33	5
Dr. A.M.Bhalerao (Up to 2014)	M.Sc., Ph.D.	Ex-Head of the department	Entomology	32	-
Prof. Narendra Madhukar Naidu	M.Sc. M. Phil.	Associate Professor	Developmental Biology	29	-
Prof. Bharat Thalu Kalbage	M.Sc.	Assistant Professor	Cell Biology	19	-
Dr. Yugandhar Satish Shinde	M.Sc. Ph.D.	Assistant Professor	Developmental Biology and Entomology	3	-
Dr. Pappu Sawleram Kudnar	M.Sc. Ph.D.	Assistant Professor	Entomology	3	-
Dr. Ananda A Babrekar	M.Sc. Ph.D.	Assistant Professor	Entomology	3	-
Prof. Netra D. Kulkarni	M.Sc., SET.	Assistant Professor	Zoology	3	-
Prof. Pallavi K. Shewale	M.Sc.	Assistant Professor	Zoology	1	-
Prof. Anushree Karmarkar	M.Sc.	Assistant Professor	Zoology	1	-
Dr. Shubhangi S Puranik	M.Sc., Ph.D.	Assistant Professor	Zoology	1	-

11. List of Senior Visiting Faculty:

- Dr. Hemant V. Ghate, Eminent Professor
- Dr. Arun M. Bhalerao, Eminent Professor
- Dr. Sushama J. Thatte, Eminent Professor
- Prof. B. B. Nath, Eminent Professor

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student-Teacher Ratio (programme wise):

B.Sc. : 15:1

M.Sc. : 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Two posts of Faculty Clerk, in the college office are sanctioned and filled.

Technical	Sanctioned	Filled
Class 3	1	1
Class 4	4	4

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./MPhil/PG

Qualification	PG	M.Phil.	Ph.D.	D.Litt.	D.Sc.
No. of Staff	4	1	4	-	-

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

- Dr.Yugandhar S. Shinde has been awarded a Minor Research Project worth Rs. 2.2 lakhs from BCUD,SPPU.

17. Departmental projects funded by DST-FIST,UGC, DBT, ICSSR, etc. and total grants received:

- Dr. H. V. Ghatе has guided a Woman Scientist (Mrs. Gauri Sathye) working on project specially designed for women by Department of Science and Technology.(WSO-B of DST: 2011-2013)
- Dr. H. V. Ghatе also guided a Post-Doctoral fellow (Dr. Sanket Tembe) working on DNA Barcoding of bugs. His work is funded by Department of Biotechnology(DBT Post-Doc 2011-2013)

18. Research Centre/facility recognized by the University:

Department of Zoology of our college has one of the oldest Post Graduate Research Centre affiliated to the SPPU. It has a recognized centre for research in Zoology and has obtained continuation of affiliation and recognition up to 2018-2019.

19. Number of publications listed in International Database (For Eg:Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory ,EBSCO host, etc.):

Name of the faculty	Papers			Books			Total publications	Total impact factor	Total citation	h-Index
	International	National	Presented in Conference	International	National/Local	Book chapter				
Dr. Hemant Ghatе	15	27	-	-	-	1	43	-	607	14
Prof. Narendra Madhukar Naidu		1	-	-	-	-	-	-	-	1
Dr. Yugandhar Satish Shinde	2	-	1	-	-	-	3	-	3	1
Dr. Pappu Sawleram Kudnar	-	-	2	-	-	-	2	-	-	-

20. Areas of consultancy and income generated:

- Taxonomy and Biodiversity (Dr.H.V.Ghatе and Dr.A.M.Bhalerao)

- Maharashtra Pollution Control Board (Dr.A.M.Bhalerao)
- Vermitechnology and Waste management (Mr.Narendra M.Naidu).
Currently, it is a non- remunerative consultancy.

21. Faculty as members in

- a) National committees:** Nil
- b) International Committees:** Nil
- c) Editorial Boards :**

- Prof. N.M.Naidu was the Joint Editor for the Proceedings of the International Conference on ‘Innovations in Teaching, Learning and Evaluation in Higher Education’, organized by our college. He is also the Editor of the College Annual Magazine since last three years.
- Dr. Hemant V. Ghate as reviewer for International Journals- Zootaxa, Zoological Journal, Taprobanica Indian Journals - Journal of Threatened Taxa, Biosystematica.
- Dr. Yugandhar S.Shinde- Reviewer- Zootaxa.

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental/programme:**

Approximate 20% students from F.Y. and S.Y. B.Sc. are involved in projects with Zoology department. More than 60% T.Y. B.Sc. Zoology students have done in- house departmental projects

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:**

About 18% T.Y. B.Sc. Zoology students have done/ doing project outside institute.

23. Awards/Recognitions received by faculty and students:

Dr. H.V.Ghate

- Recipient of the ‘Best Teacher Award’ by the Government of Maharashtra in 2010
- ‘Sarpmitra’ Award by Herpatological Society of India in 2015

Awards by the students

- Manali Gudmeti of T.Y.B.Sc. was the topper in T.Y.B.Sc. Zoology for the year 2011-12. She bagged the Prof. Mora Teja Chauhan Prize.
- Manali Dani scored the highest Principal Total and Pallavi Dorge scored the highest Grand total in the T.Y.B.Sc. Zoology batch, of the year 2014-15.

24. List of eminent academicians and scientists/visitors to the department:

- Magnus Apelqvist, Jönköping University, Sweden (Jan. 2010)
- Prof. (Mrs.) Dipsikha Bora, Dibrugarh University, India (Nov. 2010)
- Christopher Thorp-Dixon, University of Plymouth, UK (April 2012, July 2014)
- Dr. Kailash Chandra, Zoological Survey of India, India (Oct. 2012)
- Dr. Bulganin Mitra, Zoological Survey of India, India (Nov. 2012)
- Ms. Sohini Vanjari, Cambridge University, UK (Feb. 2014)
- Stuart Roberts, Reading University, UK (Feb. 2014)
- Lewis Davies, University of Plymouth, UK (July 2014)
- Jane Akernan, University of Plymouth, UK (July 2014)
- Todd Lewis, University of London, UK (July 2014)
- Dr. Ramesh R. Bhonde, Manipal University, Karnataka (Jan. 2014)
- Kiran Puandare, KIKA, (Sept, 2014, Feb, 2015)
- Sandeep Gaikwad, Pune (Jan, 2015)
- Yu- Lun Wang, National Tsing Hua University, Taiwan (Jan, 2015)
- Cheng-Yao Lo, National Tsing Hua University, Taiwan (Jan, 2015)
- Dr. Rajendra Singh, Tarun Bharat Sangh, Rajasthan, India (Feb, 2015)
- Deepak Modak, Chief Engineer (Rtd.) Koyana Dam, Pune (Feb, 2015)
- Dr. Neelesh Dahanukar, IISER, Pune, India (Feb, 2015)
- Nikhil Modak, MES Garware College, Pune, India (Feb, 2015)
- Dr. Satish Pande, Ela Foundation, Pune, India (Feb, 2015)
- Anirudh Chaoji, Pugmark, Pune (Feb, 2015)
- Dr. Anand Padhye, MES Garware College, Pune, India (Feb, 2015)
- Prof. Venkat Gunale, Savitribai Phule Pune University, Pune (Feb, 2015)
- Dr. Pradnya Kanekar, Pune, (Feb, 2015)
- Dr. Erach Barucha, BVIEER, Pune (Feb, 2015)
- Dr. Ganesh Margaj, Sawantwadi, India (Feb, 2015)
- Dr. B. B. Nath, Savitribai Phule Pune University, Pune (Feb, 2015)
- Dr. R. M. Sharma, Ex- Director, ZSI, India (Feb, 2015)
- Dr. Samit Mehata, Yale University, USA.
- Dr. Rahul Mungikar, Maharashtra State Biodiversity Board
- Dr. Leena Thorat, SPPU Pune
- Dr. Sagar Pandit, Max Plank Institute Jena, Germany.
- Dr. Somwanshi, Ahmednagar College Ahmednagar.
- Dr. Kishori Dhumal, R. Y. K. Nashik.
- Dr. Dharav Shah, Mumbai.
- Dr. Abhijit Safai, Symbiosis Pune.

25. Seminars/Conferences/Workshops organized and the source of funding:

- National: Nil
- International: 01 International Conference on Innovations in Teaching Learning and Evaluations in Higher Education, funded by SPPU, Pune.
- State: 01

State level Seminar on 6th and 7th February 2015, on: 'Freshwater Ecosystems of Maharashtra: Their Biota, Ecology and Health'. The Waterman of India Dr. Rajendra Singhji was Chief Speaker for the Inaugural Function. Eighteen resource persons from various fields were invited for the seminar. Source of funding: BCUD-Savitribai Phule Pune University, Pune-7.

26. Student profile programme/course wise:

B.Sc.

Name of the Course/ programme:	Applications received	Selected	Enrolled		Pass %
			M	F	
2010-2011	297	163	50	113	81.81
2011-2012	361	158	44	114	81.81
2012-2013	326	156	42	114	80.00
2013-2014	402	161	46	115	80.76
2014-2015	396	167	63	104	86.66
2015-2016	427	178	61	116	RA

M.Sc.

Name of the Course/ programme:	Applications received	Selected	Enrolled		Pass %
			M	F	
2015-2016	73	22	08	14	RA

27. Diversity of Students:

B.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2010-2011	100	Nil	Nil
2011-2012	100	Nil	Nil
2012-2013	100	Nil	Nil
2013-2014	99.08	0.92	Nil
2014-2015	98.55	1.45	Nil
2015-2016	98.59	1.19	0.22

M.Sc.

Year	% of students from the same state	% of students from other States	% of students from abroad
2015-2016	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: NET: 01 , GRE: 01

29. Student progression

Student progression	Against % enrolled
UG to PG	44
PG to M.Phil.	-
PG to Ph.D.	2
Ph.D. to Post-Doctoral	2
Employed	
• Campus selection	-
• Other than campus Recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- Library :
 - Stacking cupboards for books
 - Laboratory space for reading whenever available.
- Internet facilities for Staff and Students: Six separate ports of internet available within the laboratory. Ten mbps leased line for internet connection with Wi-Fi.
- Class rooms with ICT facility: All the three classrooms where courses in Zoology conducted have ICT facilities.
- Laboratories: Two laboratories for under graduate level and one laboratory for PGRC.

31. Number of students receiving financial assistance from college, University, government or other agencies:

Year	Total number of students
2010-11	49
2011-12	67
2012-13	57
2013-14	123
2014-15	162

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

- Visit to Ralegan Siddhi, an ideal village developed by the villagers inspired and guided by the great social worker Shri. Anna Hazare.
- Visit to the College of Agriculture and Central Bee Research and Training Institute, Pune.
- One-day educational trip to Shirgaon and areas nearby the backwaters of Pawana Dam with the intention of studying biodiversity of water bodies.
- Visit to Fish-Seed Farm at Hadapsar.
- Visit to Bio- Era at Tathavade, Chinchwad, to have knowledge of new

equipment purchased by our college in the recent past and also to get familiar with sophisticated instruments and techniques in advanced biology.

- Integrated Vermitechnology Training Course-two batches per year
- A lecture by Dr. Bhuvanesh Awasthi on 'How do we 'see' this world-- Neuroscience of visual perception'
- Formal and informal interaction sessions of the past students were organized for the benefit of the present students of final year. Mr.Aditya Takale, Mr.Rohit Nagalgaon, Mr.Rajan Thakur, Mr.Shashank Nambiar and Ms.Ushma Shukla shared their experiences.
- A Guest lecture by Mr. Vinayak Kelkar, PRAJ foundation, Mr. Abhijit Deshmukh of Sai Samartha Seva and Dr. Mrs. Manju Tadwalkar, INORA, on urban waste management training for the benefit of UG students.
- ZooVision – An exhibition of models and charts related to Zoology

Activities carried out under UGC-CPE Scheme:

- For effective teaching during practicals, e-learning material was prepared. Departmental staff members and under-graduate students dissected different animals viz. Earthworm, Starfish, Scoliodon, Pila, and Grasshopper and also prepared whole mount of chick embryo. Video recording of the dissection steps was done.
- Guest lecturers of following eminent personalities from industries and research institutes were arranged.

Lecture series under UGC- _CPE scheme

Sr. No.	Date	Resource Person	Topic of Lecture
1	08/02/2014	Mrs. Manju Tadwalkar, CEO ,INORA, Pune	Waste to wealth
2	12/02/2014	Dr. Donald Paise Asst. Dev .Officer, CBRTI Pune	Importance of Apiculture
3	14/02/2014	Dr. R. L. Palimkar, Govt. Central Hatchery, Pune	Business opportunities in Poultry Science
4	15/02/2014	Dr. Nitinkumar Ranshur (Associate Professor) College of Agriculture, Pune	Importance of Physicochemical testing of soil.
5	17/02/2014 04/03/2014	Dr.H.V.Ghate (Retd .Associate Professor)	Important aspects of Evolution Microtechnique-Do's and Don'ts
6	04/03/2014	Dr.Manisha Modak (Associate Professor), S.P.College,Pune	Recent trends in Molecular Biology
7	06/03/2014	Dr.S.J.Thatte (Retd.Associate Professor)	A few interesting facts in Mammalian physiology

Activities carried out under DBT-STAR College Scheme:

Lecture series under DBT-STAR college

Sr.No.	Date	Resource Person	Topic
1.	15/07/2013	Dr. Abhijeet A. Safai	Clinical Endocrinology
2.	30/07/2013	Dr. A. A. Babrekar	Cytogenetics
3.	10/08/2013	Mr. Sachin Ranade	Vulture conservation

Sr.No.	Date	Resource Person	Topic
4.	05/09/2013	Ms. Sohini Vanjari	Conservation genetics of butterflies
5.	13/12/2013	Ms. A. Pradhan	Career opportunities in Hospital Management
6.	28/12/2013	Dr. S. M. Ghaskadbi	Developmental mechanism underlying evolution of body plan in animals
7.	09/01/2014	Dr. R. R. Bhonde	Magic of Stem Cells
8.	01/02/2014	Dr. Kamallesh Chavan	Snakes and Tips for Jungle Trail (Talk on field at Dhamapur Jungle)
9.	12/02/2014	Dr. Bhuvanesh Awasthi	Neurobiology and Epigenetics

Quiz Contests

In the month of December 2013 and December 2014 quiz named **ZooQuiz**, based on undergraduate Zoology syllabus was conducted. A written quiz was held for elimination and then the Team event was conducted.

Projects for Students :

- Each staff member of the department has taken responsibility of a group of interested students and simple projects in Life Sciences have been assigned to them. Areas covered are freshwater fauna, biodiversity of spiders, experiments in vermiculture, survey methodology, basic entomology, life-cycle study of certain insects, physico-chemical properties of rivers and nearby agricultural soil and their effects on freshwater fauna, basic anthropology and *Drosophila* culture.
- Two students had Hands-on-training in Pathology and three students in Dietetics.
- Extra- practicals (out of syllabus) were conducted for F.Y. BSc. students and also for T.Y. BSc. Students. Staff members from Department of Biotechnology and Department of Microbiology extended their full cooperation in this activity.

Special Workshop on Microscopy

A two-day workshop on Microscopy was organized by our department in collaboration with the Department of Zoology, Savitribai Phule Pune University, for the last three years in two batches.

Dr.B.B.Nath, Professor and Head of the Department of Zoology, Savitribai Phule Pune University conducted this workshop very effectively. The participants had hands-on-training experience on microscopy. His research students Dr. Leena Thorat, Dr. Rahul Gaikwad and Ms.Pallavi Gaikwad also conducted few practical sessions during the workshop.

The sessions of the second day were conducted at the Department of Zoology, Savitribai Phule Pune University. Dr. P. S. Kudnar worked as the Coordinator, under the guidance of Narendra M.Naidu.

Activities of the Post-Graduate Research Centre (PGRC) :

- Prof. Rahul Gaikwad participated in “Avishkar” competition, Savitribai Phule Pune University. He was selected for the Final round at Jalgaon.
- Dr. P. S. Kudnar presented a research paper entitled ‘Study of nutritional

potential of zooplankton *Moina macracopa* at the State level seminar held on 27th -28th Dec.2013 at New Arts, Commerce and Science College, Shevgaon.

- Dr. Y. S. Shinde presented a paper at “International Conference on Biosciences with Special Reference to Environmental Issues” (ICBEI-2013) Department of Zoology, Shivaji University, Kolhapur (MS) India (December, 19-21, 2013)
- Ph.D. research students enrolled in our P.G.R.C. submitted their half-yearly progress report.
- Dr. H. V. Ghate and Mr. N.M. Naidu published their research paper in International Journal.
- Mr. N.M.Naidu went for Survey work to places in around Kolhapur and Beed. He also made a Study visit to ZSI, Kolkata.
- Dr. Y. S. Shinde has submitted minor research project to BCUD, Savitribai Phule Pune University
- Prof. B.T. Kalbage registered for Ph.D. under Savitribai Phule Pune University

Alumni activities

- Past students visited our department for delivering lectures and often for informal interaction with the present batches. These were Dr. Ananda Babrekar, Dr.Bhuvanesh Awasthi, Mr. Sachin Ranade, Dr. Manisha Modak, Dr. Mandar Kulkarni, Dr. Meghana Kanitkar, Mr. Sachin Borse, Mrs.Manuja Mundhe and Miss Apeksha Rao.
- Four students viz. Ashutosh Alekar, Pallavi Shewale, Prashant Gundal and Sneha Kamat, from the previous batch, under the guidance of Dr. Shinde designed and prepared a display chart on Career Opportunities in Zoology.
- Pallavi Shewale was the topper in the T.Y.BSc. Zoology batch of the year 2012-13. She bagged the Prof. Mora Teja Chauhan Prize.
- The entire year was full of activities which kept the students, non-teaching staff and teaching staff busy and active throughout the academic calendar

33. Teaching methods adopted to improve student learning:

- ITC
- Models Charts, preserved specimens
- Demonstration in groups of preserved dissected specimen.
- Field visits
- Institutional visits
- Guest lecturers- Invited- Visits of national and international experts.
- Quiz based on syllabus
- Student seminar
- Group discussions
- Students Projects
- Research environment /active involvement of staff in PhD/ postdoctoral research

- Library facility
- Home assignments
- Remedial coaching
- Revision of practical
- Alumni

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Our department conducts Vermitechnology course (IVTC) and extension work of the same.
- Department also collaborates with NSS for Vasundhara Environmental Film Festival, waste management and other social issues.
- Extension work on Health and hygiene for school students of rural as well as slum area also carried out.
- Our faculty conducted a workshop for school students, in order to increase scientific temperament and research attitude among them.
- Prof. N. M. Naidu is actively associated with Baba Amte's Anandwan and a Spiritual organization 'Chinmaya Mission'. Hence, several activities for the benefit of students and staff in the areas of social work and value based education are regularly arranged. These programmes sensitize our students about social issues and also help them in personality development.

35. SWOC analysis of the department and future plans:

Strength:

- Our department has the oldest Post Graduate Research Centre in the college. It has maintained reputation of being one of the best research centres in Zoology under Savitribai Phule Pune University.
- Retired teachers of our department are often invited as visiting faculty. They are available for academic and administrative guidance whenever it is necessary.
- Alumni of the department informally visit the department and interact with the staff and students. Our past students who have noteworthy achievements are formally invited to deliver talks and motivate the present students for academic pursuits.
- The department has strong bonds with educational and research institutes, NGOs and other organizations since beginning. These contacts prove useful to organized several programmes for students.
- Dr. H.V. Ghate and Dr. A. M. Bhalerao contributed in Board of Studies.
- Zoology Association is active in arranging lectures, workshop, contests and exhibitions.

Weakness:

- Placement activity at departmental level needs to be strengthened.

Opportunities:

- Funds received from various funding agencies DBT/UGC/BSR etc. are useful to involve students and staff in research projects, contests and several other academic activities without financial constraints.
- The department can launch new activities in research and teaching for the benefit of students.
- Enhancing the quality of education, through the collaborative activity with SPPU, IISER Pune and University of Melbourne, Australia, for conducting B.Sc. Blended course.

Challenges:

- Ban on dissections on animals has led to searching alternatives for such practicals with respect to understanding anatomy and also the skill needed in dissections.
- Issues related to environmental and biodiversity are increasing recently. The teaching and inputs in syllabus need to immediately address these issues.
- Most of the animal types included in the syllabus are exotic species. It is essential that description of Indigenous fauna be added in the syllabus.
- Considering the advances in practicals of Molecular Biology, Cell Biology, Developmental Biology and Biochemistry, all concerned staff should undergo rigorous hands-on training so as to impart the best to their students.
- Genuine multifactorial limitations of the students coming from varied socio-economic background creates heterogeneity in the class and addressing the needs of all of them in the same class is a challenging task.

Future plan:

- Addition to the existing short term skill development courses which would include: Apiculture, Basic taxonomy and biodiversity, Micro-technique, Instrumentation, Public health and hygiene and Nature Photography.
- Increasing participation of students in projects and hands-on training including summer training.
- Our department will also take efforts towards career guidance, campus interviews and creating a placement cell.
- Organizing visits / training for staff and laboratory assistant for enhancement of skills.
- Contribution of research students at our PGRC in teaching and practical for UG and PG students.
- Half yearly meeting of research students and guides of department with research scholars and university authorities.
- Further efforts for establishing the remunerative consultancy services.

□□□



Dr. R. S. Zunjarrao
M.Sc. Ph.D.
PRINCIPAL

Ref. No. : MCASC /

Progressive Education Society's

MODERN COLLEGE OF ARTS, SCIENCE & COMMERCE

Shivajinagar, Pune 411 005.

- NAAC Re-accredited 'A' Grade
- 'College with Potential for Excellence', UGC
- 'Best College Award', SPPU
- 'Star College Status', DBT
- ISO 9001:2006 Certified
- Community College Scheme, UGC

- P.U. AFFILIATION No. (Id No. PU/PN/ASC/022/1970)
- U.G.C. RECG. NO. included U/S 2 (F) of the U.G.C. Act 1956, Letter No. F.13-371(CD) dated 1st Sept.71
- Govt. RECG. No. D.E.M.S. Pune Oct.77, Code No. PA/ASC-13
- Jr. College Permission No. HSC/1077/31029/XII-HS dt/4-5-77, HSC College Code No. J-11.11.005

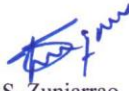
Date :

Declaration by the Head of the Institution

I certify that, the data included in the Self Study Report (SSR) is true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions and no part thereof has been outsourced.

I am aware that the Peer Team will validate the information provided in this SSR during the Peer Team Visit.


Dr. R.S. Zunjarrao
Principal

Place : Pune
Date : 23rd June 2016





Dr. R. S. Zunjarrao
M.Sc. Ph.D.
PRINCIPAL

Ref. No. : MCASC /

Progressive Education Society's

MODERN COLLEGE OF ARTS, SCIENCE & COMMERCE

Shivajinagar, Pune 411 005.

- NAAC Re-accredited 'A' Grade
- 'College with Potential for Excellence', UGC
- 'Best College Award', SPPU
- 'Star College Status', DBT
- ISO 9001:2006 Certified
- Community College Scheme, UGC

- P.U. AFFILIATION No. (Id No. PU/PN/ASC/022/1970)
- U.G.C. RECG. NO. included U/S 2 (F) of the U.G.C. Act 1956, Letter No. F.13-371(CD) dated 1st Sept.71
- Govt. RECG. No. D.E.M.S. Pune Oct.77, Code No. PA/ASC-13
- Jr. College Permission No. HSC/1077/31029/XII-HS dt/4-5-77, HSC College Code No. J-11.11.005

Date :

Certificate of Compliance

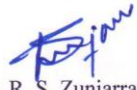
This is to certify that, Progressive Education Society's , Modern College of Arts, Science and Commerce, Shivajinagar, Pune- 411 005, fulfils all norms :

1. Stipulated by Savitribai Phule Pune University, Pune (formerly, University of Pune).
2. Regulatory council / Body – University Grants Commission
3. The affiliation and recognition is valid as on date.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once that institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 23rd June 2016
Institution: *Progressive Education Society's*
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune -5, Maharashtra
Place: Pune


Dr. R. S. Zunjarrao
Principal



Annexures

Annexure I: Approval of Courses by Affiliating University

Savitribai Phule Pune University (Formerly University of Pune)

Telephone Nos. :
020 - 25691233
25601258
25601259
25601257



ACADEMIC SECTION
Ganeshkhind, Pune - 411007, INDIA
Telegraph : 'UNIPUNE'
Fax : 020-256912
Website : www.unipune.ac.in
E-mail : dyracademic@unipune.ac.in
Date : 13/4/16

Ref. No. : CH/229

TO WHOM IT MAY CONCERN

This is to certify that **Progressive Education Society's, Modern College of Arts, Science and Commerce, Shivajinagar, Pune 411005, Maharashtra State** is affiliated to the **Savitribai Phule Pune University (SPPU)** since 1970. The following Courses are taught in the said college as per approval and its ID No. is PU/PN/ASC /022/1970

Sr. No.	Course	Duration of the course	Affiliation (Permanent/ Temporary)	Validity period
1.	First to Third Year B.A.	3 Years	Permanent	From 1978
2.	First to Third Year B.Com	3 Years	Permanent	From 1978
3.	First to Third Year B.Sc.	3 Years	Permanent	From 1978
4.	First to Third Year B.Sc. Computer Science	3 Years	Temporary	Up to 2014-15
5.	First to Third Year B.Sc. Biotechnology	3 Years	Permanent	From 2013-14
6.	First to Third Year B.Sc. Microbiology	3 Years	Permanent	From 2013-14
7.	First to Third Year B.C.A.	3 Years	Temporary	Up to 2014-15
8.	First to Third Year B.B.A.	3 Years	Temporary	Up to 2014-15
9.	First to Third Year B.Sc. Animation	3 Years	Temporary	Up to 2014-15
10.	M.A. Marathi Part I And II	2 Years	Permanent	From 2007 - 08
11.	M.A. English Part I And II	2 Years	Permanent	From 2007 - 08
12.	M.A. Psychology Part I And II	2 Years	Permanent	From 2013-14
13.	M.Sc. Geography Part I And II	2 Years	Permanent	From 2007 - 08
14.	M.A. Economics Part I And II	2 Years	Temporary	Up to 2014-15

Certified True Copy



MCASC PUNE-5

॥ ज्ञानमयो भव ॥

PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

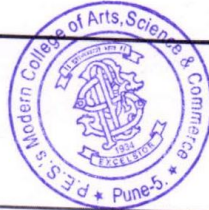
A-1

15.	First and Second Year M.com.	2 Years	Permanent	From 2006 - 07
16.	M.Sc. Computer Science Part I And II	2 Years	Permanent	From 2010- 11
17.	M.Sc. Electronic Science Part I And II	2 Years	Permanent	From 2007 - 08
18.	M.Sc. Botany Part I And II	2 Years	Permanent	From 2007 - 08
19.	M.Sc. Microbiology Part I And II	2 Years	Temporary	Up to 2014-15
20.	M.Sc. Biotechnology Part I And II	2 Years	Temporary	Up to 2014-15
21.	M.Sc. Statistics Part I And II	2 Years	Temporary	Up to 2014-15
22.	M.Sc. Chemistry Part I And II	2 Years	Temporary	Up to 2014-15
23.	M.Sc. Mathematics Part I And II	2 Years	Temporary	Up to 2014-15
24.	M.Sc. Physics Part I And II	2 Years	Temporary	Up to 2014-15
25.	M.Sc. Zoology Part I And II	2 Years	Temporary	Up to 2014-15
26.	P.G. Diploma Course in Foreign Trade	1 Year	Temporary	Up to 2014-15
27.	P.G. Diploma in Taxation	1 Year	Temporary	Up to 2014-15
28.	P.G. Diploma in Banking	1 Year	Temporary	Up to 2014-15
29.	Post Graduate Research Centre in Zoology	---	Continuation	Up to 2013-14
30.	Post Graduate Research Centre in Botany	---	Continuation	Up to 2015-16
31.	Post Graduate Research Centre in Commerce	---	Continuation	Up to 2015-16
32.	Post Graduate Research Centre in Electronic Science	---	Continuation	Up to 2014-15
33.	Post Graduate Research Centre in Marathi	---	Continuation	Up to 2014-15
34.	Post Graduate Research Centre in Economics	---	Continuation	Up to 2014-15
35.	Post Graduate Research Centre in Microbiology	---	Continuation	Up to 2014-15

The said certificate is issued as per the request application received from the Principal of the College vide his letter No. MCASC/8746 dated.09/04/2016 to submit the same to the National Assessment and Accreditation Council, Bangalore.

Certified True Copy

DIRECTOR
(B.C.U.D)



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-2

**Annexure II: UGC recognition under sections
2(f) and 12(b) Act**

**Annexure II: UGC recognition under sections
2(f) and 12(b) Act**

Ph. 23236351, 23232701, 23237721
23234116, 23235733, 23232317
23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges)
UGC Website: www.ugc.ac.in

ज्ञान-विज्ञान विमुक्तये
SPEED POST

विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F. No. 1-1/2004 (CPP-I/C)

February, 2011

7 FEB 2011

The Principal,
Modern College of Arts, Science & Commerce,
Shivajinagar,
Pune - 411 005,
Dist. Pune,
Maharashtra.

Sub: -Recognition of Modern College of Arts, Science & Commerce, Shivajinagar, Pune - 411 005, Dist. Pune, (Maharashtra) under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sir,

With reference to your letter No. MCASC/354/09-10 dated 26.03.2010 on the above subject I am directed to say that the name of **Modern College of Arts, Science & Commerce, Shivajinagar, Pune - 411 005, Dist. Pune, (Maharashtra)**, established in the year of 1970, affiliated to Pune University is included in the list of Colleges maintained under Section 2 (f) & 12 (B) of the UGC Act, 1956 under the head 'Non Government Colleges teaching upto Under Graduate Degree'. The College is also eligible to receive Central assistance under Section 12 (B) of the UGC Act.

Yours faithfully,

(Sunita Gulati)
Section Officer



Certified True Copy


PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5 || ज्ञानमयो भव || A-3

UNIVERSITY GRANTS COMMISSION
SAMADAR SHAF ZAFAR NARG
RPM 1981

No. F.M-9/71(CD)

Dated

Aug. 1971

To

The Registrar,
University of Poona
Ganesh Khand, PUNE-47

Subject: List of colleges prepared under section
2(D) of UGC Act, 1956-inclusion of
new colleges in the-

Sir,

I am directed to refer to your letter
No. Pz/DEV/C-14/1706 dated 9-8-71 on the above
subject and to say that the following college
has been included in the above list:-

1. Progressive Education Society's, Modern
College of Arts, Science and Commerce,
Shivajinagar-Pune-5.

Yours faithfully,

(UNDER 1/1)
for SECRETARY

Copy forwarded to

1. The Principal, Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar-Pune-5

2. A.C. (C)
3. A.C. (A)
4. F.A. (S.A.)
5. S.O. (C)
6. S.O. (B)
7. A.C. (U.A.C.)
8. S.O. (Meeting)
9. A.C. (C)

(UNDER 1/1)
for SECRETARY

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ जानमयो भव ॥

A-4

UGC 2(f)(12)(B)

Extension No. 413 (CPP I Colleges)
Total Budget: Rs. 1000000



Ministry of Higher Education, Government of Maharashtra

F. No. 1-1/2004 (CPP I/C)

February 2011

The Principal
Modern College of Arts, Science & Commerce
Shivajinagar
Pune - 411 005
Dist. Pune
Maharashtra

15 FEB 2011

Sub: Recognition of Modern College of Arts, Science & Commerce, Shivajinagar, Pune - 411 005, Dist. Pune, (Maharashtra) under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sr:

With reference to your letter No. MCASC/354/09-10 dated 26.03.2010 on the above subject I am directed to say that the name of Modern College of Arts, Science & Commerce, Shivajinagar, Pune - 411 005, Dist. Pune, (Maharashtra), established in the year of 1970, affiliated to Pune University is included in the list of Colleges maintained under Section 2 (f) & 12 (B) of the UGC Act, 1956 under the head: Non Government Colleges teaching upto Under Graduate Degree. The College is also eligible to receive Central assistance under Section 12 (B) of the UGC Act.

Yours faithfully,

(Sunita Gulati)
Section Officer

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune-411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-5

Annexure III: ISO 9001-2008 Certificate

Annexure III: ISO 9001-2008 Certificate

bsi.



Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2008

This is to certify that:

P E Society's - Modern College of
Arts Science & Commerce
Shivaji Nagar
Pune 411 005
Maharashtra
India

Holds Certificate No:

FS 634669

and operates a Quality Management System which complies with the requirements of ISO 9001:2008 for the following scope:

Providing educational in areas of Arts, Science & Commerce to UG, PG & research students as per UGC, Savitribai Phule University of Pune, Govt of Maharashtra & NAAC guidelines

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 07/07/2015

Latest Revision Date: 07/07/2015

Effective Date: 07/07/2015

Expiry Date: 27/06/2018

Page: 1 of 1

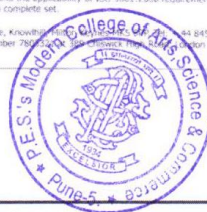


...making excellence a habit.

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract.
An electronic certificate can be authenticated online.
Printed copies can be validated at www.bsi-global.com/ClientDirectory or telephone: +91 11 2692 9000.
Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2008 requirements may be obtained by consulting the organization.
This certificate is valid only if provided original copies are in complete set.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlton, Woking, Surrey GU24 0NF, UK
BSI Assurance UK Limited, registered in England under number 7805349, registered office: One Pancras Square, London WC4A 4AL, UK
A Member of the BSI Group of Companies

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-6

Annexure IV : List of subjects- Syllabus revision

Name of the College: *Progressive Education Society's*

Modern College of Arts, Science and Commerce.

Address: Modern College Road, off J. M. Road, Shivajinagar, Pune-411 005.

Track ID: MHCOGN10219

• **List of Department offered in the Higher Education Institute**

Particulars	UG Department	PG Department	Research
Arts UG: 09 PG: 05 Research: 02	Economics	Economics	Economics
	English	English	Marathi
	Geography	Geography	
	German	Marathi	
	Hindi	Psychology	
	History		
	Marathi		
	Political Science		
Science UG: 11 PG: 11 Research: 04	Animation	Biotechnology	Botany
	Biotechnology	Botany	Electronic Science
	Botany	Chemistry	Microbiology
	Chemistry	Computer Science	Zoology
	Computer Science	Electronic Science	
	Electronic Science	Geography	
	Mathematics	Mathematics	
	Microbiology	Microbiology	
	Physics	Physics	
	Statistics	Statistics	
	Zoology	Zoology	
Commerce UG: 04 PG: 05 Research: 01	Statistics	Accountancy	
	Costing	Costing	
	Marketing	Business Administration	
	Banking	Business Statistics	
		Economics of Industries	
Any other not covered above		Post Graduate Diploma in Banking and Finance (PGDBF)	

• **Syllabus Revision:**

Third Year (B.A., B.Sc. and B.Com) : 2010-11 and 2015-16

Post Graduate Part I (M.A., M.Sc. and M.Com): 2011-12

Post Graduate Part II (M.A., M.Sc. and M.Com): 2012-13

First Year (B.A., B.Sc. and B.Com) : 2013-14

Second Year (B.A., B.Sc. and B.Com) : 2014-15

Certified True Copy


PRINCIPAL
P.E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-7



B.Sc. Animation :

F.Y. B.Sc. (Animation) : 2010-11 and 2015-16

S.Y. B.Sc. (Animation) : 2011-12

T.Y. B.Sc. (Animation) : 2012-13

• **List of Programmes offered in the Higher Education Institution**

1. Under Graduate Programme :

B.A. (Economics), B.A. (English), B.A. (Geography), B.A. (German)
B.A. (Hindi), B.A. (History), B.A. (Marathi), B.A. (Political Science)
B.A. (Psychology), B.Sc. (Animation), B.Sc. (Biotechnology),
B.Sc. (Botany), B.Sc. (Chemistry), B.Sc. (Computer Science),
B.Sc. (Electronic Science), B.Sc. (Mathematics),
B.Sc. (Microbiology), B.Sc. (Physics), B.Sc. (Statistics),
B.Sc. (Zoology), B.Com. (Statistics), B.Com. (Costing),
B.Com. (Marketing), B.Com. (Banking).

2. Post Graduate Programme:

M.A. (Economics), M.A. (English), M.A. (Geography)
M.A. (Marathi), M.A. (Psychology),
M.Sc. (Biotechnology), M.Sc. (Botany), M.Sc. (Chemistry)
M.Sc. (Computer Science), M.Sc. (Electronic Science)
M.Sc. (Geography), M.Sc. (Mathematics), M.Sc. (Microbiology)
M.Sc. (Physics), M.Sc. (Statistics), M.Sc. (Zoology)
M.Com. (Accountancy), M.Com. (Costing), M.Com. (Business
Administration), M.Com. (Business Statistics) M.Com. (Economics of
Industries).

3. Research Programme:

Ph.D. in Economics, Marathi, Botany, Electronic Science, Zoology,
Commerce
M.Phil. in Microbiology

4. Post-Doctoral Programme:

5. Any other: Post Graduate Diploma in Banking and Finance (PGDBF)

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Chivaji Nagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-8

Annexure V : List of teachers who have attended Refresher Course and Orientation Programme in last five years

Annexure V : List of teachers who have attended Refresher Course and Orientation Programme in last five years

Teachers who have attended Orientation Programme:

Sr. No.	Name of the Staff member	Year
1.	Prof. Vivek N. Bobade	2010
2.	Mrs. S. R. Hirve	2010
3.	Dr. Rajesh W. Kulkarni	2010
4.	Prof. Padmashri B. Mujumdar	2010
5.	Prof. Dipali Lodh	2010
6.	Mr. N. L. Wayal	2011
7.	Prof. Mrs. Vaishali Bhoite	2012
8.	Dr. Mrs. Smita Bhuyan	2012
9.	Dr. Mrs. S. S. Muzumdar	2012
10.	Prof. R. B. Bansode	2012
11.	Dr. A. E. Sonawane	2013
12.	Prof. R. M. Jagtap	2013
13.	Prof. S. S. Sakate	2013
14.	Prof. H. K. Gaikwad	2013
15.	Prof. Nileshkumar Paedeshi	2014
16.	Prof. Mrs. Arti P. Goggi	2014
17.	Dr. Y. S. Shinde	2014
18.	Dr. P. S. Kudnar	2014
19.	Prof. T. R. Kumbhar	2014
20.	Prof. Mrs P. B. Suryavanshi	2014
21.	Prof. A. E. Sonavane	2014
22.	Dr. S. S. Patil	2015
23.	Dr. S. S. Waman	2015



Certified True Copy


PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-9

Teachers who have attended Refresher Programme:

Sr. No.	Name of the Staff member	Year
1	Prof. Ms. R. P. Date	2010
2	Prof. S. K. Mehta	2010
3	Prof. R. Y. Deshpande	2010
4	Prof. Mrs. Manisha Suryavanshi	2011
5	Prof. Mrs. Sangeeta Raut	2011
6	Dr. Bhavale A. N.	2011
7	Dr. Suresh S. Deshmukh	2011
8	Sandhya A. Vartak	2011
9	Prof. Mrs. Anjali Sardesai	2012
10	Prof. Mrs. Arti P. Goggi	2012
11	Prof. A. E. Sonavane	2012
12	Mr. N. L. Wayal	2013
13	Dr. A. E. Sonawane	2013
14	Dr. R. B. Barmukh	2013
15	Dr. U. R. Wayse	2013
16	Prof. V. S. Phale	2013
17	Prof. Mrs. Sandhya Vartak	2013
18	Prof. A. V. Kamble	2013
19	Dr. Suresh S. Deshmukh	2013
20	Sandhya A. Vartak	2013
21	Prof. Gadagkar P. V.	2014
22	Prof. Paratane R. M.	2014
23	Prof. Nileshkumar Paedeshi	2015
24	Prof. S. R. Gogte	2015
25	Prof. Mrs. S. R. Hirve	2015
26	Padmashri B. Mujumdar	2015
27	Prof. Dipali Lodh	2015

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-10

Annexure VI :List of Minor and Major Research Projects

Annexure VI :List of Minor and Major Research Projects

Minor Research Projects

Sr. No.	Name of Principal Investigators	Title of the Project	Name of funding agency	Amount sanctioned (Rs.)	Duration of the Project
1	Prof. Mrs. R. M. Phadake	Evaluation of potential of cytotoxicity of curcumin from <i>Jatropha curcus</i> L.	UGC	3,35,000/-	2016-17
2	Dr. Mrs. M. M. Satam	A Study of Minimum Balance Account as a tool for Financial Inclusion and its impact on urban unemployed youth in Pune	BCUD, SPPU	75,000/-	2014-16
3	CA Mrs. R. P. Date	Gender Audit of Educational Institutes- A case study of select Deemed Universities in Pune.	BCUD, SPPU	1,10,000/-	2014-16
4	Mrs. M. S. Datre	Designing E-learning courses to improve information literacy skill of College students	BCUD, SPPU	90,000/-	2014-16
5	Dr. Mrs. R. S. Thombre	Studies on bacterioruberin and membrane protein production by haloarchaea isolated from Mumbai salters	BCUD, SPPU	2,30,000/-	2014-16
6	Dr. Mrs. S. V. Bhagat	Screening of some indigenous plant species for xanthineoxidase inhibitors: Potential remedies for gout	BCUD, SPPU	1,60,000/-	2014-16
7	Dr. R. S. Zunjarrao	Optimization of Growth Rate of Potential Biodiesel Producing Microalgae.	BCUD, SPPU	2,40,000/-	2014-16
8	Prof. R. L. Dabhadre	Green synthesis of metal nano particles and their applications	BCUD, SPPU	1,30,000/-	2014-16
9	Dr. Mrs. V. S. Waman	Development of CZTS based low cost thin film solar cells by electrochemical deposition method	BCUD, SPPU	2,20,000/-	2014-16
10	Dr. Mrs. G. M. Litake	Evaluation of Environmental dissemination of Multi-Drug Resistant <i>Staphylococcus species</i>	BCUD, SPPU	1,80,000/-	2014-16
11	Dr. S. S. Patil	Systematic synthesis, characterization & Field emission investigations of Novel Metal Oxide nanostructures/heterostructures	BCUD, SPPU	2,40,000/-	2014-16
12	Dr. Y. S. Shinde	Taxonomy and Distribution of Ostracoda (<i>Crustacea</i>) of Phytotelmata from Western Maharashtra	BCUD, SPPU	2,20,000/-	2014-16
13	Dr. A. B. Shinde	A Study of Behavioural Finance Pertaining to Management Institutes Faculty in and around Pune .	BCUD, SPPU	70,000/-	2014-16
14	Dr. M. M. Satam	Financial inclusion and women empowerment	UGC	1,70,000/-	2014-16
15	Prof. Wayal Navnath	Ground water management for sustainable development of Agriculture in Akole tahsil, Ahmadnagar district, western Maharashtra.	UGC	1,40,000/-	2014-16
16	Prof. Mrs. A. P. Goggi	Utilization of potential of <i>Alternanthera sessilis</i> (L.) R. Br. Ex DC an ethanomedicinal weed	UGC	1,30,000/-	2013-15
17	Prof. Mrs. A. P. Kulkarni	Protease inhibitors and antioxidants from <i>Sonchus asper</i> Hill.	UGC	1,25,000/-	2013-15
18	Prof. R. M. Jagtap	Synthesis and Biological applications of 2-aryl thiazolidine carboxylic acids and their ester derivatives	BCUD, SPPU	2,30,000/-	2013-15
19	Dr. Mrs. R. S. Thombre	Green Synthesis of Nano particles	UGC	90,000/-	2013-15
20	Dr. Mrs. R. S. Thombre	Green synthesis of Silver Nano-particles using Congress weed	BCUD, SPPU	2,00,000/-	2012-14
21	Mr. B. T. Kalbage	Taxonomical Studies on Scarabaeinae Dung Beetles in and around Pune	BCUD, SPPU	1,80,000/-	2010-12
22	Dr. Mrs. S. D. Joag	Evaluation of antioxidant activity of vegetables referred to in Ayurveda	UGC	2,00,000/-	2010-11

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-11

Sr. No.	Name of Principal Investigators	Title of the Project	Name of funding agency	Amount sanctioned (Rs.)	Duration of the Project
23	Prof. S. S. Sakate	One pot synthesis hydroxy flavones	UGC	2,00,000/-	2010-11
24	Prof. S. R. Pokharkar	Synthesis and characterization of metal oxides used in Ayurvedic medicines	BCUD, SPPU	2,50,000/-	2010-11
Total Rs. Fourty Two lac Finteen Thousand only.				42,15,000/-	From 2010 Till date

Major Research Projects

No.	Name of Principal Investigators	Title of the Project	Name of funding agency	Amount sanctioned (Rs.)	Duration of the Project
1	Dr. Mrs. A. S. Oak	Emotional Intelligence among adolescents: Tool Development, Enhancing through training and study of correlates	ICSSR	17,00,000/-	2015-17
2	Dr. A. H. Shende	A Study of Competition, Co-operation and Conflict of India and China with special reference to Trade & Commerce.	ICSSR	8,00,000/-	2014-16
3	Dr. Mrs. N. M. Patil	Isolation of the induced mutants in linseeds (<i>Linum usitatissimum</i>) under salt stress	UGC	12,80,500/-	2013-15
4	Dr. Mrs. R. S. Thombre	Microbial Biodiversity of Marine ecosystem	ISRO	17,00,000/-	2013-15
5	Dr. Mrs. P. P. Kanekar	Exploring Halophiles from west cost of India for production of Bacteriochodospin	CSIR	17,00,000/-	2013-15
6	Dr. K. D. Gopale	Fatty acid profiling and Molecular Characterization of Potential biodiesel producing microalgae from south India	SERB-DST	24,00,000/-	2013-16
7	Dr. R. S. Zunjarrao	Developing a Digital Herbarium of Angiospermic Plants of the Western Ghat Regions of Maharashtra	UGC	9,86,750/-	2013-15
8	Dr. R. S. Zunjarrao	Bio-ecological and Bio-chemical Approach to Assess Bryophytes - Pigmy Locust Association	DST	39,52,500/-	2010-13
Total Rs. One Crore, Twenty Nine Lac, Eighty Nine Thousand, Seven Hundred Fifty only.				1,29,89,750/-	From 2010 Till date

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005

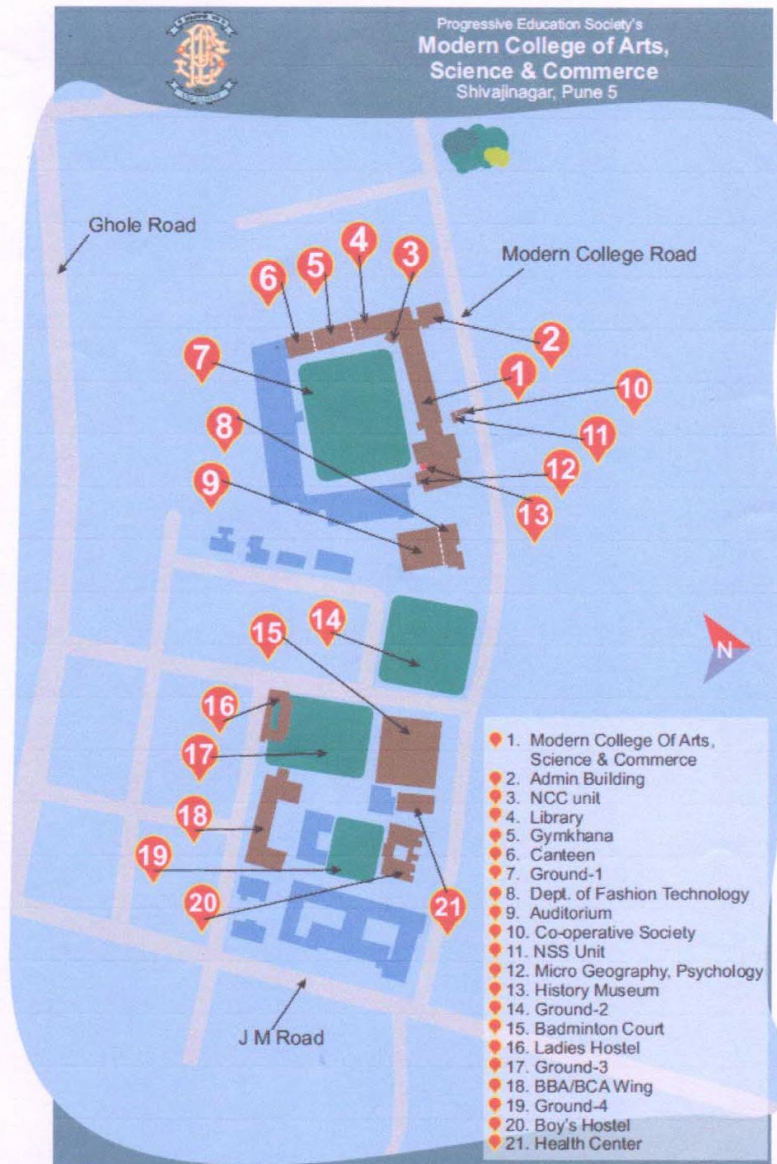
MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-12

Annexure VII : Master Plan of the Institution

Annexure VII : Master Plan of the Institution



TRUE COPY

PRINCIPAL

PES's Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-13

Annexure VIII : Affiliation Letter from SPPU

Annexure VIII : Affiliation Letter from SPPU

University of Pune

Telephone Nos.
5696061
5696060
5696062

Telex No. UNIPUN
Fax 020-5693899

Ref. No. 21/1003

Crane-shikhandi
PUNE - 411 007

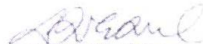
Date 28/1/2005

CERTIFICATE

To Whomsoever it may Concern

This is to certify that P.E.Society's Modern College of Arts, Science and Commerce College, Shivajinagar, Pune-411 005, is affiliated to the University of Pune since 1970.

This Certificate is issued on the request of the college.


Asstt. Registrar
Academic Section

C:\My Documents\My Document\Bhargwa\CERTIFICATE.doc

Certified True Copy




PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-14

Annexure IX : UGC Plan General Development Grant Copy from UGC

Annexure IX : UGC Plan General Development Grant Copy from UGC

Handwritten notes:
 P.E. Society's Modern College of Arts, Science & Commerce
 Shivajinagar, Pune - 411005
 12/03/2014

UNIVERSITY GRANTS COMMISSION
 Western Regional Office
 Ganeshkhind, Pune. - 411007

Phones: (020) 25691477
 25691178, 25696897
 Fax: (020) 25691477
 Web site: www.ugc.ac.in

No. F.9-045/13 (WRO) XII Plan.

Dated:

The DDO
 University Grants Commission (WRO)
 Pune-411 007.

12 MAR 2014

Subject: Release of "Adhoc on Account Grant" under the Scheme of Under Graduate Development Assistance during XII Plan period.

Sir/Madam,

I am directed to convey the sanction of the Commission for payment of Rs.776000/- (Rupees seven lakhs seventy six thousand only) to P.E. SOCIETY'S MODERN COLLEGE OF ARTS, SCIENCE AND COMMERCE, SHIVAJINAGAR, SHIVAJINAGAR, PUNE -411005 as an adhoc grant for the XII plan period.

XI Plan Allocation	40% of XI Plan Grant	XII Plan Provisional Sanction (Adhoc)
1940000	776000	Grant-in-aid/Recurring (31) 232800
		Capital Assets (35) 543200
		Total 776000

The sanctioned amount is debitable to head of account as detailed below.

XII Plan Provisional Allocation	Amount sanction (Rs.)	For SC 15% (Rs.)	For ST 7.5% (Rs.)	For GENERAL (77.5%) (Rs.)
Grant-in-aid/Recurring (31)	232800	34920	17460	180420
Capital Assets (35)	543200	81480	40740	420980

- The sanctioned grant may be treated as "Adhoc On account" grant for XII Plan. The allocation made now is Provisional Allocation and the final allocation would be made on finalization of XII Plan Guidelines. The grants sanctioned now would be adjusted against the XII Plan allocation to be made subsequently.
 - The grant shall not be used for self-financing/ non-grant/unaided courses & teachers.
 - If it come to our notice that the college is Self-finance. The entire amount has to be refunded to UGC(WRO), Pune with penal interest @ 10% per annum.
 - The grant can be used for renovation/addition/alteration of building (including renovation of heritage building), books & journals, equipments, laboratory, connectivity, career and counseling cell, cultural activities, day care center, annual maintenance contract and development of ICT, Human Rights & Duties Education (HRDE) and instrumentation Maintenance facilities (IMF).
- The sanctioned amount is debitable to the major Head 2 (B) for General, 2D(i) for SC, 2D(ii) for ST respectively and is valid for the financial year 2013-14
 - The amount of the grants shall be drawn by the Account Officer (DDO), UGC (WRO), Pune on the Grants-in-aid bill and shall be disbursed to and credited to the Principal of the college through Electronic mode as per the following details:

a	Details (Name & Address) of Accounts Holder:	The Principal, P.E. SOCIETY'S MODERN COLLEGE OF ARTS, SCIENCE AND COMMERCE, SHIVAJINAGAR, PUNE- 411005.
b	Account No.:	20137636009
c	Name & Address of Bank Branch:	BANK OF MAHARASHTRA, MODERN COLLEGE ROAD BR
d	MICR Code:	
e	IFSC Code:	MAHB0001328
	Type of Account	Saving Bank Account

- The grant is subject to adjustment on the basis of Utilization Certificate in the prescribed Performa submitted by the University/ College/ Institution.
- The University/ College shall maintain proper accounts of the expenditure out of the grants, which shall be utilized, only on approved items of expenditure.

Certified True Copy



PRINCIPAL
 P. E. Society's
 Modern College of Arts,
 Science & Commerce
 Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ जानमयो भव ॥

A-15

5. The University/ Institution may follow the General Financial Rules, 2005 and take urgent necessary action to amend their manuals of financial procedures to bring them in conformity with GFRs, 2005 and those don't have their own approved manuals on financial procedures may adopt the provision of GFRs, 2005 and instruction/ guideline there under from time to time.
6. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to UGC as early as possible after the close of current financial year.
7. The assets acquired wholly or substantially out of UGC's grant, shall not be disposed of or encumbered or utilized for purposes other than those for which the grant was given, without proper sanction of the UGC, and should at any time the College cease to function, such assets shall revert to the University Grants Commission.
8. A Register of the assets acquired wholly or substantially out of the grant shall be maintained by the University/ College in the prescribed proforma.
9. The grantee institution shall ensure the utilization of grants-in-aid for which it is being sanctioned/ paid. In case non-utilization / part utilization, the simple interest @ 10% per annum as amended from time to time on utilization amount from the date of drawl to the date of refund as per provision contained in General Financial Rules of Govt. of India will be charged.
10. The Univ./College shall follow strictly the Government of India/ UGC's guidelines regarding implementation of the reservation policy [both vertical (for SC, ST & OBC) and horizontal [for persons with disability etc.]] in teaching and non-teaching posts.
11. The University/ College shall fully implement to Official Language Policy of Union Govt. and comply with the Official Language Act, 1963 and Official Languages (use for official purposes of the Union) Rules, 1976 etc.
12. The sanction issues in exercise of the delegation of powers vide Commission office order No. 130/2013 [F. No. 10-11/12 (Admn. IA & B)] dated 28/5/2013.
13. The University/ Institution shall strictly follow the UGC Regulations on curbing the menace of Ragging in Higher Education Institutions, 2009.
14. The University/ Institution shall take immediate action for its accreditation by National Assessment & Accreditation Council (NAAC).
15. The accounts of the University/ Institution will be open for audit by the Comptroller & Auditor General of India in accordance with the provisions of General Financial Rules, 2005.
16. The annual accounts i.e. balance sheet, income and expenditure statement and statement of receipts and payments are to be prepared strictly in accordance with the Uniform Format of Accounting prescribed by Government.
17. Funds to the extent of Rs. _____ are available under the Scheme.
18. This issues with the concurrence of IFD vide Diary No. 5137(IFD), 27957 & No.7411 dated 20.12.2013, 25.02.2014 & 21.02.2014.
19. This issues with the approval of Head of the Office vide Sanction File No 1-1/2013(Policy/RO) dated 02.01.14 & File No 1-1/2013(Policy/RO) dated 28.02.14
20. An amount of Rs. _____ out of the grant of Rs. _____ sanctioned vide letter No. _____ dated _____ has been utilized by the college for the purpose for which it was sanctioned and noted in Grant-in-aid Register at page No. _____
21. The grant is sanctioned on the basis of the information/documents provided by the college. In case of any discrepancy in the above information and the College is found ineligible for the above grant at the time of expert committee meeting, the college is liable to refund the grant along with interest.
22. The college shall ensure involvement of Technical advice on and Supervision of specifications and construction standards.

Yours faithfully

(Naresh Pal Meena)
Education Officer

Copies forwarded for information and necessary action to:

- i) The Principal,
P. E. SOCIETY'S MODERN COLLEGE OF ARTS, SCIENCE AND
COMMERCE
SHIVAJINAGAR, SHIVAJINAGAR
PUNE- 411005
- ii) The Director, B.C.U.D./ C.D.C. University of Pune
- iii) The Director/Commissioner, Higher Education, Govt. of Maharashtra, Central
Building Pune-1.
- iv) Accountant General, Govt. of Maharashtra state, 101, Maharshi Karve Marg, Mumbai-20.
- v) Guard File.

Sr. No. _____
Prog. Total. _____



(Naresh Pal Meena)
Education Officer
Certified True Copy

PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-16

Annexure X : NAAC 2nd Cycle Assessment and Accreditation Certificate

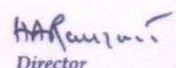
Annexure X : NAAC 2nd Cycle Assessment and Accreditation Certificate


NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
Ministry of Human Resource Development, Government of India
P. O. Box 1075, Nagarbhavi, Bangalore-560 072, India.
Phone: +91-80-23005100, 23210261 - 65, Fax: +91-80-23210268/23210270

Provisional Certificate of Accreditation

*The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the
P. E. Society's
Modern College of Arts, Science and Commerce
Shivajinagar, Pune, affiliated to University of Pune, Maharashtra as
Accredited
with CGPA of 3.15 on four point scale
at A grade
valid up to March 27, 2015*

EC Date : March 28, 2010


Director

EC/P/KAK/52/UM



TRUE COPY


PRINCIPAL

PES's Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

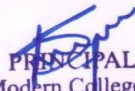
॥ ज्ञानमयो भव ॥

A-17

		
Institution Code	CGPA	Grade
0782	3.15	A
Entered By	Checked By	Verified By
	K. J.	

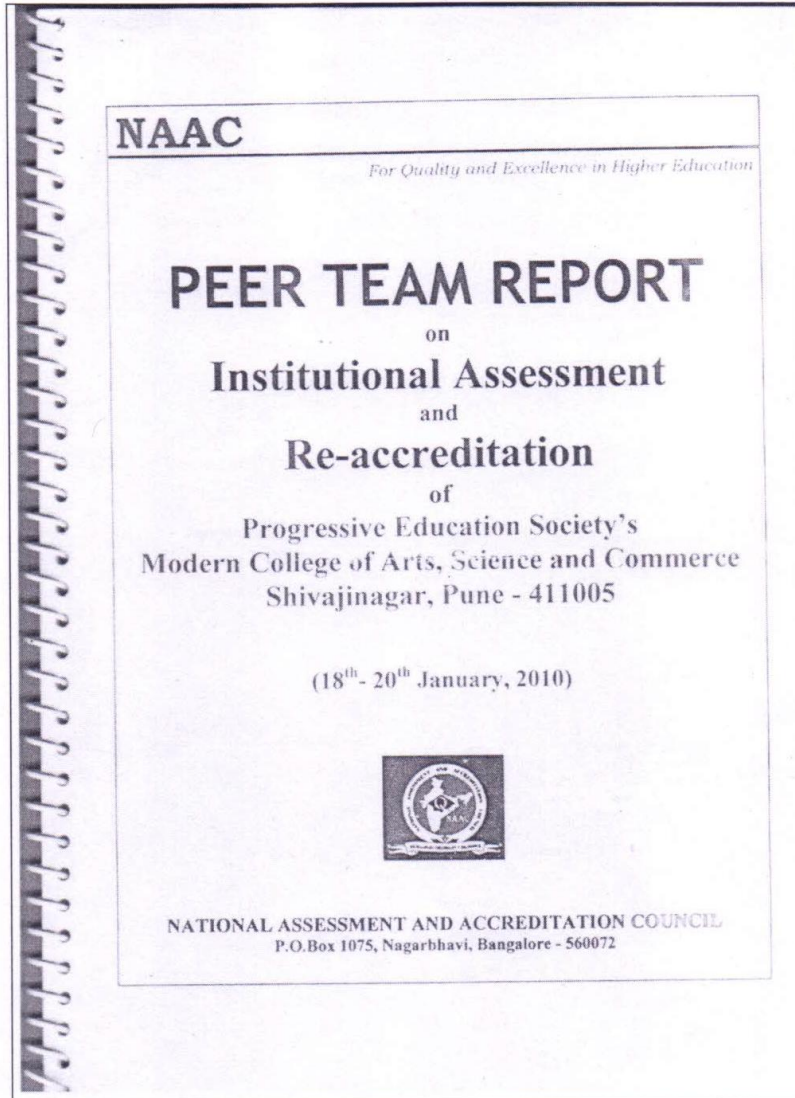


TRUE COPY


PRINCIPAL
PES's Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

Annexure XI : Peer Team Report : 2nd Cycle of Accreditation

Annexure XI : Peer Team Report : 2nd Cycle of Accreditation



Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Shivajinagar, Pune - 411 005.

MCASC PUNE-5

॥ ज्ञानमयो भव ॥

A-19

PEER TEAM REPORT ON
Institutional Re-accreditation of
Progressive Education Society's Modern College of Arts,
Science & Commerce
Pune - 411005
(Maharashtra)

Section I : GENERAL	INFORMATION
1.1 Name and address of the Institution	Progressive Education Society's Modern College of Arts, Science & Commerce, Pune - 411005 (Maharashtra)
1.2 Year of Establishment	1970 (15 th June, 1970)
1.3 Current Academic Activities at the Institution (Numbers)	(a) Faculty of Arts Departments: English, Hindi, Marathi, Economics, History, Pol Sc., Psychology, Physical Education
► Faculties	(b) Faculty of Science Departments : Botany, Zoology, Microbiology, Bio- technology, Chemistry, Physics, Mathematics, Geography, Computer Science, Electronic Science, Statistics
► Departments/Centres	(c) Faculty of Commerce: Departments: Accountancy, Costing, Business Admn., Business Law, Business Economics, Marketing, Business Practicvs, Banking and Finance
► Programmes/courses offered	B.A., B.Com., B.Sc (with Mathematics, Computer Science, Biotechnology, Microbiology, Electronic Science, Physics, Chemistry, Botany, Zoology, and Statistics), MCA, M.Com and M.Sc in Biotechnology, Botany, Chemistry, Computer Science, Electronic Science, Microbiology and M.A in English, Economics, Geography, Marathi, Psychology
► Permanent Faculty Members	Permanent 109 (53 M, 56 F)
► Permanent Support Staff	Guest/Part-time 4 (4 M, 0 F)
► Students	4107 (2008-2009)

Certified True Copy



PRINCIPAL
P. E. Society's
Modern College of Arts,
Science & Commerce
Univajinagar, Pune - 411 005.

MCASC PUNE-5

|| जानमयो भव ||

A-20

1.4 Three Major features in the Institutional Context (as perceived by the Peer Team)	• Catering to a vast cross-section of students' community with multi-faculty courses • Qualified faculty and research orientation in some departments • Adequate infrastructure and supportive management
1.5 Dates of visit of the Peer Team (a copy of the detailed visit schedule attached)	18-20th January, 2010
Composition of the Peer Team which undertook the on-site visit	1. Prof A.N. Basu - Chairman 2. Dr Sucharita Sharma - Member 3. Prof K.K. Bajaj - Member Coordinator (NAAC Coordinator : Dr Ganesh Hegde - Assistant Adviser)

2



Section II : Criterion-wise Analysis	Observations (Strengths and/or Weaknesses on Key-Aspects)
2.1 Curricular Aspects:	
2.1.1. Curriculum Design & Development :	- Curriculum being Pune University mandated, its independent framing or modification is constrained - Fair representation of faculty in different Boards of Studies - Faculty-wise courses and combinations in core and elective options available as permissible under university norms
2.1.2 Academic flexibility :	- Academic flexibility available within the framework of university rules only - Some mainstream options available along with a few add-on courses in Electronics, Plant Tissue Culture and Pharma Techniques - More course options in elective subjects at UG and PG levels in Arts need to be made available
2.1.3 Feedback on Curriculum :	- Informal feedback from Alumni, student community available - Regular analysis of formally received feedback be institutionalised - Follow-up on the feedback could be evaluative and ameliorative for quality enhancement

2.2.3 Teaching-Learning Process:	• Mostly lecture-based and teacher centric teaching in view of heavy classes • Central Computer facility with Internet connectivity to the advantage of students • Good use of IT tools and visual aids except in Science subjects where students have to perform experiments
2.2.4 Teacher Quality:	• Out of 113 teachers 109 are permanent and many out of these are Ph.D holders while many others have M.Phil degree to their credit. • There are only 4 teachers who have been engaged on CHB (Contract Hourly Basis). • Such contingent arrangements could compromise the quality of teaching.
2.2.5 Evaluation Process and Reforms:	• Regular recruitment to teaching posts is merit based subject to reservations and rules of the state government and the university. • Some members of the faculty have been duly recognized and awarded • Exposure to other institutional best healthy teaching practices outside the state could be beneficial
2.2.6 Best Practices in Teaching-Learning and Evaluation (if any):	• Internet facilities in different departments promoting better teaching learning possibilities • Guest lectures mostly in science subjects • End of the session evaluation of the concerned teachers

2.3 Research, Consultancy & Extension 2.3.1 Promotion of Research: 2.3.2 Research & Publication: 2.3.3 Consultancy: 2.3.4 Extension Activities: 2.3.5 Collaborations : 2.3.6 Best Practices in Research, consultancy and Extension (If any) :	• Institutional encouragement available to pursue research • Projects sanctioned by BCUD, UGC and DST in science departments • Five Research centres in different subjects for Ph.D candidates recognized • Eight teachers have been recognized as research guides, • Major and Minor research projects could be got sanctioned from the UGC • Formally compatible consultancy yet to take shape in defined areas of entrepreneurship, marketing and extension activities • Requires liaison and collaboration with state government, private enterprise and the community for greater outreach of faculty competence in consultancy. • NSS and NCC cater to neighborhood community centric extension activities. • Campaign to spread literacy in slum areas • Blood donation a regular activity • Assistance to NGOs in voluntary services • Collaboration with Pune university and other national institutes • Greater collaboration with alumni for social uplift be invoked • Recognition of faculty members as Research Guides and the departments as research centres

2.4 Infrastructure and Learning Resources	• Village adopted for health and welfare promotion • Collaboration with scientists.
2.4.1 Physical Facilities for Learning:	• 5 acres of campus having 53 rooms and a vast central playing field for different games • Adequate infrastructural support to sustain the ongoing academic and sports activities. • Ideal for conducting competitive sports and events with good security back-up
2.4.2 Maintenance of Infrastructure:	• Campus well maintained, with power back-up, spatial spread and distribution and connectivity of computers in different departments • Grounds and Gym offer facility for national competitive sports participation and health care.
2.4.3 Library as a Learning Resource:	• Library holdings and maintenance call for upkeep and update for better services to faculty and students' interest • Journals and magazines call for greater reference and study
2.4.4 ICT as Learning Resources	• ICT/E-books as a learning and reference tool in the library could be better popularized with provision of increase in nodes
2.4.5 Other Facilities:	• Hostel facilities for girls available in separate premises. • Common rooms for the staff and also for boys and girls are available. • Canteen facility with reasonable rates available on the campus • Bank of Maharashtra Branch available on the campus

2.5.4 Best Practices in Student Support and Progression (If any)	• Student welfare measures • Ranks in the university examinations
2.6 Governance and Leadership	
2.6.1 Institutional Vision & Leadership	• Supportive relationship with mutual cooperation to realize institutional vision • Healthy affiliation bond with the university and its BCUD • Committed management playing its positive role in the development of the college
2.6.2 Organisational Arrangements	• Internal committees and decentralization ensure smooth and problem-free administration • Grievances redressed effectively • Coordinated approach in all activities and administrative matters of the college
2.6.3 Strategy Development & Deployment	• Management commitment, support and leadership well placed. • Pivotal role of the Principal in Planning • MIS yet to be properly developed
2.6.4 Human Resource Management	• Adequate faculty with due recognition • CHB appointments could dilute commitment to teaching • Academic development programmes permitted • Research orientation be embedded in faculty enhancement culture
2.6.5 Financial Management & Resource Mobilisation	• Effective checks and balances in accounts in place • Computerized finance management

2.6.6 Best Practices in Governance and Leadership (If any)	• Better lifting of allocations from UGC and other funding agencies elicited • Good financial discipline through strategic budget planning, resource mobilization and utilization of funds • Healthy team work contributes to the ambience of the college • Resource mobilization through letting out of college rooms for competitive tests
2.7 Innovative Practices: 2.7.1 Internal Quality Assurance System: 2.7.2 Inclusive Practices 2.7.3 Stakeholder Relationships	• IQAC in place with its quality assurance, planning and monitoring role • Healthy coordination among various departments and disciplines • Community engagement through voluntary activities of NSS and NCC • Classes for the weak students • Equity transparency in admissions assured • Proper academic planning mooted and executed by Management, Principal and the faculty • Wider consultation among faculty members enriches the formulation and delivery of prescribed course contents • Social concerns of different sections of students addressed • Formal feedback mechanism from stakeholders could be institutionalized

SECTION III - OVERALL ANALYSIS

OBSERVATIONS

(Please limit to *five* major ones for each and use telegraphic language) It is not necessary to denote all the five bullets for each.

3.1 Institutional Strength

- Centrally located and well maintained campus with adequate learning resources
- Supportive management, committed faculty and well behaved students
- Impressive extension and outreach
- IQAC monitoring for assuring quality inputs
- Career guidance addressed

3.2 Institutional Weaknesses

- CHB appointments dilute commitment to teaching output
- Liaison with parents not regular
- Research yet to be an institutional faculty imperative
- Soft skills and language laboratory along with library support system

3.3 Institutional Opportunities

- Mega-city exposure and institutional advantage with diverse availability of interaction
- Opportunity for advanced learning techniques at different levels of teaching
- More add-on job-ready courses

SECTION – IV

RECOMMENDATIONS FOR QUALITY ENHANCEMENT OF THE INSTITUTION

(Please limit to Ten Major Ones and use telegraphic language; it is not necessary to indicate all the ten bullets)

- The college may plan to introduce an array of subjects in all the three streams with greater inter-disciplinary combinations, flexibility and mobility at the UG and PG levels
- There should be a perspective plan to progressively modernise and remove obsolescence in laboratories, library and other areas which call for update
- Library being the hub of all academic activity calls for concerted planning to give it the modern shape, ambience and upkeep with its latest books, journals and update in information pool for students and faculty. Its holding should be digitized. Eventually a digital library be established in due course
- Basic Science education requires to be reinvented in consonance with the national debate on its relevance, role and importance to channelise students talent in national development more effectively
- For continuous teacher training while they are allowed to attend ASCs there should be a provision of sabbatical leave as well so as to enable them to enhance their academic base
- Communication skills, histrionic talents and confidence building measures in the students could be promoted for their better placements
- The college may prepare for the application and grant of Autonomous status which will enable it to have complete academic and functional freedom
- For seeking more funds for innovative programmes the college may apply to the UGC for its identification as college with Potential for Excellence
- Consultancy and Research culture should become a professional

imperative for the faculty with the support and encouragement of the authorities of the college

- May introduce the teaching of foreign as well as other Indian languages
- Many more add-on job-ready courses as per UGC and university norms be introduced while many more be considered as hobby courses for others
- Possibility to seek research grants from different funding agencies be pursued
- Formal system of tracking alumni be evolved
- Hostel amenities be improved to the advantage of the hostellers

I agree with the Observations of the Peer Team as mentioned in this Report

Signatures of the Peer Team Members



Signature of the Head of the Institution

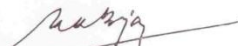
Seal of **PRINCIPAL**
P.E. Society's
Modern College of Arts, Science & Commerce
Shivajinagar, Pune - 411 005.


Prof (Dr) A.N. Basu

Chairperson


Dr Sucharita Sharma

Member


Prof K.K. Bajaj

Member Coordinator

Place : Pune: Date : 20th January, 2010