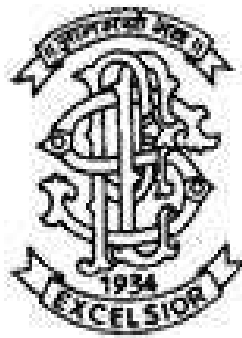


# Supplementary Report

## for 3<sup>rd</sup> Cycle

Submitted to  
National Assessment and Accreditation Council  
(NAAC)  
Bangalore



By  
Progressive Education Society's  
Modern College of Arts, Science and Commerce,  
Ganeshkhind, Pune 411016. Maharashtra

January 2017

## **FOREWORD**

Progressive Education Society's Modern College of Arts, Science and Commerce, Ganeshkhind, Pune- 411016 submitted its Re-Accreditation Report for the third cycle to NAAC Bangalore on 19<sup>th</sup> April 2016. It gives us pleasure to present before you the Supplementary Report of the college.

This report carries information and data about different aspects of the institution recorded Criterion wise and Department wise for the period April 2016 to January 2017. We have also listed out the various activities undertaken by the college during the last nine months. Although we have tried to follow the RAR format for the Supplementary Report, we have taken into consideration only those points where developments/changes/ modifications have taken place in the last nine months.

We identified a few typographical errors in the Re-Accreditation Report submitted to NAAC. We apologize for the same.

Dr. Sanjay S. Kharat  
Principal,  
Moden College of Arts, Science & Commerce,  
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## CRITERION I: CURRICULAR ASPECTS

### 1.1 Curriculum Planning and Implementation

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.

- Competition: B.Voc. Department of Food Processing Technology celebrates World Food Day in month of October to inculcate ideas regarding Innovative Recipes and Model making. Poster Competition was conducted on the worldwide theme of World Food Day.

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?

- **Workshop with 'Deasara' for Entrepreneurship Development** is conducted by Commerce faculty.

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.

- Following are the **BOS members from commerce faculty** : Manjusha Kulkarni, Parag Shah.

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.

- College has identified the fields and designed **curriculum for 30 skill development courses** to enhance student's employability and give an impulse for entrepreneurship.
- Institution has designed the curriculum for Bachelor of Vocational in Food Processing Technology and Green House Technology. This program is sponsored by UGC under National Skill Qualification Framework (NSQF). First the curriculum was sent with the proposal to UGC and then it was sent to Savitribai Phule Pune University for affiliation. This curriculum is approved by BCUD of Savitribai Phule Pune University. The objective of this course is to fill gap between Industry and Academia and to create entrepreneur and professional for the Food Industry. At the end of every year the skill component examination will be conducted by NSQF for each level.
- Format of Mark sheet prepared by B.Voc. department is approved and adopted by Savitribai Phule Pune University.

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

<b>Sr. No.</b>	<b>Name of the skill development courses</b>	<b>Aim</b>	<b>Objectives</b>	<b>Funding agency</b>
1.	Basics of Communication	To improve communication skills in English	Curriculum Enrichment, Employability, Value Addition	Self Financing
2.	Marathi D.T.P.	To improve Competitive Skill	Employability, Skills Development	Self Financing
3.	Skills in Psycho Social Counselling.	Student Progression, Value Addition.	Curriculum Enrichment, Employability, Value Addition	Self Financing
4.	Social Services and Welfare	Student Progression, Value Addition.	Curriculum Enrichment, Employability, Value Addition	Self Financing
5.	Diversity and Public Policy	Student Progression, Value Addition.	Curriculum Enrichment, Employability, Value Addition	Self Financing
6	Blogging and CMS	Awareness in Content writing, blogging, website.	Curriculum Enrichment, Employability, Value Addition	Self Financing
7.	Travel and Tourism	To improve the knowledge of Geography and Tourism	Employability	Self Financing
8.	Finishing School	To improve the knowledge of Soft Skills	Personality development Global competency Employability skills	Self Financing
9.	Transformation Course	Women Empowerment	Personality development Global competency Employability skills Health awareness	Self Financing
10.	Tally ERP	Knowledge of Tally and ERP	Global competency Employability skills	Self Financing
11.	E- Filing and Income Tax Return	Knowledge of E- Filing and filling of Income Tax Return	Curriculum Enrichment, Employability	Self Financing
12.	Entrepreneurship Development Programme	Awareness in support Systems to start the career in Entrepreneurship	To make the Entrepreneurs	Self Financing
13.	Making Bakery Products	Knowledge of Bakery and food products and its production	Employability skills and Entrepreneurial Skills.	Self Financing
14.	Web Designing Development and hoisting	Knowledge of Web Designing Development	Curriculum Enrichment, Employability skills and Entrepreneurial Skills.	Self Financing
15.	Computer Networks	Knowledge of Computer	Curriculum Enrichment, Employability skills.	Self Financing

		Networks		
16.	Applied Zoology and Biobusiness	Knowledge of Applied Zoology and Biobusiness	Curriculum Enrichment, Employability skills, Entrepreneurial Skills.	Self Financing
17.	Solar PV System Installation and Maintenance	Knowledge of Solar PV System Installation and Maintenance	Curriculum Enrichment, Employability skills, Entrepreneurial Skills.	Self Financing
18.	Repairing and Maintenance of Electrical Home Appliances	To know the Skills of Repairing and Maintenance of Electrical Home Appliances	Employability skills, Entrepreneurial Skills.	Self Financing
19.	Repairing and Maintenance of Mobile Cell.	To know the Skills of Repairing and Maintenance of Mobile Cell	Employability skills, Entrepreneurial Skills.	Self Financing
20.	Quality Control in Laboratories and Industries	Knowledge of Quality Control in Laboratories and Industries	Employability skills, Entrepreneurial Skills.	Self Financing
21.	Mathematical Modelling in Life Sciences	Knowledge of Modelling in Life Sciences	Curriculum Enrichment, Employability skills	Self Financing
22.	Use of Scilab Software	Awareness of Scilab Software	Curriculum Enrichment, Employability skills,	Self Financing
23.	C-Programming	Curriculum Enrichment	Employability skills,	Self Financing
24.	Vedic Mathematics	Awareness of Vedic Mathematics	Curriculum Enrichment, Employability skills,	Self Financing
25.	Recent Trends in Biological Techniques	Curriculum Enrichment, to know the recent trends in Biological Techniques	Curriculum Enrichment, Employability skills	Self Financing
26.	Archaeology and Organic Evolution	To know the Knowledge of Archaeology and Organic Evolution	Curriculum Enrichment, Employability skills, better career option	Self Financing
27.	Diversity and Taxonomy with special reference to Entomofauna	To know the insects Diversity and Taxonomy	Curriculum Enrichment, better career option.	Self Financing
28.	Research methodology and Scientific Communication Skills	To develop Research Environment	To make Researchers, Curriculum Enrichment, better career option.	Self Financing
29.	Natural Products Biotechnology	Curriculum Enrichment	Better career option.	Self Financing
30.	Printed Circuits Board Designing and Manufacturing	Curriculum Enrichment	Better career option, Employability skills.	Self Financing

College has initiated some of the courses: Applied Zoology and Biobusiness, Diversity and Taxonomy with special reference to Entomofauna, Natural Products Biotechnology, C Programming, Vedic Mathematics, Repairing and Maintenance of Electrical and home Appliances and Mathematical Modeling in Life Sciences.

- 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 skills 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

B.C.A under Science faculty is been introduced by the college from academic year 2016-17 where choice based credit system is introduced.

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

- B.C.A under Science faculty introduced by college from academic year 2016-17 is the self financed programme.

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

- 30 Skill oriented programmes like Basics of business communication, Marathi D.T.P., Skills in social Counselling, Social services and welfare, Diversity Inequality and Public Policy, Blogging and CMS were designed and offered.

### 1.3 Curriculum Enrichment

- 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 the needs of the dynamic employment market?

- Biotechnology department has conducted **Research induction programme** for the M.Sc. students of Biotechnology, Microbiology and Zoology departments. Soft skill programmes organised by Barclays and Mahindra companies as a part of their CSR. More than 100 students underwent training programme of industry required skills.

- 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?

- College applied for **Energy Conservation Award from Maharashtra Energy Development Agency (MEDA)**, and won the 1st prize in corporate sector.
- Gender champion activity is initiated from this academic year.

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

- **Moral and ethical values** : Soft Skill, Social Services and Welfare, Skills in Psycho Social Counselling.
- **Employable and life skills** : Soft Skill, Spoken English, Office Automation, Health and Beauty Grooming, Skills in Psycho Social Counselling, Blogging and CMS, Finishing School, Transformation Course, Entrepreneurship Development Programme, Making Bakery Products, Web Designing Development and hoisting, Computer Networks, Solar PV System Installation and Maintenance, Repairing and Maintenance of Electrical Home Appliances, Repairing and Maintenance of Mobile Cell, Quality Control in Laboratories and Industries, Mathematical Modelling in Life Sciences, C-Programming, Vedic Mathematics, Recent Trends in Biological Techniques, Archaeology and Organic Evolution, Diversity and Taxonomy with special reference to Entomofauna, Research methodology and Scientific Communication Skills, Natural Products Biotechnology, Printed Circuits Board Designing and Manufacturing.
- **Better career options** : B.Voc., Embedded Systems, Applied techniques in industry and laboratory, Hands on Training (With Vidya Sahakari Bank), Basics of Communication, Marathi D.T.P. Blogging and CMS, Travel and Tourism, Tally ERP, E- Filing and Income Tax Return, Making Bakery Products, Web Designing Development and hoisting, Computer Networks, Applied Zoology and Biobusiness, Solar PV System Installation and Maintenance, Quality Control in Laboratories and Industries, Mathematical Modeling in Life Sciences, Use of Scilab Software, C-Programming, Research methodology and Scientific Communication Skills, Recent Trends in Biological Techniques, Archaeology and Organic Evolution, Diversity and Taxonomy with special reference to Entomofauna, Natural Products Biotechnology, Printed Circuits Board Designing and Manufacturing.
- **Community orientation** : '*Modi*' Script, B.Sc. vocational courses under UGC-Green House Technology and Food Technology, Social Services and Welfare, Diversity and Public, Vedic Mathematics Policy, Transformation Course, Entrepreneurship Development Programme, Solar PV System Installation and Maintenance, Archaeology and Organic Evolution.

#### 1.4 Feedback System

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 or new programmes?

- Recently college has introduced online feedback system.

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?

Any other relevant information regarding curricular aspects which the college would like to include.

- Institution has introduced B.C.A. Science programme in academic year 2016-17.
- Rationale behind introducing this course is global demand and good career prospects.



## CRITERION II : TEACHING-LEARNING AND EVALUATION

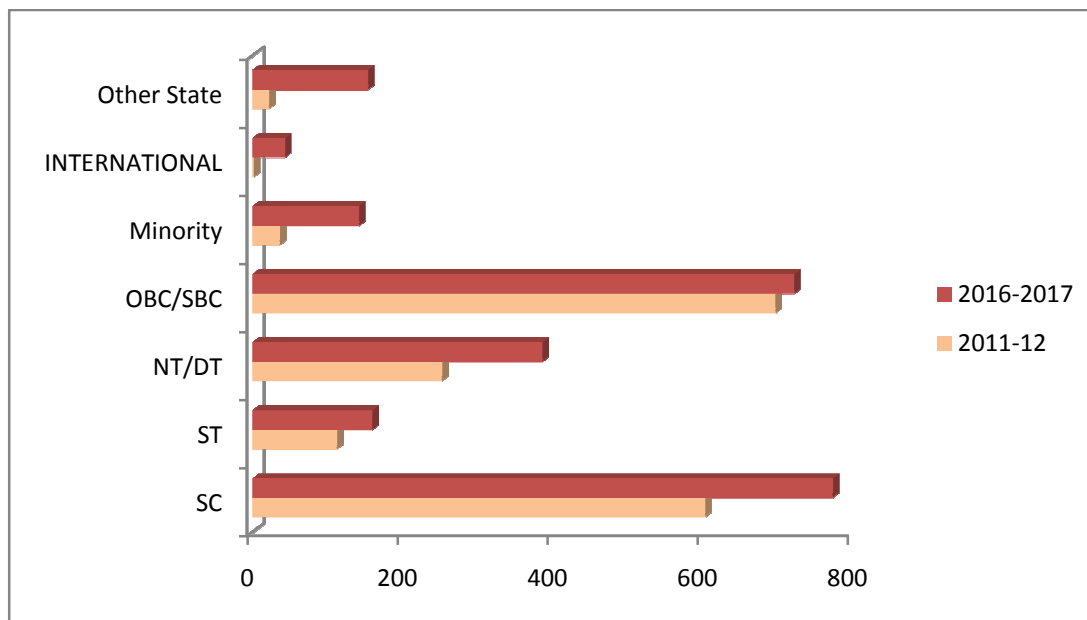
### 2.1 Student Enrollment and Profile

- 2.1.2 Explain in detail the criteria adopted and process of admission to various programmes of the Institution.
- The admissions to the BCA (Science) course were given on first come first serve basis.
- 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 with in the city/district.

Name of the Programme	Minimum percentage of marks	Maximum percentage of marks
F.Y.B.Sc.	39.69	88
F.Y.B.Sc.(Computer Science)	41.54	84.70
F.Y.B.Sc.(Biotechnology)	42.31	88.10
F.Y.B.A.	37	83.85
F.Y.B.Com.	39.38	85.60
F.Y.B.Voc	43.64	75.08
M.Sc(Chem)	46.44	83.26
M.Sc(Micro)	56.83	88.50
M.Sc(Zoology)	58.68	91.66
M.Sc(Biotech)	51.25	87.50
M.Sc(Computer Science)	48.00	79.33
MA(Economics)	48.00	83.80
MA(History)	37.63	83.83
MA(Sociology)	41.64	75.00
BBA(CA)	40.16	78.15
BCA(Science)	41.38	84.15

- 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?

Category wise student strength comparison for the years 2011-12 and 2016-17



- 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

Category	2016-2017
SC	759
ST	157
Women	2382
NTB	85
NTC	141
NTD	58
DTA	102
OBC	656
SBC	52
Minority	142
Differently Abled	4
Foreign Students	50
Other State	151

- 2.1.6 Provide the following details for various programmes 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.

<b>Programme</b>		<b>2016-17</b>
B.A.	Number of applications	409
	Number of students admitted	376
	Demand Ratio (applications : admissions)	1.08:1
B.Com.	Number of applications	680
	Number of students admitted	656
	Demand Ratio	1.03:1
B.Sc.	Number of applications	676
	Number of students admitted	594
	Demand Ratio	1.13:1
M.A.	Number of applications	98
	Number of students admitted	98
	Demand Ratio	1:1
M.Com	Number of applications	105
	Number of students admitted	101
	Demand Ratio	1.03:1
M.Sc.	Number of applications	213
	Number of students admitted	183
	Demand Ratio	1.16:1
B.Voc	Number of applications	102
	Number of students admitted	50
	Demand Ratio	2.04:1
BBA(CA)	Number of applications	128
	Number of students admitted	122
	Demand Ratio	1.04:1
BCA(Science)	Number of applications	27
	Number of students admitted	27
	Demand Ratio	1:1

## 2.2 Catering to Student Diversity

- 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?

Following departments have conducted bridge courses.

<b>Sr. No.</b>	<b>Name of the Department</b>	<b>Class</b>
1	Microbiology	M.Sc II
2	Mathematics	F.Y.Bsc (Biotech)
3	Chemistry	S.Y .Bsc, F.Y.Bsc
4	Psychology	International and North East students

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

Many activities are conducted in this regard.

**Gender Sensitization:**

- Gender Champions Club and department of Psychology organized a debate conducted on the topic “Gender Equality has already been established in India”. Dr Manasi Palshekar, author, Activist and Gender studies expert was invited to debate .
- Vidyarthini Munch has organised on “Anti Sexual Harassment”.
- Workshop on Self- confidence was organised by Disha coordinators for Marathi medium girls.
- College has conducted gender audit.

**Environment:**

- College has received First Prize in Eleventh State Level energy conservation award given by MEDHA( Maharashtra Energy Development Agency
- Tree plantation by the college staff
- Faculty members and students participated in Traffic Awareness Mission(Human Chain)
- Electronics department signed MOU with MUDRA for e-waste collection.
- Department of English signed MOU with an NGO ‘Keshavsita’ for plastic waste management.

**Health and Hygiene**

- Student conducted a drive in the form of displaying posters and rally in college campus to spread awareness about the prevention of suicide.

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

College has identified such students and leading certificate courses like “Vedic mathematics”, “Mathematical Modeling”, “Embedded systems and applications”, “Applied Techniques in industry and laboratories” etc.

**Workshops / Training for students**

Program Details	Class	Department	Dates
Summer Traing Program		Biotechnology	20-25 <sup>th</sup> June2016
Research Induction Program	M.Sc (Zoo), Biotech , Microbiology	Biotechnology	5To7September 2016
Characterization Techniques	S.Y.BSc	Microbiology	24-26 <sup>th</sup> June 2016
Biochemical techniques and instrumentation	T.Y.B.Sc	Microbiology	1-4 <sup>th</sup> July
Goal setting workshop		Psychology	7 <sup>th</sup> Sept 2016
Life skills	B.Voc	Psychology	23 Sept 2016

Life skills	Physics	Psychology	21 Sept 2016
Summer Training Program	F.Y.B.Sc.	Mathematics	June 2016
College to Corporate		English	December 2016
Soft skill workshop	UG and PG Com Sci	Computer Science	26,27 August 2016
Fishry Production and Management		Economics	7 <sup>th</sup> October 2016
Summer Traing Program		Chemistry	25-28 June 2016
Skill Based course in Analytical Techniues	S.Y.BSc	Chemistry	To be done

- 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?

Activities organized during first half of academic year 2016-17: Vividha, Soft Skill Workshop/ trainings, Science exhibition, Hands-on training, Yuva Saptaha.

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

- B.Voc department celebrates World food day . On this occation various competitions such as innovative product development, model making etc are arranged which inculcates creative thinking in students.
- College has conducted research induction program for PG students
- A guest lecture was arranged on the occasion of Reading Inspiration Day. The topic was “Dr. A.P.J. Abdul Kalam”.
- Department of Psychology has conducted Workshops on Life skills for students.
- Department of English has conducted a workshop on College to corporate.

- 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.

- Use of Flinnt App for distributing notes.

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

Recognizing that in addition to class room teaching, it is essential that students and faculty get a more hands on perspective on their subject, the following initiatives are taken.

- Guest lectures are organized for students.
- 13 Workshops are organized for students by various departments.

- Mathematics department has conducted a certificate course on Vedic Mathematics and on Mathematical modelling.

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

- This year BCA (science) course started late, so to complete curriculum extra lectures and practicals.

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

Highest Qualification	Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	
Permanent teachers					
Ph.D.	02	05	06	22	35
M.Phil.			01	04	05
PG/NET/SET			24	43	67
Temporary teachers					
Ph.D.			00	04	04
M.Phil.			00	00	00
PG/NET/SET			05	21	26
Total					137

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.

- College has appointed adjunct professors in Biotech and Zoology department.

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.

#### Academic Year 2016-17

a) Nomination to staff development programmes

Name of the Course	No
Refresher courses	03
HRD programmes	01
Orientation programmes	01
Staff training conducted by the University	01
Staff training conducted by other institutions	04
Summer/ winter schools, workshops etc.	--

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

#### Teaching Learning methods/approaches

Program Details	Level	Department	Dates
National Statistic Day Workshop	State	Statistics	29 <sup>th</sup> June 2016
Role of Advance sensors in the development of Smart city	State	Electronics	28 Sept 2016
Learning and learning centered learning	District	Psychology	21 <sup>st</sup> October 2016
Fishery production and management	State	Economics	7 th Oct 2016

- c) Percentage of faculty
- invited as resource persons in Workshops/ Seminars/ Conferences organized by external professional agencies

Level	International	National	State	College
Total	--	3	--	2

- participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies

Level	International	National	State	College
Total	3	7	9	7

- Presented papers in Workshops/ Seminars/ Conferences conducted or recognized by professional agencies

Level	International	National	State	College
Total	08	04	1	

- 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.

Academic Year	No of faculty who received awards/recognitions			
	State	National	International	Local
Total	01	--	--	--

- 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 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.

Course	Year	2015-16
B.A	Appeared	299
	Passed	269
	Percentage	89.96
B.Com	Appeared	230
	Passed	165
	Percentage	71.73
B.Sc.	Appeared	234
	Passed	144
	Percentage	61.53
M.A.	Appeared	78
	Passed	69
	Percentage	88.46
M.Com	Appeared	39
	Passed	28
	Percentage	71.79
M.Sc.	Appeared	189
	Passed	167
	Percentage	89.30

- 2.6.4 What are the measures/ initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

➤ **Student Placement**

- Computer Science students attended career guidance program under youth employability initiative at Barclays, Hinjawadi campus, Pune
- One week training program organized by student Placement cell.

➤ **Entrepreneurship**

- Vividha

➤ **Innovation and research aptitude**

- Research induction Program
- Post graduate students of Microbiology attended two day international symposium.



## CRITERION III : RESEARCH, CONSULTANCY AND EXTENSION

### 3.1 Promotion of Research

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

The college has a research centre in Microbiology. The research centre for Zoology is sanctioned. Proposals for research centers in Biotechnology and Chemistry are under consideration.

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

The College has a research committee and constituted a Research and Innovation Center for Excellence (RICE). The six member committee is chaired by the Principal of our college. The committee has representatives from all three faculties.

The research committee for year 2016-17 is as follows

Dr. Ravindra Kshirsagar	Chairperson
Dr. Amita Dharmadhikari	Member
Dr. Sanjay Patil	Member
Dr. Vinay Kumar	Member
Dr. S. Ghosh	Member
Dr. Kavita Parekh	Member

#### Recommendations made by research committee:

- To conduct research induction programme for postgraduate students.
- To encourage undergraduate students to carry out small research projects.

#### Impact of Committee on research activities:

- Research induction programme conducted for postgraduate students of Life science departments.
- Undergraduate and postgraduate students carried out research projects.

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

- The college encourages student to participate in various scientific activities such as conferences, workshops, project competitions, debate and essay writing competitions. The students attend summer and winter training programmes in research institutes. This helps students to get familiarized with the recent research trends.

**Table 3.1.4.1: Student participation in conferences (Paper /poster presentation) 2011-15**

Level	Number of participants	Awards received
International	16	3
National	30	10
State	7	3
Zonal	6	1
Interuniversity	7	-
Inter-college	10	9
<b>Total</b>	<b>76</b>	<b>26</b>

**Table 3.1.4.2: Student participation in conferences (Paper /poster presentation) 2015-16, 2016-17**

Level	Number of participants	Awards received
International	14	-
National	41	4
State	8	3
Zonal	35	-
Interuniversity	1	-
Inter-college	16	-

The details of participants are given in Table no. 3.1.4.3

Sr. No	Name of the students	Name of the event	State/ National/Inter-national	Prize/Med al Won
<b>International conference</b>				
1	S.Y and T.YB.Sc students. 12 participants	Nano-science and Technology on 29 <sup>th</sup> Feb-2 <sup>nd</sup> March 2016 at IISER, Pune	International conference	
2	Sonika Sharma (BA Psychology)	INTAR	International	Participated
3	Shivani Vani (BA Psychology)	INTAR	International	Participated
<b>National conference/ seminar</b>				
1	Abhishaj Sajeev (B. A. English)	National Level Competitions on Poetry Writing, Short Story Writing and Book Review Writing	National	Awaited
2	Akshaya Phadatare (Zoology)	National conference of Entomology, Patiala	National	Participated

3.	M. M. Divekar (Zoology)	National conference on Faunal Diversity: Assessment and Conservation	National	Participated
4.	Akshaya Phadatare, (Zoology)	National conference on Faunal Diversity: Assessment and Conservation	National	Second prize
5.	Pooja Nagarkar, Payal Chandak, Avinash Kuwar (Zoology)	National Conference at Y.C.M. Kothrud, Pune	National	Participated
6.	Akshaya Phadatare, (Zoology)	International conference- ICSCCB, Pune.	International	Participated
7.	Manisha Divekar, Ashwini Gujar (Zoology)	National Conference on Innovative Research in life Science, Shinghad college of Science, Ambegaon BK, Pune	National	Participated
8.	Rachana Rokade, Akshay Phadtare, (Zoology)	National Conference on Innovative Research in life Science, Shinghad college of Science, Ambegaon BK, Pune	National	Participated
9.	Pankaj Gorule, Manoj Pise and Chandani Verma. (Zoology)	National conference on Faunal Diversity: Assessment and Conservation	National	Participated
10	Rachana Rokade, Akshay Phadtare, (Zoology)	National Conference on Innovative Research in life Science, Shinghad college of Science, Ambegaon BK, Pune	National	Participated
11	Renuka Potbhare (Zoology)	National conference on Faunal Diversity: Assessment and Conservation	National	Participated
12.	Naikwadi, N., Raut A. (Zoology)	National conference of Entomology, Patiala	National	Participated
12.	Bagal, M. P (Zoology)	National conference on Faunal Diversity: Assessment and Conservation, Pune	National	Participated
13	Nagawade N., Chandak, P.S., Sawant Sonali, S.R., Khude, G.,	National conference on Faunal Diversity: Assessment and Conservation, Pune	National	Participated

	(Zoology)			
14	Mr. Soching Luikham (T. Y. B. Sc., Microbiology)	Poster presentation at National Conference on Innovative Research in Life Science (IRLS) at Sinhgad College of Science, Pune organized on 26 <sup>th</sup> and 27 <sup>th</sup> February, 2016	National Conference	First Prize
15.	Mr. Soching Luikham (T. Y. BSc, Microbiology)	Poster presentation at National Conference on Faunal Diversity: Assessment and Conservation (FDAC-2016) at Modern College of Arts, Science and Commerce, Ganeshkhind, Pune on 22 <sup>nd</sup> and 23 <sup>rd</sup> January, 2016.	National Conference	First Prize
16.	Ms. Kajal Mulla (M. Sc. Microbiology)	All India Essay Writing Event, 2015, organized by Shree Ram Chandra Mission and United Nations's Information Centre for India and Bhutan.	National	Honorable Mention
17.	Ms. Rashmi Ahire (M. Sc. Microbiology)			Participated
18.	Preeti Pandhare (M. Sc. Microbiology)			Participated
19	Akhilesh Choudhary (B. Sc. Comp. Sc.)	Paper Presented at IISER,Pune	National	-
20	Kambale Rajkumar (B. A.)	Swami Ramanand Tirth Vidyapeeth, organised National Conference	National	Participated
21	Sonika Sharma (B. A. Psychology)	Young Psychologist Competition	National	First Prize
22	ShivaniVani (B. A. Psychology)	Young Psychologist Competition	National	Participated
23	PritviBhushan (B. A. Psychology)	Young Psychologist Competition	National	Participated
24	Sonika Sharma (B. A. Psychology)	Chikitsa Women's Studies Conference	National	Participated
25	ShivaniVani (B. A. Psychology)	Chikitsa Women's Studies Conference	National	Participated
26	Hemant Raghunauth	Chikitsa Women's Studies Conference	National	Participated
27.	ShivaniVani (B. A. Psychology)	National Academy of Psychology Annual	National	Participated

		Conference (2016-17)		
28.	Sonika Sharma	National Academy of Psychology Annual Conference (2016-17)	National	Participated
29.	Pritvi Bhushan (B. A. Psychology)	National Academy of Psychology Annual Conference (2016)	National	Participated
30.	Lavina Johnson (B. A. Psychology)	National Academy of Psychology Annual Conference (2016)	National	Participated
<b>State level conference/workshop</b>				
1	Gauri Rengade (Commerce)	Growth of e-commerce in India : Challenges and its Future.	State	Presented paper
2	Shiwani Patel (Commerce)	Growth of e-commerce in India : Challenges and its Future.	State	Presented paper
3.	Mangesh Pacharne (M.Sc I Chemistry)	M.J. Pujari Lecture Competition in A. G. College, Pune on 27.2.16	State	Consolation prize
4.	Ms. Pranali Meher (F.Y. B.Sc. Microbiology)	15 <sup>th</sup> State Level Microbiological Contest and Microbio Olympiad organized at Shirpur	State Level	Won best poster award
5.	Mr. Hardik J Shah (M. Sc. Microbiology)	MicrobioPodium (State level Microbiology Presentation Competition) organized by R.C. Patel college, Shirpur on 27 <sup>th</sup> January, 2016	State Level	Participated
6.	Ms. Rashmi Ahire (M. Sc. Microbiology)	MicrobioPodium (State level Microbiology Presentation Competition) organized by R.C. Patel college, Shirpur on 27 <sup>th</sup> January, 2016	State Level	Participated
7.	Mr. Prashant Walke (T.Y. B. A)	One day Conference Paper presented on “A Study of Stages of Agricultural Development in India and Various Policies”	State	Paper Presented
8.	Ratna Pal	Chemiad,	University	7 <sup>th</sup> rank
<b>Zonal</b>				
1.	BalikaGawade (SY BSc Electronics)	Avishkar, 2015	Zonal	Participated

2.	Amit Kadmallu (SY BSc Electronics)	Avishkar, 2015	Zonal	Participated
3.	Gayki Manoj and Swati Jadhav	Avishkar, 2016	Zonal	Participated
4.	Ms. Shraddha Talekar & Mr. Duargude Pargappa form (M.A. Part – I Economics)	“Avishkar 2015” Poster Presentation on “Green Audit”	College level	Participated
5.	29 students from M.Sc. II Microbiology	Hands-on training workshop on ‘ <b>Gene Annotation</b> ’ on 19/10/15, organized by <b>AMI (Pune Unit) and MCC-NCCS</b>	Zonal	Participated
<b>Inter university</b>				
1.	Harsh Kamble	“Summer School in Physics” <b>training programme</b> conducted by and at Dept. of Physics, SPPU, Pune. from 9 <sup>th</sup> to 20 <sup>th</sup> May 2016	SPPU	Participated
<b>Intercollege</b>				
1.	Shahista Hungud	Botanica Competition :Ness Wadia College	Intercollege	Participated
2.	F.Y. B.Sc. Two Students	Organic Farming workshop: Sinhgad College of Arts, Sci.& Comm.	Intercollege	Participated
3.	Veersen Singh	IPA (Indian Physics Association ) Pune Chapter	Intercollege	Participated
4.	Harsh Kamble	IPA (Indian Physics Association ) Pune Chapter	Intercollege	Participated
5.	Pooja Galande	IPA (Indian Physics Association ) Pune Chapter	Intercollege	Participated
6.	Pooja Galande, Laxmi Patil Shalaka Khot (T.Y.BSc- Physics)	workshop on “Solar Energy” at B.R.Gholap college on 10 <sup>th</sup> ,11 <sup>th</sup> ,12 <sup>th</sup> Feb 2016.	Intercollege	Participated

**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.**

- Eight staff members of our college are recognized M.Phil/Ph.D. guides. A total of 28 students have registered for Ph.D. and six students have registered for M. Phil. under them. Nineteen staff are involved in research and have registered for Ph.D.

**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 imbibing research culture among the staff and students.**

The college conducted several workshops, training programmes and sensitization programmes for staff and students in 2015-16 and first half of 2016-17. The programmes include college level, state level, national level and international level workshops, seminars and conferences.

**Table 3.1.6.1: Details of workshops/ training programmes/ sensitization programmes (2015-16, 2016-17)**

Sr. No.	Name of activity	Class	Details
<b>College level workshops/activities</b>			
1	<b><i>Research Induction Program</i></b>	Life Sciences Post-Graduate Students	Research Induction Program For Life Sciences Post-Graduate Students (Under DST-FIST Program), 06 – 07 September 2016, Total participation: 90 Conducted by: Department of Biotechnology, Microbiology and Zoology
2	Science Motivation Workshop on 16 <sup>th</sup> February 2016	F.Y.B.Sc	Conducted by Dr. Prabodh Chobe, organized by Department of Chemistry, 150 students
3.	A three day Workshop on “Guidance for NET-SET examinations” ISR	P.G students	2 <sup>nd</sup> March to 4 <sup>th</sup> March 2016, organized by Department of Chemistry 100 participants
4.	Summer Training Workshop	S.Y.B.Sc	20 students
5.	Skill Based Course	S.Y.B.Sc	30 students
6.	Summer Training Program	F.Y.BSc	Diversity and Taxonomy with special reference to <i>Entomofauna</i> and <i>Ichthyofauna</i>  For Undergraduate students, organized by Department of Zoology  15 <sup>th</sup> to 17 <sup>th</sup> March, 2016  25 students

7.	Hands on training program Report	S.Y B.S.c	Two day workshop on 'Basic techniques in life Science', organized by Department of Zoology (18th – 19 <sup>th</sup> March 2016) 20 students
8.	Entrepreneurship Development Programme	T Y B Com	In collaboration with Maharashtra Center for Entrepreneurship Development.
9.	TRANSFORMATION Personality Development Workshop	T Y B Com	In Collaboration with Lee Spa
10.	Cost fest	SY/Ty B Com	For students who have opted costing as special subject.
11.	Magnit	BBA(CA)	Project, poster and programming competition.
12.	Direct Tax Advisor	MCom	Training regarding various taxes.
13.	Career Guidance Programme	T Y B Com	Lectures by experts in various fields.
14.	Training on "Steps involved in designing electronic product and PCB design using EXPRESS PCB software	F.Y. and S.Y. Comp.Sc. and Electronic Sc.	Training under DBT –STAR college scheme.(2015-16)
15.	Hands on training on Photo-Voltaic System Design and installation	F.Y.and S.Y.B.Sc. CompSc.,General, Biotech	Interdisciplinary activity initialized to train workforce to work in the field (2015-16)
16.	DBT –STAR Hands-on training Workshop by Department of Microbiology	T .Y. B.Sc.	Biochemical techniques and instrumentation on 1 <sup>st</sup> , 2 <sup>nd</sup> and 4 <sup>th</sup> July 2016. 39 students from Modern college, Ganeshkhind +3 from Abasaheb Garware College+ 3 students from Modern college Shivajinagar
17.	DBT –STAR Hands-on training Workshop by Department of Microbiology	S .Y. B.Sc. Microbiology	Physicochemical and Microbiological Characterization of Soil, on 24 <sup>th</sup> and 25 <sup>th</sup> June 2016 for Microbiology students at Microbiology, Dept, MCASC, GK 19 students from Modern college, Ganeshkhind +3 from H. V. Desai College+ 3 TY BSC Biotech students from Modern college Shivajinagar
18.	Department of Computer Science - Soft Skill Workshop Soft Skill 2015-16	M.Sc., M.C.A.	Communication skills needed in Resume writing,G.D.



19.	Department of Computer Science Soft Skill 2016-17	TYBSc(CS)	Training at Barkclay Company, Hinjewadi.
20.	Department of Computer Science Android Workshop	TYBSc(CS)	Understanding developing in Android
21.	Development and Displacement	UG & PG (Arts)	2 <sup>nd</sup> September 2015 03 <sup>rd</sup> September 2015
22.	Violence Against Women	UG & PG(Arts)	Dr. Vijay Narkhede and TATHAPI team
23.	Ideas & Maharashtra Tribal Research Centre	UG & PG(Arts)	Dr. Tribhuvan Robin
24.	For Faculty- Learner and Learning Centered Teaching	10 assistant professors from Arts Faculty,	Organized by Department of Psychology 21/10/2016
25.	For Students - Goal Setting Workshop	30 students (UG/PG)	Organized by Department of Psychology 07/09/2016
26.	Study Skills for Dept of BVoC	50 students (UG)	Organized by Department of Psychology 23/09/2016
27.	Life Skills for Dept of Physics	15 students	Organized by Department of Psychology 21/09/2016
28.	Life Skills for Dept of BVoc	50 students	Organized by Department of Psychology 9/12/2016
29.	Hands on Training 9 <sup>th</sup> July, 2015	F.Y., S.Y. B.Sc	Advanced Graphical Techniques for Data presentation, Organized by Department of statistics
30.	PUSA Quiz (January of each year)	F.Y., S.Y. B.Sc	MCQ Quiz based on F.Y., S.Y. B.Sc. syllabus
31.	National Statistics Day, 29 <sup>th</sup> June, 2016	F.Y., S.Y. B.Sc	Presentations on Statistics for Farmers' welfare
32.	Summer Training Program	F.Y. BSc	For Undergraduate students, organized by Department of Mathematics, 13 <sup>th</sup> to 23 <sup>rd</sup> June, 2016. 15 students benefited
33.	Vedic Mathematics	Undergraduate students	For Undergraduate students of all faculty, organized by Department of Mathematics, 25 <sup>th</sup> July to 13 <sup>th</sup> August, 2016 40 students benefited
<b>Inter college activities</b>			
1	<b><i>Summer Training Program</i></b>	TY BSc (Life Sciences) students.	<b><i>Summer Training Program</i></b> on 'Gene Isolation and Amplification' under DBT Star College Scheme from 20 <sup>th</sup> – 25 <sup>th</sup> June 2016, conducted by

			Department of Biotechnology 25 Students including from 2 other colleges participated
2	Interaction 2015-16	UG & PG	Intercollegiate competitions
3	Interaction 2016-17	UG & PG	Intercollegiate competitions
<b>National workshops</b>			
1	Workshop at wadia college on 27 August 2015	M.ScI	Conducted by Royal Society of Chemistry.
<b>International Workshops</b>			
1	IISA Pre-conference workshop 19th December, 2015	-	Use of statistics in Clinical Trials

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

The teaching staff of the college is actively involved in the research activities in various fields. The supplementary information for details of area of expertise is given in table 3.1.7.1

**Table 3.1.7.1: Details of prioritized research areas and the expertise available**

Sr. No.	Name of Teacher	Research Area / Expertise available
<b>Arts</b>		
1.	Mr. Gandhale Rajkumar	Sociology of Health and Globalisation
2.	Dr. Deshpande Megha	Research Methodology
3.	Mr. Ajit Padwal	Urban Sociology, Policy making, Competitive Examinations
4.	Nashome Crasto	Dementia and Alzheimer intervention
5.	Ms. Shubhangi Meshram	Geography Dept, Geography, GIS
<b>Science</b>		
	Dr. Geeta Morwal	Plant Biotechnology
	Dr. Prachi Kshirsagar	Plant Taxonomy , Ethnobotany
	Mr. Tajne Niket	Pattern Recognition
	Mrs. Trupti Sohoni	System Analysis & Design
	Mr. Amol Patil	Image Processing , Data structures
	Dr. Amita Dharmadhikari	DoE, Reliability, Regression Analysis
	Mrs. Varsha Joshi	Nanomaterials
	Mr. Mahendra Waghmare	Synthesis of non-ferrites and their characterization

### 3.2 Resource Mobilization for Research

#### 3.2.4 How does the various departments /units /staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The research committee of college and the staff members involved in research, identify the possibilities of collaborative research. As an output of this discussion few research projects were carried out in the college as follows:

- Analysis of solar panel efficiency, between Physics and Electronics.
- Evaluation of antimicrobial activity of metal nanoparticles using electrical impedance, between Microbiology, Physics and Electronics.
- Synthesis and characterization of physicochemical properties of ink used in tabla, between Chemistry and Physics department.
- Optimization of parameters to improve adhesive properties of ink used in tabla, between Chemistry and Physics department.
- Development of hearing prosthesis using mechanical transducer, Physics Department and Department of Electronic science, SPPU.

#### 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.

**Table 3.2.7.1: List of sanctioned, completed and ongoing research projects from different funding agencies (year 2015-16, 2016-17)**

Nature of the Project	Duration Year From-To	Title of the project (Principal Investigator)	Name of the funding agency	Total grant		Total Grant received till date
				Sanctioned	Received	
Minor project	2013-15	An Analysis of Agricultural Development of a Maharashtra after 1991 (Mr. Doke Namdev)	BCUD	60000	49887	49887
	2014-16	Study on digestive and reproductive physiology of lepidophagous fish, Neotropius Kavalchor, Kukarni from western ghats, India. (Dr. Sanjay Kharat)	UGC	440000	250000	250000
	2014-16	Biosystematics studies on Braconoid parasitoid on lepidopteran larvae of some economically important crop pests from Pune. (Dr. Shakira Inamdar)	UGC	280000	2,00000	200000

	2014-16	Stem cell signaling in planaria, <i>Dugesiatigirina</i> (Dr. Ravindra Kshirsagar)	BCUD,S PPU	240000	210000	210000
	2014-2016	Vigilant Attendance System (Vaishali Salunke)	BCUD	1,65,000	82500	82500
	May 2016 to Sept 2016	Impact Assessment and Evaluation of Therapeutic Groups in Low Income Communities- Bapu Trust Seher Mental Health Project (Dr. Sadhana Natu)	Forbes Marshall CSR	125000	12500	12500
	2015-2017	“Synthesis and characterization of Nanoferrites by Solgel method ” (Mr. Mahendra Waghmare)	UGC	470000	370000	370000
	2016-2018	Elicitation of diosgenin production in <i>Helicteres isora</i> suspension cultures (Dr. Vinay Kumar)	BCUD, S. P. Pune University	240000	120000	120000
	2016-2018	Synthesis and Characterization of Pyrazole derivatives (Dr. Sushma Katade)	BCUD	190000	95000	95000
Major project	2015 to 2018	Empirical Analysis of Effects of Pre-birth Education on Child Development by using Advanced Statistical Techniques (Dr. Amita Dharmadhikari)	U.G.C. New Delhi	1253600	815600	815600
			<b>TOTAL</b>	<b>3298600</b>	<b>2205487</b>	<b>2205487</b>

### 3.2.7.2 Research Proposals submitted/ Under Consideration:

S. No.	Name of the investigators PI and CO-I	Title of the project	Funding agency	Total Outlay (Rs.)	Status
1.	Dr. Vinay Kumar (PI/Coor	Exploring Potentials of Three Tier Phyto-Microbe-Nano-Remediation	DBT, Government of India	<b>7283603</b>	Shortlisted and presented before the

	dinator) Dr. Sanjay Kharat (Co-PI)	Technologies for Clean Up of Sewage Discharged in to Mula-Mutha Rivers of Pune City [BT/PR20433/BCE/8/13 91/2016]			Taskforce at VIT, Vellore in October 2016
2.	Dr. Vinay Kumar (PI)	Identification of novel and conserved sodium-responsive miRNAs and their target genes modulating salinity stress during reproductive phase in rice cultivars EMR/2016/003896/PS	Science and Engineering Research Board (SERB), DST, Government of India	2968000	Peer-reviewed and has been put before PAC

### 3.3 Research Facilities

Name of Department	Funding agency	Instruments received
Biotechnology	DST-FIST (2016-17)	1. CO <sub>2</sub> Incubator, Thermo Fisher, Cost: 6,25,000/- 2. Biosafety Cabinet, Micro-Filt India, Cost: 1,72,651/-
Zoology		1. Digital Caliper 2. Spin wheel microcentrifuge 3. Refrigerator 4. Vortex mixer 5. Heating mantle 6. Soxhlet apparatus 7. Micropipettes 8. Microtome 9. Spectrophotometer
Microbiology	UGC	Multichannel pipette (2015-16)
Psychology	College	Psychological Tests and equipment
Physics	Under DBT Scheme	1. Goniometer, 2. Sound absorption coefficient apparatus. 3. Mini Optical bench 4. Callender and Griffith bridge
Chemistry	Department budget	1. Electronic balance- 03 2. Pure Aqua System- 01
ELECTRONIC Sc.	DBT	4 sets of Solar PV system installation sets including 10v solar panel, Battery, Charge controller and LED display
	DBT	2-Experiment kits of Code converter
	BCUD	Raspberry pi board ,Fingerprint module, GSM interface

### 3.4 Research Publications and Awards

#### 3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product):

The college has three Indian patents filed by a staff member from Department of Microbiology-

<b>Ghosh S, Harke AN, Chacko MJ, Gurav SP.</b> (2016) <i>Gloriosa superba</i> mediated synthesis of silver and gold nanoparticles.	Indian patent	201621016060 A.
<b>Ghosh S, Gurav SP, Harke AN, Chacko MJ.</b> (2016) An optimized process for <i>Dioscorea oppositifolia</i> mediated synthesis of gold and silver nanoparticles.	Indian patent	201621028221 A
<b>Ghosh S, Chacko MJ, Gurav SP, Harke AN.</b> (2016) Process optimization for synthesis of silver and gold nanoparticles using <i>Barleria prionitis</i> leaf.	Indian patent	201621027956 A

#### 3.4.3 Give details of publications by the faculty and students:

Detailed list of publication for individual faculty are shown in Table 3.4.3 .1

- **Chapter in Books/Books Edited/Books with ISBN/ISSN numbers with details of publishers**

Details of books are shown in Table 3.4.3.2

### 3.5 Consultancy

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

The table 3.5.4.1 gives details of consultancy.

Area of Consultancy	Income generated
Consulting Archaeologist at Kirloskar Consultants Pune, on the project 'Listing and grading of heritage buildings and precincts in Alibag, Pen, Karjat and Khopoli', sponsored by MMRDA	Rs.30,000/-
Researcher at Janwani- an initiative of Maharashtra Chamber of Commerce, Industries and Agriculture (MCCIA), Pune, on the project 'Pune Heritage Walk'	Rs.25,000/-

### 3.6 Extension Activities and Institutional Social Responsibility

#### 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?

Our institute believes in inculcating good values among students. We strive for building good citizens out of them. The college conducts activities through various lectures to improve sense of social responsibility and gender equality.

In order to ensure holistic development of students the college conducted various activities

- Vidyarthini manch

Sr. No.	Year	Activity
1.	(August 2016)	Lecture and demonstration on Benefits of Physiotherapy
2.		Lecture on Web addiction
3	September 2016	Lecture Antiragging and sexual harassment

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

In order to inculcate moral values and nurture a compassionate and progressive attitude college encourages student participation in various activities like:

- **Police mitra programme:** During Ganesh festival 14 boys and 1 faculty member of our college helped in controlling traffic between 11-8 p.m for one day.
- **Swachhata Abhiyan :**On the occasion of Mahatma Gandhi's Birth Anniversary a cleanliness drive was arranged where in students along with staff members were involved in cleaning the college campus.
- **Electronics department e-waste** collection drive was conducted in different housing society.
- **Sociology department :** Students of sociology department actively participated in distribution of books amounting Rs. 1000/ to tribal children through a **N.G.O One book one smile.**
- **NSS and NCC units** of our college organize various social activities every year, where most of the students participate actively and voluntarily. The activities include–
  1. Rice plantation was done on 2 acre by students and teachers.
  2. Krantidias celebration was organized along with History department wherein Rangoli exhibition was organized on Shivacharapati .
  3. Lecture was organized on **Youth empowerment** by Keshawanand Swami from ISKCON.
  4. Students were involved in Nirmalaya collection drive after Ganesh festival and converted to biofertiliser.
  5. Blood donation camp was organized in the college.
  6. Special winter camp was organized at Lavarde village, Tal. Mulshi, Dist. Pune.

### 3.7 Collaborations

#### 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 institute has developed collaborations, linkages and MOUs with research institutes, organizations, industries.

**Table showing list of collaborative projects, linkages and MOUS are shown in Table 1 Annexure 3.7.2 page 572.**

Sr. no.	Name of staff member/ Department	Title and Nature	Institute and other details
<b>Collaborations</b>			
1	Department of Biotechnology: Dr. Vinay Kumar	Research Project	CSIR-NCL, Pune RMIT University, Australia B.J. Govt. Medical College, Pune Vasantdada Sugar Institute, Pune Environmental Science Department, S. P. Pune University, Pune
2	Department of Chemistry	Hands on Training for Skill Based course for P.G.	Dept. of Chemistry, Savitribai Phule Pune University.
3	Department of Zoology Dr. Sanjay Kharat	Fish taxonomy	Zoological survey of India
4.	Department of Zoology: Dr. S.A. Inamdar	Insect Taxonomy	
5.	Department of Zoology Dr. Ravindra Kshirsagar	Aquatic insect	
6.	Department of Microbiology : Dr. Sougata Ghosh	Nanotechnology Research and Development	Defence Institute of Advanced Technology, Pune
		Anticancer and cell cytotoxicity studies	Institute of Bioinformatics and Biotechnology, SPPU
		Synthesis of novel drug molecules	Department of Chemistry, SPPU
		Antimicrobial activity of nanomedicine	Department of Microbiology, SPPU
		Synthesis and characterization of nanodrug delivery vehicles	IISER, Pune



		In-vivo animal studies and antileishmanial activity	National Centre for Cell Science, Pune
		Characterization of novel nanomaterials	Indian Institute of Technology Bombay, Mumbai
7.	Department of Sociology	Child abuse skill based programme.	Muskaan
		Soft skill development programme.	Gyaansetu
	Department of Sociology	Soft skill development programme.	TISS- women protection cell
	Department of Sociology	Tribal Handicraft exhibition.	Ideas
	Department of Sociology	Kisaan Student Forum.	Abhinav farmers club
	Department of Sociology	Computer course.	Ashwan foundation
	Dr. Sadhana Natu	International – Pan University Network in Global Health. Attended a Research workshop and worked out a collaborative international research proposal	SPPU and University of Pennsylvania , USA
<b>Linkages</b>			
1	Department of Chemistry	Projects for P.G.	National Chemical Lab, Dept. of Chemistry, Savitribai Phule Pune University.
2	Department of Microbiology	SPPU Extra credits for M.Sc. course: Cyber Crime and Cyber Security	Department of Computer Science, Modern College of ASC, GK, Pune-16
3	Department of Microbiology Modern College of ASC, GK, Pune-16 and	SPPU Extra credits for M.Sc. course: Human Rights	Modern Law College
4.	Department of Microbiology Research Projects M.Sc.	Linkages for Research projects	NCL, NCL venture centre, Departments of S.P. Pune University.

5.	Dr. Sanjay Kharat	Fish Taxonomy	IISER
6.	Department of Zoology Dr. S.A. Inamdar	Insect Taxonomy	NCL
7.	Department of Zoology Dr. Ravindra Kshirsagar	Pest Taxonomy	NCL
8.	Dr. Sadhana Natu	Expert on National Consultation on Sexual Harassment at the workplace	Women's Studies Centre, SPPU
9.	Dr. Sadhana Natu	Advisory Committee for setting up Counselling Cell	PES Modern Law College
10.	Dr. Sadhana Natu	Advisory Committee for starting a Peer Support Group	AbedaInamdar College
11.	Dr. Sadhana Natu	Evaluator for MA and PhD	IGNOU
12.	Dr. Sadhana Natu	Presentation about Disha Peer support and speak out group	University of Massachusetts , Amherst, USA group at Women's Studies Centre, SPPU
13.	Dr. Sadhana Natu	Testing and Review Expert for new E book	McGraw Hill International Publishers
<b>MOU</b>			
1	Department of Biotechnology (Dr. Vinay Kumar)	Academic and Research Cooperation and Faculty/student Exchange	RMIT University, Melbourne, Australia
2	Department of Biotechnology (Dr. Nivedita Das)	Research Collaboration	Applied Nanomaterials, Pvt. Ltd., Pune
3	Department of Zoology	Sericulture	Central Sericulture Institute Baramati
4	Department of Zoology	Agricultural Entomolgy	Ashwamedh Agrotech Ltd. Kopargaon
5	Department of Electronics	E-Waste collection and Management	Kuldeep E-waste Management Firm , Pune.
6	Department of Biotechnology (Mrs. Sneha Ogale)	Bacterial Concrete	Civil Engineering Dept., AISSMS Engineering College
7	Department of Computer Science	Fostering collaboration to promote industrial & academic interaction	IGATE Global Solutions Ltd.

**Table 3.4.3 .1: List of Publication per faculty (2015-16, 2016-17)**

Sr. No	Name of the Teacher(s) Author	Title of the Paper	Name of the journal	Volume & Pages	Year of publication	ISBN/ ISSN No.	Impact factor
1.	Mrs. Shilly John	<i>Growth Trend in Card Based Payment in India</i>	RESECO	Vol. 1 Pp. 14-18	2015-16	ISSN: 2395-6860	
2.	Dr Sadhana Natu	The Study of Government's Efforts of Psycho-socio-political Empowerment of Women in the Panchayat Raj Institution: Document Analysis Approach"	IOSR Journal of Humanities and Social Sciences	Vol 21, issue 10, Pp 27-31	2016	ISSN: 2279-0845	1.607
3.	Dr Sadhana Natu	Internet Addiction : Can CBT help?	International journal of Indian Psychology	Vol 4, Issue 1 No 76,	2016	ISSN 2348-5396  ISBN: 978-93-86162-13-7	Info base Index India 3.3 Research bible 5.1, Global impact factor 0.5
4.	Dr Sadhana Natu	Internet Addiction : A Focus group discussion approach	IOSR Journal of Humanities and Social Sciences	Vol 21, Issue 10, pp 19-23	2016	ISSN: 2279-0845.	1.607
5.	Dr Sadhana Natu	Impact Assessment and Evaluation of Therapeutic Groups in Low Income Communities- Bapu Trust Seher Mental Health Project	Published by Bapu Trust on Mind and Discourse	Pgs 50	2016	-	-

6.	Dr Sadhana Natu	Youth Suicides in Purandar Taluka, Pune District; an exploratory Study	Published by MASUM ,Pune	Pgs 50	2015	ISBN 978 93 81352 06 9	-
8.	Dr Sadhana Natu	Youth and Mental Health : Urban, Rural and Fringe Realities	Conference proceedings Siddhivinayak College, Pune	-	2015	ISBN 978 81 931444 0 4	-
10.	Dr Sadhana Natu	College Mental health : The Disha Experience	Medico Friends Circle Bulletin	Vol365- 66, Pgs 10-13	2015	-	
11.	Shivani Vani and Dr Sadhana Natu	Caught in the Web : Matrimonial websites and their complexities	Mindscape : Research Compendium	Vol I	2016		
12.	Shivani Vani and Dr Sadhana Natu	Conflict and Terrorism in the contemporary world	Mindscape : Research Compendium	Vol I	2016		
13.	Sonika Sharma and Dr Sadhana Natu	Marriage partner : suitability and selection	Mindscape : Research Compendium	Vol I	2016		
14.	Sonika Sharma and Dr Sadhana Natu	Kashmir Conflict : A psycho social enquiry	Mindscape : Research Compendium	Vol I	2016		
15.	Prithvi Bhushan and Dr Sadhana Natu	Micro Expressions : A psychological enquiry into the concept and its applications	Mindscape : Research Compendium	Vol I	2016		
16.	Hemant Raghunath and Dr Sadhana Natu	To marry or not to marry : A multi-cultural perspective	Mindscape : Research Compendium	Vol I	2016		

17.	Dr.Madhuri Kulkarni Dr. Nilesh Rathod	Liquid liquid extraction of Cd <sup>2+</sup> and its complexation study by p-t-butylthiacalyx.	• Research Journal of Chemical Sciences, 1-7, April 2016	Vol.6(4)	2016	ISSN223 1-606X	
18	Shriram, V., Kumar, V., Devarumath, R., Khare, T.S. and Wani, S.H.	Micro RNAs as potential targets for abiotic stress tolerance in plants	<i>Frontiers in Plant Science</i>	7: 817	2016	1664-462X	<b>4.45</b>
19	Wani SH, Kumar V, Shriram V, Sah SK.	Phytohormones and their metabolic engineering for abiotic stress tolerance in crop plants.	<i>The Crop Journal</i>	4: 162-176	2016	2214-5141	-
20	Wani SH, Kumar V.	Plant Stress Tolerance: Engineering ABA: A Potent Phytohormone.	<i>Transcriptomics</i>	3(2): 1000113	2015	2329-8936	-
21	Mapara N, Sharma M, Shriram V, Bharadwaj R, Mohite KC, <b>Kumar V.</b>	Antimicrobial potentials of <i>Helicteres isora</i> silver nanoparticles against extensively drug resistant (XDR) clinical isolates of <i>Pseudomonas aeruginosa</i> .	<i>Applied Microbiology and Biotechnology</i>	99: 10655-10667	2015	0175-7598	<b>3.34</b>
22	Gupta, R., Soni, S.	Perchlorate uptake and its effect on physiological, biochemical and growth parameters of eucalyptus plant under ammonium perchlorate stress.	<i>International Journal of Agriculture, Environment and Biotechnology</i>	8: 335	2015	0974-1712	
23	Rekha Gupta, Aditi Deshpande	Degradation and Decolorization of synthetic dye	<i>Asian journal of Microbiology, Biotechnology &amp; Environmental science</i>	16: 641-646	2014	0972-3005	

24	Gupta R, Soni S.	Studies on Rhizoremediation of perchlorate and its effect on physiological and biochemical parameters of Peltophorum plant in presence of mycorrhiza	<i>Environment Observer</i>	18: 94	2014	2320-5997	
25	Gupta, Rekha; Prathemesh, Madhuri Rathi, Nikhil N Jadhav;	isolation/characterization and identification of endophytic bacteria by 16S rRNA partial sequencing technique from roots and leaves of Prosopis cineraria plant	<i>Asian Journal of Plant Science and Research</i>	5: 335-346	2015		
26	Gupta, Rekha; Kedari, Ashwini;	Comparative studies on phytochemical analysis, relative antioxidant potential and free radical scavenging activity from different parts of plant Tridax procumbens	<i>European Journal of Biotechnology and Bioscience</i>	3:	2015		
27	K Alagarasu, T Honap, <b>AP Mulay</b> , RV Bachal, PS Shah, D Cecilia	Association of vitamin D receptor gene polymorphisms with clinical outcomes of dengue virus infection	<i>Human immunology</i>	73: 1194-1199	2012	01988859	<b>2.127</b>
28	K Alagarasu, T Honap, IM Damle, <b>AP Mulay</b> , PS Shah, D Cecilia	Polymorphisms in the oligoadenylate synthetase gene cluster and its association with clinical outcomes of dengue virus infection	<i>Infection, Genetics and Evolution</i>	14: 390-395	2013	1567-1348	<b>2.26</b>
29	K Alagarasu, <b>AP Mulay</b> , R Singh, VB Gavade, PS Shah, D Cecilia	Association of HLA-DRB1 and TNF genotypes with dengue hemorrhagic fever	<i>Human immunology</i>	74: 610-617	2013	01988859	<b>2.127</b>

30	Kalichamy Alagarasu, Indraneel M Damle, Rupali V Bachal, <b>Aditya P Mulay</b> , Paresh S Shah, Cecilia Dayaraj	Association of promoter region polymorphisms of CD209 gene with clinical outcomes of dengue virus infection in Western India	<i>Infection, Genetics and Evolution</i>	17: 239-242	2013	1567-1348	<b>2.26</b>
31	K Alagarasu, <b>AP Mulay</b> , M Sarikhani, D Rashmika, PS Shah, D Cecilia	Profile of human leukocyte antigen class I alleles in patients with dengue infection from Western India	<i>Human immunology</i>	74: 1624-1628	2013	01988859	<b>2.127</b>
32	Jaydeep Sidhayee, Mandar Phatak, Shamik Banerjee, <b>Aditya Mulay</b> , Ojas Deshpande, Sourabh Bhide, Tressa Jacob, Ines Gehring, Christiane Nuesslein-Volhard, Mahendra Sonawane	Myosin Vb mediated plasma membrane homeostasis regulates peridermal cell size and maintains tissue homeostasis in the zebrafish epidermis	<i>PLoS Genet</i>	10: e1004614	2014	1553-7404	<b>7.528</b>

33	Monica Nagendran, Prateek Arora, Payal Gori, <b>Aditya Mulay</b> , Shinjini Ray, Tressa Jacob, Mahendra Sonawane	Canonical Wnt signalling regulates epithelial patterning by modulating levels of laminins in zebrafish appendages	<i>Development</i>	142: 320-330	2015	1477-9129	<b>6.1</b>
34	K Alagarasu, RV Bachal, H Tillu, <b>AP Mulay</b> , MB Kakade, PS Shah, D Cecilia	Association of combinations of interleukin-10 and pro-inflammatory cytokine gene polymorphisms with dengue hemorrhagic fever	<i>Cytokine</i>	74: 130-136	2015	10434666	<b>2.940</b>
35	Shakera S. Inamdar	Studies on monthly variations of biological parameters of ganesh pond, Pune, maharashtra	Indian Streams Research Journal	3(3)	2013	2230-7850	0.21
36	Shakera S. Inamdar	Rhopaloceran Richness in Relation to Larval Host Plant from Pune	Asian Journal of Multidisciplinary Studies	4(3)	2016	2348-7186	1.4
37.	Ravindra V. Kshirsagar	Ichthyofaunal Diversity of Manas Lake, Bhugaon, Pune	Bionano Frontiers	9 (1) 52-54	2016	0974-0678	4.8
38.	Sachin M. Gosavi	Unique courtship and spawning behaviour in the wrinkled frog, <i>Nyctibatrachus humayuni</i>	Amphibia-Reptilia	32 (2011): 333-339	2011	0173-5373	1.4
39.	Sachin M. Gosavi	Determining sensitive stages for learning to detect predators in larval bronzed frogs: Importance of alarm cues in learning	Journal of Biosciences	39(4), 701-710	2014	0250-5991	1.4
40.	Pradeep B. Kumkar	<i>Badis britzi</i> , a new percomorph fish (Teleostei: Badidae) from the Western Ghats of India	ZOOTAXA	3941 (3): 429-436	April 2015	1175-5326	0.99



41.	Pradeep B. Kumkar	<i>Balitora chipkali</i> , a new species of stone loach (Teleostei: Balitoridae) from the northern Western Ghats of India, with a note on the distribution of <i>B. laticauda</i>	ZOOTAXA	4138 (1): 155–170	July 2016	1175-5326	0.99
42.	Pradeep B. Kumkar	Corrigendum: Redescription of <i>Nemachilichthys rueppelli</i> , a senior synonym of <i>N. shimogensis</i> (Teleostei: Nemacheilidae)	ZOOTAXA	4111 (1): 100–100	May 2016	1175-5326	0.99
43.	Pradeep B. Kumkar	Length-weight and length-length relationships of seven loach species (Teleostei: Cypriniformes) from five localities in northern Western Ghats, India	Journal of Threatened Taxa	7(15): 8205-8220	December 2015	0974-7893	-
44.	Pradeep B. Kumkar	Redescription of <i>Nemachilichthys rueppelli</i> , a senior synonym of <i>N. Shimogensis</i> (Teleostei: Nemacheilidae)	ZOOTAXA	4059 (3): 555–568	December 2015	1175-5326	0.99
45.	Pradeep B. Kumkar	<i>Pethia sanjaymoluri</i> , a new species of barb (Teleostei: Cyprinidae) from the northern Western Ghats, India	Journal of Fish Biology	88, 2027–2050	May 2016	1095-8649	1.246
46.	Dr. Sougata Ghosh	<i>Dioscorea oppositifolia</i> mediated synthesis of gold and silver nanoparticles with catalytic activity	<i>Journal of Nanomedicine and Nanotechnology</i>	7:5	2016	ISSN: 2157-7439	3.573
47.	Dr. Sougata Ghosh	<i>Barleria prionitis</i> leaf mediated synthesis of silver and gold nanocatalysts.	<i>Journal of Nanomedicine and Nanotechnology</i>	7:4	2016	ISSN: 2157-7439	3.573
48.	Dr. Sougata Ghosh	<i>Gloriosa superba</i> mediated synthesis of silver and gold nanoparticles for anticancer applications.	<i>Journal of Nanomedicine and Nanotechnology</i> .	7:4	2016	ISSN: 2157-7439	3.573
49.	Dr. Sougata Ghosh	<i>Gnidia glauca</i> leaf and stem extract mediated synthesis of gold nanocatalysts with free radical scavenging potential.	<i>Journal of Nanomedicine and Nanotechnology</i>	7:2	2016	ISSN: 2157-7439	3.573

50.	Bhute S S	Hyperoxaluria leads to dysbiosis and drives selective enrichment of oxalate metabolizing bacterial species in recurrent kidney stone endures	<i>Scientific Reports</i>	6:34712	2016	ISSN: 2045-2322	5.228
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**Table 3.4.3 .2: List of Books/ chapter in Books**

Sr.no	Name of the Teacher(s) Author	Nature and Title	Publication details	ISBN no.
1	Dr. A.H. Shinde	Two Chapters in Economic Development & Planning T.Y.B.A G-3 Text book	31/07/2015 Atharva Prakashan, Pune	<b>ISBN: 978-93-83639-26-7</b>
2	Dr. A.H. Shinde	Two chapters in International Economics T.Y.B.Com. Text book	31/07/2015 Atharva Prakashan, Pune	<b>ISBN: 978-93-83639-27- 4</b>
3	Dr. S. Awalgaonkar	‘Bhave prayog ani patangachi dori-Eka prayougshil ani dhadasi lekhakache atmacharitra’.	Vishakha Diwali Visheshank Issue 51, pp150-154	-
4	Dr Sadhana Natu	Title : Impact Assessment and Evaluation of Therapeutic Groups in Low Income Communities	Bapu Trust Seher Mental Health Project, published by Bapu Trust on Mind and Discourse, Pune , Sept 2016	-
5	Mr. Mahendra Waghmare	Atomic and Molecular Physics (Textbook – T.Y. B.Sc.)		978-93-5158-378-3
6	Mr. Mahendra Waghmare	Nuclear physics (Textbook – T.Y. B.Sc.)		978-93-5158-488-9
7	Mr. Mahendra Waghmare	Oscillations, Waves and Sound (Textbook – T.Y. B.Sc.)		978-93-5158-122-2

8	<b>Kumar V</b> , Shriram V, Hoque TS, Hasan MM, Burritt DJ, Hossain MA.	Glycinebetaine mediated abiotic oxidative-stress tolerance in plants: physiological and biochemical mechanisms. In: Sarwat M et al. (Eds.). <i>Stress Signaling in Plants: Genomics and Proteomics Perspective, Volume 2</i>	2016. Springer International Publishing, Switzerland,	DOI 10.1007/978-3-319-42183-4_5
9	Wani SH, Sah SK, Shriram V, <b>Kumar V</b> . 2016.	Engineering Phytohormones for Abiotic Stress Tolerance in Crop Plants. In: Ahammed GJ, Yu J (Eds) <i>Plant hormones under challenging environmental factors</i> .	Springer Science + Business Media, Dordrecht.	DOI 10.1007/978-94-017-7758-2_10
10	<b>Kumar V</b> , Sharma M, Khare T, Wani SH.	Impact of nanoparticles on oxidative stress and responsive antioxidative defense system of plants. In: Tripathi et al. (Eds.) <i>Nanomaterials in Plants, Algae and Micro-organism: Concepts and Controversies</i> .	Elsevier (In Press)	-
11	<b>Kumar V</b> , Khare T, Sharma M, Wani SH.	ROS induced signaling and gene-expression in crops under salinity stress. In: Khan IR (Ed.) <i>Reactive Oxygen Species and Antioxidant Systems: Role and Regulation under Abiotic Stress</i>	Springer International Publishing, Switzerland (In Press)	-

## CRITERION IV

### INFRASTRUCTURE AND LEARNING RESOURCES

#### 4.1 Physical Facilities

##### 4.1.2 Detail the facilities available for

- a) **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.**

In order to give better facilities to staff and students Mathematics and language laboratories have been renovated. Geography, History, Sociology, Political science and Economics departments have also been renovated. Separate Research area has been created in the Physics laboratory.

To cope up with the newly started course Psychology laboratory was built up newly. The counseling cell run by the department has been given separate existence (area) within the department itself.

#### **Botanical garden**

Botany department has taken special efforts to rearrange the small botanical garden in the premises which enhances the beauty of campus. The garden is a center of attraction because of its beautiful layout and collection of different plants like medicinal, aromatic, ornamental, cacti, succulent and aquatics. Plants are well labeled with their botanical name and vernacular names in Marathi. Besides this some habitats have developed in the garden, including shade house, pond for aquatics, sand bed for cacti and succulents and small fernery. The plants are arranged in a garden according to their groups such as medicinal, aromatic, succulent, flowering, foliage etc. Along with angiosperms, ferns and gymnosperms are also blooming in the garden. The fresh plant material needed for practical are also cultivated in the garden.

Ferns present in garden are *Asplenium nidus*, *Nephrolepis biserrata*, *Polypodium punctatum*, *Pteris ensiformis* etc. *Zamia* sp., *Thuja biota*, *Cycas* sp., *Araucaria* sp., and *Cyperus* sp. are some notable taxa in gymnosperms. The important medicinal plant grown in garden are *Andrographis paniculata* (kiryata), *Bixa orellana* (Sendari), *Saraca asoca* (Sita Ashok), *Costus pictus*, *Adathoda vasica* (Adulsa), *Centella asiatica* (Bramhi), *Eclipta alba* (Bramhi), *Ocimum sanctum* etc.

Many species of Cacti are planted in ground and in pots. Some other noteworthy plants in garden are *Adenium*, *Azadirachta indica*, *Chlorophytum* sp., *Asparagus* sp., *Dracaena* sp., *Aloevera*, *Begonia*, *Coleus* sp., *Passiflora*.

A plant nursery is being developed where plant of Indian origin would be cultivated.

**Staff room :** Staff room of A building is renovated to accommodate increasing no of staff and also to generate better ambience.

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

A pavilion has been built around the Basket Ball and Volley Ball courts. The NSS department has been shifted to new location.

**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.**

Sr.	Item	2016-17
1	Renovation of laboratories	19,67,228/-
2	Purchase of equipment and computer	31,00,031/-
	Total	50,67,259/-

**4.1.5 Give details on the residential facility and various provisions available within them:**

The college provides residential facilities to the staff and students depending on the demand and the availability.

Hostel Facility: A Solar Water Heater has been installed in the hostel. For providing safe drinking water, water purifier and water coolers are installed.

Mess facility is made available in the hostel.

The amount spent is as given below –

Particulars	Amount
Solar Water Heater	8,37,620/-
Water Purifier, filter and Commercial RO plant	81.300/-

**4.2 Library as a Learning Resource**

**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.**

Some additional reading material has been added to the library

Books: Added during 1<sup>st</sup> April 2016 to 31<sup>st</sup> December 2016

Total Books: 701 Amount of Rs. 2,91,449/-

Orders Placed: 172 Amount of Rs. 1,25,248/-

Shelves: Added new shelves for increasing collection of book

Amount spent on Shelves Rs. 2,17,000/-

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

**Softwares added newly**

- **Koha Library Automation Software:** Installed new Koha open source software with international standards and advanced features for library automation. Web OPAC made available on our college website.
- **DSPACE Digital Library Software:** Installed Digital library software DSpace for managing digital resources of our library and creating Institutional Repository. We have initiated to upload and index the electronic documents in this software like

question papers, syllabus, audio books, CDs, DVDs, project reports and faculty publications

- **FEDGATE:** We have purchased FEDGATE single search engine for all library and online subscribed resources on a single platform. Readers will be able to access NLIST resources, library catalogue, Institutional repository and other open access databases through this search engine.
- **TURNITIN:** Plagiarism check software is made available to all readers of our college.

#### **Library automation**

**Computers:** Replaced 13 PCs with new PCs at UGC Network Resource Centre for providing E-Library facility to our students and staff.

#### **4.2.6 Give details of the specialized services provided by the library.**

The library is giving specialized service to render additional help in teaching learning process.

**Flipped Classroom:** Library has initiated a new flipped classroom for giving online education and training to our patrons using new educational open source software. Prepared online tutorials and videos for demonstration of how to access various electronic resources, OPAC and new audio visual resources available for reference purpose.

**Online Survey:** Conducted online survey of all readers and generated automatic report.

#### **4.3.1 IT Infrastructure**

##### **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)**

The data given below specifies the information about addition in computing facility made available to the various departments in the college. All these computers connected in LAN.

#### **1. Department wise distribution of computers**

<b>Department / Office</b>	<b>No. of computers</b>
Computer Science	39
Botany	01
Chemistry	03
B.Voc.	03
Biotechnology	15
Physics	03
Microbiology	03
Library	10
NSS	01
Statistics	04
Zoology	04
Vice Principal cabin	03
Staff Room	02

Hostel	01
Office	02
Psychology	01
Standby Arrangement	06
<b>Total Computers</b>	<b>100</b>

## 2. Computers with All in One facility

Location	No. of Computers
Principal's Cabin	01
Registrar Cabin	01
Server Room	01
Computer Science Department	01
Total	04

### Computer System Configuration

- For Computers – No. 100  
CPU CORE I3, 41503.5 GHZ, M/B ASUS H81M-CS, RAM 4 GB DDR3, HDD 1 TB Segate Sata, Cabinet Circle, DVD R/W LG, Keyboard + Mouse Logitech MK200, Monitor 18.5' LED (Make Samsung)
- For all in One machines – No. 04  
Computers all in one -04  
Desktop all in one Lenovo - 4 no.s  
Lenovo AIO PC, Core i5/ 4GB RAM / 1TB HDD / 21.5''screen,  
Wireless keyboard and mouse /w 10,

#### 4.3.4 Provide details on the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution.

Provision made in the annual budget for 2015-16			
Purchase of Computers	Accessories	Maintenance	Up gradation
5,00,000/-	1,71,275/-	31,36,872/-	236637/-

#### Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

The college has taken initiative to use Flinnt, a social learning platform where learners can join courses provided by our institution. Students and teachers can communicate online for sharing learning experiences.

## CRITERION V : STUDENT SUPPORT AND PROGRESSION

- 5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

### Scholarship –

Leela Poonawalal's –	Rs. 60,000
S.C Scholarship : 400 students	Rs. 50,23,955
S.C.Freeship : 87 students :	Rs.19,19,900
S.T. Scholarship : 59 Students :	Rs. 8,19,170
S.T. Freeship : 28 Students :	Rs. 3,70,270
N.T.Scholarship : 138 Students :	Rs. 8,24,470
N.T.Freeship : 18 Students :	Rs. 2,04,820
O.B.C. Scholarship : 112 Students :	Rs. 3,05,755
O.B.C Freeship : 28 Students :	Rs.76,360
Scholarship by Calsoft Pvt Ltd : 1 student :	Rs.15,000
<b>Total Students 872</b>	<b>Rs. 96,19,700</b>

- 5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

- As per SAKSHAM guidelines, rules and regulations of the Act is displayed on notice board and flex in the college campus.
- Legal actions for sexual harassments under the Act is highlighted on flex and notice board.

- 5.2.1 Provide the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

### Higher Education

UG-PG	44
M.Phil.	1
PhD	4

- 5.3 Student Participation and Activities

- 5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

### Supplementary activities by NSS

Sr. No.	Activity
1.	Rashtrapita Mahatama Gandhi Jayanti “ Swachha V Sundar Bharat Abhiyan”
2.	Wahatuk Surksha Abhiyan “Nirdhar Wahatuk Shishticha’s Usankrut Punekaracha”



3.	Shiv Charitrachya Chitrancha Kagdawaril Bhavya Pradrashan
4.	Tree Plantaion “Van Mahostav”
5.	Bhat Lagwad : Rice Plantation in Wadgaon Maval (Sategaon)
6.	Blood Donation Camp
7.	Chandrayan, Mangalyan and Beyond by Mr. Sureh Naik
8.	A Lecture on Youth Empowerment by De. Keshawanad Swamy
9.	Nirmalya : collection, sagraigation and project on Oraganic Fertiliser

▪ **Supplementary activities by Other Departments**

Sr. No.	Activity
1.	Lokmanya Tilak 95 <sup>th</sup> Death Anniversary on 1 August 2015
2	Kranti Din on 9 <sup>th</sup> August 2016
3	HDFC (Historical documentary Film Club) at third Saturday Every Month

**Sports Department**

- Organized Intercollegiate Basketball Competition for men.
- Arranged a programme on Yoga Day for Teaching and Non teaching staff.
- Organized a workshop in Career in Sports and Physical Education.

5.3.2 Furnish the details of major student achievements in co- curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

Sr. No.	Activity
1.	Celebration of World Stastics Day
2.	Sliver Jubilee Celebration Programme
3.	In the presence of MLA Mrs. Supriys Sule Dr. Sougata Ghosh Presented his research work done on Medicinal Plant ‘KalLavi’ for Cancer Medicine
4.	Kranti Din – Rangoli Pradarshan on Shivcharitra by Mr. Vilas Chakwate
5.	Akansha – College Magazine awarded 1 <sup>st</sup> Prize by Savitri Bai Phule Pune University
6	Poster Competition by Banking Club : Problems faced by Senior Citizens and their solutions
7	Soft Skill Management Workshop under skill development programme
8	“ Manat” Programme on Journy of Manat, a book written by Mr. Achhut Godbole And Nilambari Joshi
9	Flair : A wall Magazine : Inauguration by Mrs. Mita Banerjee
10	Avishakar : A lecture series on Research competition organized by Savitri Bai Phule Pune University

11	Staff Academy Programme : A lecture by Joint Director Mr. Vijay Narkhede on Healthy Atmosphere in staff room
12	Modernites : Alumani Association organized Get together programme and cultural programme
13	State Level Seminar on “ The role of ADvanced Sensors in the development of smart city” Jointly organized by QIP SPPU and Electronics Department
14	Inauguration of competitive cell guidance center
15	World Food Day Celebration by B. Voc department
16	Fishary Production and Management : One day seminar organized by Fishary Department and Economics Department
17	Aashayghan : A staff cultural programme
18	Poster and Quiz competition by Economics Department
19	Trancending Cultural Boundaries : International Student exchage by English Department
20	Pune International Literaaly Festival : visit by students & teacher of English department
21	The merchant of Venis : Shekspears A flim
22	What can I do with the English degree : by Limaye Sir
23	Skill Based training For Modi script writing
24	Skill Based Course on Taxonomy study of Entomofuna, & Applied Zoology
25	Jidnyasa : Tarunai and Leakhanamagil Prerana : Guest Lecture by Dr. Ashutosh Jawdekar
26	A workshop on Child Criminology: Social Issue by Sociology and Economics Department
27	One day workshop on Child Abuse : with collaboration with Tathapi & Muskan NGO
28	Career Scope in Zoology : A lecture series organized by Zoology Department
29	Zoology Craft : Student competition on models and posters, organized by Zoology Department
30	H D F & C : A documentary on Ancinet and Medival History organized by History Department
31	Medical Checkup Programme of First year Students
32	Summer Training Programme is organized by Mathematics Department under DBT
33	Vedic Mathematics Skill development course under DBT
34	Alumni meet of Mathematics Department
35	Inaguration Programme for M.Sc Part I Computer Science Students organized by Computer Science Department
36	Soft Skill Workshop for M.Sc and MCA Students organized by Computer Science Department
37	Celebration of International Year of Light through poster and model competition by Physics department .also celebrated special physics

	related event such as “Discovery of gravitational wave”
38	Skill development program conducted by Physics department on “Repairing and maintenance of Electrical home Appliances”
39	Department of biotechnology conducted field visit for SY and T.Y. Biotech students
40.	Department of biotechnology conducted PTA meeting for F.Y.,S.Y and T.Y. Biotech students in August 2016
41	2 Guest lecture organized by Geography dept.( on Disaster Management by Prin. Anil Dandekar and ON Mangalyan by Dr. Suresh Naik Scientist ISRO)
42	20 Geography students visit to Aditya Exhibition at Ghole Road conducted Jyotirvidya Sanstha, PUNE
43	4 Geography students participated in Aditya Quiz at PUNE
44	Geography dept started “GEO- Movie Club” FOR STUDENTS EVERY WEEK.
45	WORLD SUICIDE Prevention day By psychology
46	Self confidence workshop for Marathi medium girls students
47	Guest lecture conducted by physics dept. on life skill management for TYBSc students.
48	Guest lecture conducted by BVoc. dept. on life skill management for TYBSc students.
49	Guest lecture Attended by MSc-II Micro students. On “Journey of HiMedia” at Amphitheatre at Fergusson College, Pune.
50	Guest lecture Attended by MSc-I Micro students. On “Next Generation Sequencing” at MCC-NCCS, Pune.
51	Guest lecture Attended by MSc-I Micro students. Dr. APJ Abdul Kalam on the occasion of Reading Inspiration day.
52	Guest lecture conducted by micro dept. on Non parametric tests and its problem solving for MSc-I students.
53	Visit organised by Micro dept.. at NCCS,pune.
54	Visit organised by Micro dept. at PMC’s Sewage treatment plant, near Dr. Naidu hospital ,pune.
55	A workshop on physicochemical and microbiological analysis of soil: by Microbiology Department
56	A workshop on Biochemical techniques and instrumentation: by Microbiology Department
57	A workshop on Research Induction program: by Microbiology Department
58	Microbiology dept. PG students attended two day International symposium on Microbial Ecology and Systematic.
59	Visit organised by Microbiology dept. at MCC-NCCS, Pune.

5.3.2 Furnish the details of major student achievements in co- curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.

- 25 Students from Psychology department is pursuing training in Psychology in different organization i.e. Bapu Trust, Tathapi, Alochana, Karwak and Under the guidance of Mr. Bhushan Shukla, Psycharistics.
- 85 Students are enagaged in training with Vidya Sahakari Bank under the activity of Banking Club.
- 10 Students are taking training in Lees Beauty Centre and SPA under the guidance of Ms. Leena Khandekar.
- 2 Students of F.Y.B.Sc slelcted in summer internship progamme of NSSO Government of India Akurdi, Pune.
- Ms. Suchitra Pednekar Consolation Prize for elocucation competition at Chandraroop Dakle College, Ahmednagar & Dnyaneshwae College, Ahmednagar of Hstory Department
- Mr. Ajay Kumar Jadhav won 1<sup>st</sup> prize in inter collegiate debate competition organized by Psychology Department on the topic Gender Equality
- Mr. Sushant Thorawade cleared SET Exam in history in 2016
- Mr. Khushwant Sing Rajput cleared SET Exam in Commerce in 2016
- Vijay Gulumkar cleared CSIR NET –LS (AIR 15)
- Shrikant Sete cleared CSIR NET –LS (AIR 26)
- Ratna Pal cleared Chemiad Intercollege competitom in chemistry held by dept. of chemisty, SPPU, Pune and stood seventh rank overall and first in our college.
- MSc students of Chemistry department attended 3 days workshop on “Bridging the learning gap between chemistry and its applications” by science academy (INSA, NASI and IASC) at SP college.
- Sujata Hazare cleared SET Exam. May 2016
- Sacin Ubale Participation –NCC- state level-silver (3), 01 gold, All India vaury sainik trophy to Maharastra directorate.
- Harsh Kamble a student of TYBSC physics attended summer school in physics - 2016 titled” exploration towards physics “from 9<sup>th</sup> -20<sup>th</sup> may 2016 at dept. of Physics in SPPU, Pune.
- Vishal Satish Dighe won state level Elocation Competition from History Department.

## CRITERION VI : GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 Institutional Vision and Leadership

#### 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.?

##### “New Vision Statement”

*Modern College of Arts, Science & Commerce, Ganeshkhind, shall aspire to establish itself as an institution of excellence thriving on the tri-pillars of inclusiveness, integrity and innovation. Equipped with advanced infrastructure and empowered with ingenious minds it shall seek to devise customized curricula to meet the growing challenges in higher education. In doing so, the college will offer diverse communities with rich academic experience and open the gates of knowledge and research for all, through successful global partnerships.*

New courses started in 2016-17

Science: BCA

Skill Development Courses: A number of skill development courses have been introduced in the current year, as follows:

##### Arts Faculty

Sr. No.	Course Name	Course Co-ordinator Name	Course conducted by Dept.
1	Basics of Business Communication	Shampa Chakravorthy	English
2	Marathi D.T.P.	Dr. Sanskriti Awalgaoonkar	Marathi
3	Skills in Psycho Social Counselling	Dr. Sadhana Natu	Psychology
4	Social Services and Welfare	Dr. Jyoti Gagangras	Sociology
5	Diversity Inequality & Public Policy	Dr. Jyoti Gagangras	Sociology
6	Blogging and CMS	Prof. Sangeeta Dhamdhare	Library
7	Travel and Tourism	Prof. Motial More	Geography
8	Finishing School	Prof. Shampa Charavorthy	English

**Commerce Faculty:**

<b>Sr. No.</b>	<b>Course Name</b>	<b>Course Co-Ordinator Name</b>	<b>Course Conducted by Dept.</b>
1	Transformation Course	Mrs. Sujata Dahiwal	Commerce
2	Computerised Financial Accounting Programme (Tally ERP 9)	Prof. Moreshwar	Commerce
3	E-Filing of Income Tax Returns	Prof. Moreshwar	Commerce
4	Entrepreneurship Development Programme	Prof. Sujata Deshmukh	Commerce

**Science Faculty:**

<b>Sr. No.</b>	<b>Course Name</b>	<b>Course Co-Ordinator Name</b>	<b>Course Conducted by Dept.</b>
1	Making Bakery Products	Ms. Dipali Tamhane	Computer Science
2	Web Designing, Development and hoisting	Prof. Satish Ambike	Computer Science
3	Computer Networks	Prof. Sapkal Kumod	Computer Science

<b>Sr. No.</b>	<b>Course Name</b>	<b>Course Co-Ordinator Name</b>	<b>Course Conducted by Dept.</b>
1	Applied Zoology and Biobusiness	Dr. Shakera Inamdar	Zoology
2	Solar PV System Installation and Maintenance	Prof. Vaishali Salunke	Electronics
3	Printed Circuit Board Designing and Manufacturing	Prof. Vaishali Salunke	Electronics
4	Repairing and Maintenance of Electrical and Home Appliances	Prof. Abanave Chhaya	Physics
5	Repair and Maintenance of Mobile Cell	Prof. Deepak S.Kumbhar	Electronics

Sr. No.	Course Name	Course Co-Ordinator Name	Course Conducted by Dept.
6	Quality Control in Laboratories and Industries	Prof. Gauri Bhagat	Microbiology
7	Mathematical Modelling in Life Sciences	Prof. Swati Kandharkar	Mathematics
8	Use of Scilab Software	Prof. Shamal Deshmukh	Mathematics
9	C-Programming	Prof. Jayashree Jain	Mathematics
10	Vedic Mathematics	Prof. Pratiba Pawar	Mathematics
11	Recent Trends in Biological Techniques	Dr. Shakera Inamdar	Zoology
12	Archeology and Organic Evolution	Prof. Varsha Joshi, Dr. Shakera Inamdar	Physics And Zoology
13	Diversity and Taxonomy with special reference to Entomofauna	Dr. Shakera Inamdar	Zoology
14	Research Methodology and Scientific Communication Skills	Dr. Ravinda Kshirsagar	Zoology
15	Natural Products Biotechnology	Dr. Vinay Kumar	Biotechnology

## 6.2 Strategy Development and Deployment

### 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

The college has applied for starting new courses in M.A. (Psychology). Besides, the university committees have already visited the college for Post-Graduate Research Centers in Biotechnology and Chemistry subjects, and the result is awaited. The college has applied to Government of India and Government of Maharashtra to grant the permission for the following Skill Development courses

1. Travel and Tourism Executive
2. Banking and Accounting Associate
3. Food Processing and Preservation
4. Integrated Course on Beauty, Culture and Hair-dressing
5. Repair and Maintenance of Domestic Electronic Appliances

### 6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

A number of resolutions were made by the Progressive Education Society, Pune, and some of them are as follows:

- Resolution No. 104 – 105, regarding closure of MCA (Science) course.
- Resolution No. 106, regarding advance sanctioned to Peon working at the college
- Resolution No. 107, regarding granting of lien to a teaching faculty member of the college
- Resolution No. 210, dated 19/08/2016, regarding concession of fees provided to economically weaker student, a Kin of Shishu Vidya Mandir, Ganeshkhind, Pune.
- Resolution No. 3, dated 12/10/2016, regarding submitting the proposal to Savitribai Phule Pune University for starting a new course- M.A. (Psychology)
- Resolution No. 4, dated 12/10/2016, regarding submitting the proposal to Savitribai Phule Pune University for starting a new course- B.Sc. (Hospitality).
- Resolution for starting the process for applying for Autonomy

### **6.3 Faculty Empowerment Strategies**

#### **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?**

Various lectures/interactive sessions and training programs have been organized by the college, details are as follows:

1. Inaugural Speech for Staff Academy Program for the year by Dr. Vijay Narkhede, Joint Director, Higher Education, Government of Maharashtra, themed on 'Challenges in Higher Education and New University Act' on September 17, 2016.
2. 'Vanmahotsav' a tree plantation program organized at Modern College of Agricultural Biotechnology, Hadshi, Pune, from July 01 to 07, 2016.
3. 'Ashayghan' a Cultural Program for the staff, organized on October 14, 2016.
4. Guidance Lecture on 'Preparing for NAAC Re-Accreditation- 3<sup>rd</sup> Cycle' by Dr. Ganesh Hegde, Deputy Advisor, NAAC, Bangalore.
5. A guidance lecture on 'Preparing for NAAC Re-Accreditation- 3<sup>rd</sup> Cycle' by Dr. Shirish Chindhade.
6. An interactive session on 'Preparing for NAAC Re-Accreditation' by Dr. R. S. Pardeshi, Principal Fergusson College, Pune and Dr. Sameer Terdalkar, Asst. Professor, Department of Zoology, Fergusson College, Pune.
7. A guidance lecture on 'Preparing for NAAC Re-Accreditation- 3<sup>rd</sup> Cycle' by Dr. Snehal Agnihotri, Principal Dr. D. Y. Patil College, Pimpri, Pune.

#### **6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

**Few more Adjunct/Visiting Professors have been appointed, as follows:**

Dr. R. M. Devarumath  
Scientist,  
Molecular Biology and Gene Expression Division,  
Vasantdada Sugar Institute, Pune



Dr. Bharat Bhushan  
Dean (Academic)  
Professor, Environmental Planning  
Yashwantrao Chavan Academy of Development Administration, Pune

Dr. Bashir Khan  
Former Scientist  
Biochemical Sciences Division  
CSIR-NCL, Pune

Dr. Madhura Vipra  
Director, Athena Consulting,  
Pune

Dr. S. G. Deshpande  
Former Scientist,  
Entomology Section,  
CSIR-NCL, Pune

#### **6.4 Financial Management and Resource Mobilization**

##### **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.**

*Audited Statements of Expenditure (2015-16) is attached as Annexure.*

##### **6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

Research Projects sanctioned in the year 2016-17  
The details are as follows

##### **Extra mural Research Projects:**

<b>S. No.</b>	<b>Name of the Funding Agency</b>	<b>Amount sanctioned (Rs.)</b>
1.	BCUD-S.P.P.U. research projects (Two)	4,30,000

#### **6.5 Internal Quality Assurance System (IQAS)**

##### **6.5.1 Internal Quality Assurance Cell (IQAC)**

##### **b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**

A number of decisions and recommendations of the college IQAC have been given due consideration by the management and been approved such as:

- To initiate the process of starting a new course M.A. (Psychology)
- To invite University Committees for visiting the college for approving the Post-

Graduate Research Centers in Biotechnology and Chemistry subjects, and the result is awaited. Subsequently, the committees have visited the college and the results are awaited.

- To apply and contest for the '11<sup>th</sup> State Level Energy Conservation Award' of the Maharashtra Energy Development Agency (MEDA), Government of Maharashtra for excellence in clean energy generation and energy efficiency. Subsequently the college has been awarded 'First Prize'.

**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.**

Various lectures/interactive sessions and training programs have been organized by the college, details are as follows:

1. Guidance Lecture on 'Preparing for NAAC Re-Accreditation- 3<sup>rd</sup> Cycle' by Dr. Ganesh Hegde, Deputy Advisor, NAAC, Bangalore.
2. A guidance lecture on 'Preparing for NAAC Re-Accreditation- 3<sup>rd</sup> Cycle' by Dr. Shirish Chindhade.
3. An interactive session on 'Preparing for NAAC Re-Accreditation' by Dr. Sameer Terdalkar, Asst. Professor, Department of Zoology, Fergusson College, Pune.
4. A guidance lecture on 'Preparing for NAAC Re-Accreditation- 3<sup>rd</sup> Cycle' by Dr. Snehal Agnihotri, Principal Dr. D. Y. Patil College, Pimpri, Pune.

## CRIETERION VII INNOVATIVE AND BEST PRACTICES

### 7.1 Environmental Consciousness

#### 7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

The College conducts a Green Audit in its campus. The IQAC of the college conducts meetings regularly wherein the experts give valuable inputs towards environmental consciousness. Our college has a dedicated committee for Environment, Safety and Health. This committee conducts various activities with the help of the Post Graduate students. So far it has conducted the following activities:

**Water Testing:** College has expertise of water potability testing. Water samples are collected and potability of drinking water provided through cooler and provided in canteen is tested on the basis of BIS (Bureau of Indian Standards) by the Microbiology Department on regular basis.

#### 7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

Various activities under NSS and Staff academy were carried out to make the campus eco friendly. College Campus Cleanliness Drive was conducted by NSS ON 12<sup>th</sup> Sept 2016.

Through these activities we educate and sensitize the youth towards making the campus eco-friendly. As a token of appreciation an award is given to a student who for presenting the Best Environment Awareness project.

- A. Energy Conservation :** Recently the College has received First prize in 11<sup>th</sup> State Level Energy Conservation Competition organized by MEDA (Maharashtra Energy Development Authority) under Educational Institutional category
- B. Use of Renewable Energy:** The College has 'Solar Wind Hybrid Power Generation Plant' that generates 13 KW energy daily. Guests from three institutions have visited this project to learn about the benefits of this plant.
- C. Water Harvesting:** The College is getting sufficient consumable water supply from Pune Municipal Corporation. The college has a rain water harvesting plant in the campus.
- D. Tree Plantation:** Botany Department has renovated the Botanical Garden in the college campus. A tree plantation drive was conducted by the Staff academy of the college during the "Vasundhara Week" at Agricultural Biotechnology College of our parent Institution Various Saplings were planted during this drive.  
On the occasion of Silver Jubilee Year of the college, the representative of first batch of our Alumni planted sapling in the college campus during Vasundhara Week.
- E. Hazardous Waste Management-** Science departments have systematic mechanism of management of waste chemicals and other laboratory materials. The college has continued a contract with **Pasco Environmental Solutions** for safe disposal of hazardous chemicals and Bio hazardous waste. College has taken an initiative of recovery of solvents from used solvent waste. The college has installed '**Effluent Water Treatment Plant**' for treating waste water of chemistry, Biotechnology and Microbiology departments of our college.

**F. e-Waste Management:**

The college has signed MoU with Kuldeep E-Scrap Material ( Regd No : BO/Ro(HQ) HW/ E-Waste/Collection Center/2016/k/B-557) an authorized vendor of Maharashtra Pollution Control Board and declared as authorized E-Waste Collection Center in India. Electronics Department will be coordinating the activities related to E-Waste collection in the College campus as well as from residential colonies.

E-waste collection drive was conducted by the Department of Electronics during the month of October 2016 for Staff and students of the college. Also the E-waste of Electronics (Total 123 Kgs) and Computer department (307 Kgs) was collected and given to above mentioned agency during September to November 2016. College has received Green Certification from this agency.



**e-waste collection drive by Department of Electronics in the College Campus**

**e-waste and Plastic Waste Collection Drive at Ovalnest Housing Society Warje**

**Date: 22<sup>nd</sup> and 23<sup>rd</sup> October 2016**

An e-waste and Plastic waste collection drive was conducted by the M.Com Students of the college at Ovalnest Co-op. Housing Society on 22<sup>nd</sup> and 23<sup>rd</sup> October 2016. On the first day, the students went to every Flat of every building and created awareness about the effects of E-Waste on the environment through various charts. They explained the importance of this drive and collected the Electronic from every flat from six buildings (About 250 Flats) of the Society. On the second day once again the students visited the Flats and collected the E-waste. Two teachers from the college monitored the activity. The e-Waste was handed over to the E-waste Management.



Certification received by the college for E-waste Collection Drive

### Kuldeep e-scrap Materials”



e-waste and Plastic Waste Collection drive at Ovalnest Hsg. Society, Pune.

- F. Ultra Modern sanitation facility:** Renovation of the Staff room and the Sanitation area with ultramodern facility.
- G. Other** – This year 2,000 kg Nirmayla is collected and converted into compost in collaboration with Chatushrungi Trust during Navratri Festival at *Chatushrungi* Temple. College has Baction compost (Green waste management plant).

The College has signed an Mou with **Rudra Environmental Solutions,Pune** for appropriate management of Plastic waste. English Department will coordinate the collection of Plastic waste in the college campus and from various residential colonies. As a part of this activity, the students from the college had a plastic waste awareness and collection drive at a residential society, “Ovalnest” at Warje, Pune, during 22<sup>nd</sup> and 23<sup>rd</sup> October 2016. Around 50kg plastic waste was collected during this drive.

## 7.2 Innovation and Best Practices

**We have continued the following innovative platform in achieving institutional objectives.**

### 1. Anubhuti

A Science exhibition and competition exhibiting Projects and posters made by our students of Science stream was held on 17<sup>th</sup> December 2016. In this event 496 students participated and 100 projects and Posters on Green Technology were displayed.

### 2. Vividhaa

A theme of “Clean and Green India” was planned with the activities like

- Open forum with successful alumni on the occasion of Silver Jubilee Year. The forum included alumni from army, some are well-known entrepreneurs, researcher, Social workers and Artist (Tabala)
- Street plays : on Cashless India and Smart city
- Modern Chef Recipe competition for all stakeholders.:  
Theme : Dishes made with Green vegetables & fruits
- Walk for a cause of Clean India and poster making competition.

### 3. Banking Club

- 85 students of T.Y.B.Com completed Hands on training at 12 branches of Vidya Sahakari Bank.
- Students have supported Bankers and customers during demonetization of currency.
- Insurance Connect to make the students aware about importance of insurance and career opportunities.
- In association with Financial Literacy Foundation Club has conducted banking literacy campaigns at village, Lawarde and to spread the message of cash less economy.
- Campus Bank Connect for Class IV of our college.
- The students of club has participated in ‘Senior Citizen Banking Model Designing’ poster competition.

### 4. Flair

#### List of Flair Issues (2016-17)

Sr. No.	Title of the magazine	Expert
1.	Life Ethics and Morals	Mrs. Mita Banerjee

**5. Disha****Issue of Kaleidoscope (2016-17)**

Theme	Experts
Celebrating 100 years of Psychology in India.	Dr. Manisha Gupte, Researcher and health activist, Founder of the gender and health research organization MASUM

**6. Cost Fest:** Poster & Model Competition & Paper Presentation related to Costing.**7. Jidnyasa****List of Themes of Jidnyasa (2016-17)**

Theme	
“Motivation behind creative writing” By Dr. Ashutosh Javadekar, author, music composer singer	August 2016

**8. Interaction:** Intercollegiate Competition Held by Computer Science Dept. on 2<sup>nd</sup> to 4<sup>th</sup> Jan 2016 which includes different competitions like Modern Top Coder, Poster Competition, 1 Min Mobile Clip, Project Competition, Quiz Competition, Group Discussion.**9. Image Building :** (Transformation) 11 Female students participated in a course of Health and Beauty enhancement conducted by Mrs. Leena Khandekar from Lee's Beauty Institute, during 8<sup>th</sup>-22<sup>nd</sup> November 2016.**10. Aashayaghan :** Ashayghan was celebrated on 14<sup>th</sup> October 2016. 20 participants participated.**11. Yuva Saptaha:**

Events	Duration
Poetry reading, Elocution, Handwriting, Mehendi, Short film, English Caption contest, Rangoli, Poster competition, How Dramatic are you? (English), Mastermind Quiz (Psychology), Salad decoration and Bouquet making, Kaun Banega History Scholar (History Department), What's The Good Word? (English Department)	27 <sup>th</sup> December 2016 To 12 <sup>th</sup> January 2017

**1. Skill Development Courses****List of Skill Development Courses (2016-17)**

Sr. No.	Department	Course details
1.	Commerce	Transformation
2.	Commerce	Computerized financial Accounting Program (Tally ERP)
3.	Physics	Repairing & Maintenance of Electrical Home Appliances

2. **Agro to Campus:** New round after demonetization started from 30<sup>th</sup> December 2016.
3. **Insurance Connect** One day workshop was conducted on 3<sup>rd</sup> December 2016, to make the students aware about the importance of Insurance in their life and linked to Pradhanmantri Jeevan Suraksha Yojana. The students are spreading the message in the society about various micro insurance policies.
4. **Odyssey Transcending Cultural Boundaries Exchange Program** for International and North east students by English Department.



## Evaluative reports of the Departments

### Department of Economics

#### 1. Quiz Competition on 31/08/2016 : INDIAN ECONOMY

Quiz Competition was conducted by the department on 31/08/2016 on the Topic-Indian Economy. There were 99 participants from both Arts and Commerce faculty. The result is as follows :

Prize	Name of the Student	Class	Marks
First	Saurab Mali	T.Y.B.A.	18
Second	Dandge Prashant Eknath	T.Y.B.Com.	17
Third	Hange Deepak Bhagwat	F.Y.B.A.	16

#### 2. One Day Workshop on 07/10/2016: FISHERY PRODUCTION AND MANAGEMENT

As a part of the **Silver Jubilee celebrations** of the College, the Department of Economics in association with the **Marathi Arthashastra Parishad** organized a ‘Dr. Sudha Mokashi’ awarded -one day workshop on **“Fishery Production and Management”** on Friday, **7<sup>th</sup> October 2016**. There were about 110 participants including staff and students. The **Inaugural address** was given by **Dr. Shivaji Bhosale, Chairman Marathi Arthashastra Parishad**. He spoke about the opportunities today’s youth have in getting self employed in the field of Fish Production. He talked about government’s policy regarding fish cultivation. The other dignitaries also gave their views during the session. The guest included Prof. Dr. Avinash Nikam, Chief Editor, Arthasanvad, Prof. Suresh Todkar, Joint Secretary, PES, Shivajinagar, Pune and Dr. D.V. Jahagirdar, Former Chairman Marathi Arthashastra Parishad. Dr. Sanjay Kharat, Principal and Mr. Dastagir Pathan gave the welcome address.

The resource person for the **First Session** was **Mr. Vijay Shikre, Joint-Director, Matsya Utpadan Kendra, Hadapsar, Pune**. He spoke about his expertise on the various types of fish and its production. Mr. Shikre gave his views on fishery exports and the nutritional value of consuming fish. He also spoke on the significance of fish for controlling various diseases like Cancer, Diabetics and Cardiac problems.

In the **Second Session**, **Dr. Sanjay Kharat, Principal** of the college spoke on **“Security and Safety of Fresh Water Fish”**. He gave his expert opinion on how and why the fish in the fresh waters in India are becoming lesser in number due the polluting environment.

Due the increasing industrial waste being dumped into the rivers makes it injurious for these aquatic lives. Some of the species of have become extinct. According to Dr. Kharat, using the freely available natural resources without damaging the environment will help in increasing the fish production and thereby employment in fisheries.

**Dr. Jyoti Gagangras, Vice-Principal Arts, Mr. Dastagir Pathan, the coordinator and Head, Department of Economics** and Mr. Motilal More, from Department of Geography gave their whole hearted support for organizing the program. The organizing team included Mr. Namdev Doke, Dr. Abaso Shinde, Mr. Nitesh Gujarati, Mr. B. G. Sawaishikre and Mrs. Shilly John, the staff from the Economics Department. The student volunteers who gave their full support included Mr. Prashant Walke, Ms. Shraddha Talekar and Ms. Rupali Chavan from post graduate course. The **anchor for the program was Mr. B. G. Sawaishikre** and the **vote of thanks was given by Dr. Abaso Shinde.**

### 3. Survey:

#### **SOCIO-ECONOMIC SURVEY OF THE FLORIST NEAR CHATUSHRUNGI TEMPLE DURING NAVRATRI FESTIVAL**

The departments of Sociology and Economics conducted a combined study of the florist near the Chatushrungi Temple about their socio-economic parameters during the Navratri festival in October 2016. The survey was carried out by two teachers each from the two departments and 15 students from the undergraduate course (B.A.). A questionnaire consisting of 20 questions was used to collect the information from the florists. The students got the questionnaires filled from the respondents. To get the social information, questions like personal information, religion, caste, education, language, food etc. was included. They were asked about the behavior of their customers, police etc. to know about the kind of social acceptance they receive. For the economic aspect, their income, bank account etc. was asked. The respondents were also asked about their available documents for identity like Aadhar card, voter's i-card etc. Data was collected from 17 respondents (florists).

With no proper education, housing facility or poor health issues and with a meager income, they mainly fall into the low income group. As per the survey, they have to face various socio-economic problems. These problems can be solved to some extent by following suggestions:

1. The government should provide permanent housing facility for the florists staying in Pune and with a proper shop for selling flowers.
2. Adequate measures should be taken to provide information regarding the market to these florists.
3. Florists having seasonal business, and those who come during the festival for trade should be provided with temporary accommodation.
4. They should be given proper facility for food.
5. Should be given adequate health facilities and proper sanitation.
6. Police and the customers should try to understand their problems and cooperate with these poor florists.

The florists near Chatushrungi Temple, on S. B. Road, Pune face various socio-economic problems. These poor self employed florists earn a very low amount to fulfill their daily needs. Only with school education without any other vocational training, during off-season they find it difficult to meet their ends. They also have to face difficulties from the police, customers and the neighbors. With proper measures taken by the local authorities, their conditions can be improved.

### **Department of Geography**

- **Geography Movie Club** started on every Wednesdays in Geography Department on various geographical and educational topics.
- Lecture of **Dr. Suresh Naik** (Scientist, ISRO), on Mangalyaan2 and Chandrayaan2.
- Lecture of **Prin. Anil Dandekar**, on Disaster Management- Tsunami.
- Visit to the **Astronomy Exhibition** in Nehru Auditorium organized by Jyotirvidya Sanstha.
- Participation of Four Students from FYBA class- Dhruv, Kaushal Varma, Ravi Kumar, Shubham Burade in **Aditya Intercollegiate Quiz Competition** organized by Jyotirvidya Sanstha.
- **GPS Survey** at Javan Village, near Hadshi (Tal- Mulshi) on 29<sup>th</sup>, 30<sup>th</sup> December 2016.
- **Sky-Watch Workshop** at Javan Village (Tal- Mulshi) sponsored by Students Welfare Board of Pune University. Participation of 115 students from 15 different colleges on 30<sup>th</sup> December 2016.
- **National Seminar and Geo-Jatra** on 31 Dec 2016, An intercollegiate competition of Essay, Poster, Model and Quiz with cash prizes. This Seminar and Competition was Sponsored by B.C. Vaidya Foundation. The seminar was attended by 175 students and 40 teachers from other colleges.
- **Pune to Goa Cycling** by Dr. Sanjay Patil, Dr. Deepak Shendkar and Mr. Namdeo Doke for Environmental awareness among students to curb fuel consumption and to promote cycling for clean environment in between 3 to 6 Nov 2016.

### Department of History

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:  
**'Modi' script course in collaboration with Deccan College, Pune**

10. Faculty profile with name, qualification, designation, specialization.

Name	Qualification	Designation	No. of Years of Experience
Sneha Gaikwad	MA, Bed, M.Phil. (Registered)	Asst. Professor	6 months

19. Publications:

- a) Publication per faculty : Number of papers published in peer reviewed journals (national / international) by faculty and students

Name of the faculty	International	National	State
Prof. Shruti Bhatkhande		01	
Prof. Dr. Meenakshi Tiwari		01	

Name of the faculty	National
Prof. Shruti Bhatkhande	Lal Bahadur Shastri Mahavidyalaya and Satara Itihas Parishad organized one day seminar on 9 <sup>th</sup> Oct., 2016 on Quit India movement- contribution of Aruna Asaf Ali and Suchitra Kriplani.

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme

Academic year	Title of Project	Total no. of Students participated	Percentage of completion of project
2016-17	Historical survey of Lavarde village	50	100%

23. Awards / Recognitions received by students **Faculty:**

Year	Name of the Student	Award/Recognition
2016-17	Ajay Kumar jadhav	won 1 <sup>st</sup> prize in debate competition on topic Gender equality organized by Dept of Psychology
2016-17	Suchitra Penekar	Won Elocution competition

## 26. Student profile programme/course wise:

Postgraduate Course: M.A.

Name of the Course/ programme	Academic Year	Admissions in MA-I	MA-II Students' Strength	Enrolled		Pass percentage
				*M	*F	
M.A.	2015-16	36	29	24	05	

\*M = Male \*F = Female

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Category	Number of students	Name of the student	Year of passing
SET	01	Sushant Thorawade	2016

## 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

**Study Tour:**

Academic year	Places visited
2016-17	<ul style="list-style-type: none"> <li>• Kelkar Museum</li> <li>• Deccan College Museum</li> </ul>

## Department of Languages

**4. Names of Interdisciplinary courses and the departments/units involved:**

English is being taught to students of BCA under Science faculty from 2016-17

**5. Annual/semester/choice based credit system (program wise):**

Semester Pattern (English) : B.C.A (Science Faculty)

**10. Faculty profile with name, qualification, designation, specialization:**

Name	Qualification	Designation	Experience
Jitender Kumar	M.A. NET	Assistant Prof.	6 months

**11. List of senior visiting faculty:**

Sr. No.	Visiting Faculty	Designation
1	Dr. Shirish Sahasrabudhe	Director, ELTIS-SIFIL
2	Mrs. Mita Banerjee	Former Director, Rosary Institute of Media and Mass Communication, Pune
3	Dr. Amol Shinde, IRS	Asst. Registrar of Companies, Pune
4	Dr. Atul Patil	Asst. Professor and Faculty In Charge, College of Engineering, Pune
5	Mr. Sunil Patil	Corporate Trainer

**17. Publications:**

Publication per faculty:

**Dr. Sanskruti Awalgaonkar:**

1. Bhav Prayog ani Patangachi Dori -Eka prayogshil v Dhadsa Prakashkache Atamcharitra,-VISHAKHA Diwali Ank2016.
2. Stree-Purush Tulana -Ek Samajik Dataveg,AKSHAR VANGMAY Oct-Nov-Dec 2016 ISSN-2229-4929

**21. Awards/Recognitions received by faculty and students:**

- Jitender Kumar qualified NET in November 2016

24. **Seminars/Conferences/Workshops organized & the source of funding:** One Day Workshop on “College to Corporate” organized by Department of English on 27<sup>th</sup> December 2016 (Self Funded)

28. **Details on student enrichment programs with external experts:**  
Students of Second and Third Year Special English attended the “**Industry Academia Meet**” at Modern College, Shivajinagar, Pune on 8<sup>th</sup> December 2016

Sr. No.	Activity	Objective	Need	Outcome
1	FLAIR- THE WALL MAGAZINE (Life, Ethics and Morals)	To create a platform for students to showcase their creativity and talent	Promote research aptitude	Familiarization with contemporary issues Writing skills improvement
2.	ODYSSEY-In House Publication (English Dept.)	To encourage research aptitude amongst students	To expose students to research activity	Creative and insightful writing
3	English Corner	To take Classroom to Campus	Reach out to all students on the campus	Learning English grammar and usage
4	Spoken English	To enhance LSRW skills	Need for enhancement of employability	Confidence building and ability to converse in English
5	Guest Lecture (What can I do with an English Degree?)	To give exposure about emerging trends in English Lang. and Lit.	Awareness of career opportunities and academic programs	Better informed about the importance and efficacy of English
6	Educational Visits (Visit to Crossword, Book Store) (Visit to PILF)	To promote interest among students in art and culture	Tap creative skills	Enhanced creativity and ability to appreciate
7	Film Screening (William Shakespeare’s Merchant of Venice)	To enhance better understanding and appreciation of prescribed texts	Need for critical analysis of prescribed texts	Improvement in thinking, writing and critically appreciating the texts
8	Intercollegiate Essay writing Competition	To increase language skills and to reach to the students in rural areas	Need for writing critically on diverse and current topics	Improvement in writing and critical thinking and participation of students in rural areas
9	‘Lekhan Jidnyasa’	To create a platform for	Interdisciplinary exposure	Active participation and



		students to develop curiosity		team work
10.	<b>Transcending Cultural Boundaries</b>	To promote multiculturalism	To establish harmonious environment in the campus among international and local students.	Awareness about international and local cultures.
11.	<b>MoU with Keshavsita</b>	To spread awareness on healthy segregation and management of plastic waste	Need to familiarize people with the toxic impact of plastic waste	Plastic Waste management drive in Oval Nest Society, Warje, Pune
12	<b>KavyaVachan Spardha- YuvaSaptah</b>	To spread awareness on healthy segregation and management of plastic waste	Need to familiarize people with the toxic impact of plastic waste	Plastic Waste management drive in Oval Nest Society, Warje, Pune
13	<b>Vakrutav Spardha</b>	To spread awareness on healthy segregation and management of plastic waste	Need to familiarize people with the toxic impact of plastic waste	Plastic Waste management drive in Oval Nest Society, Warje, Pune

29. **Teaching methods adopted to improve student learning:**

Presentation	Film Screening	Word Power Games
<b>Creative Writing based on Wordsworth's Daffodils</b>	<b>William Shakespeare's THE MERCHANT OF VENICE</b>	<b>Word association game Chinese whisper</b>

30. **Participation in Institutional Social Responsibility (ISR) and Extension activities:**

**MoU with Keshavsita** - *To spread awareness on healthy segregation and management of plastic waste. Plastic Waste management drive in Oval Nest Society, Warje, Pune*

**Best Practices:**

- English Help Centre in order to address queries of students and staff related to English
- Continuous coordination with students through Whats App Groups
- Interdisciplinary students centric activities

### **Road Map for Next Five Years**

- To introduce a Certificate Course in Foreign Languages
- To start an English Help Centre in order to address queries of students and staff related to English
- Enhance collaboration and linkages for student internship programs

## Department of Political Science

- **Names of Interdisciplinary courses and the departments/units involved**

Invited Lectures: (Interdisciplinary/Use of ICT)

1. Worked as a subject expert for the development of e-Content programmes in 'Office Management and Secretarial Practice' domain. This is a project of Ministry of Human Resource Development of Government of India for National Mission on Education through Information and Communication Technology (NME-ICT) initiative. Delivered lectures on
  - a. Introduction to Institutional Functioning : Parliament, Prime Minister and Judiciary
  - b. Power Structures in India : Caste, Class and Gender
2. Worked as Subject Co-ordinator for four lectures.
  - a. Introduction to Institutional Functioning : Parliament, Prime Minister and Judiciary
  - b. Power Structures in India : Caste, Class and Gender
  - c. Secularism
  - d. Parties and Party System in India

- **Publications:**

Book Review 'Critical Analysis of Social Dominance' of the book by Prof. Gopal Guru in Marathi fortnightly, '*Pariwartanacha Watsaru*' ISSN 2250-3145 dtd. 1 to 15 August 2016, pp 51-55

- **Areas of consultancy and income generated:**

Prepared a background note on 'Politics and Political Economy of Urban Planning' for V M Dandekar Memorial Seminar (National) organized by Indian School of Political Economy during 16 & 17 December 2016 at Pune. Central Theme of the seminar was 'Urban Planning in India : Emerging Issues and Challenges'.

**Income generated** : Rs. 10,000/-

- **Details on student enrichment programmes with external experts:**

**Jidnyasa (Curiosity)** : an interdisciplinary platform for students from Arts and Commerce, having different theme for 2016 : '*Lekhan Jidnyasa*' : Motivation for creative writing. Dr. Ashutosh Javadekar, Dentist, Author, Music Composer, Singer and Critique unveiled his journey as an author and interacted with students on his diverse interests. Inaugurated wall magazines prepared by students on the theme on 10 August, 2016.

- **Participation in Institutional Social Responsibility (ISR) and Extension activities :** Writers for visually impaired students for MA examination of Department of Politics & Public Administration, SPPU

- **Recognition :**

Member, Board of Studies in Political Science, Center for Talent Search and Excellence, Ness Wadia College, Pune.

## Department of Psychology

1. Name of the department: Department of Psychology

6. Participation of the department in the courses offered by other departments:

i	Study Skills for Dept of B.Voc.	23/09/2016	50 students
ii	Life Skills for Dept of Physics	21/09/2016	15 students

7. Courses in collaboration with other universities, industries, foreign institutions, etc. Conducted:

1	Dr Sadhana Natu	International – Pan University Network in Global Health. Attended a Research workshop and worked out a collaborative international research proposal.	SPPU and University of Pennsylvania , USA
2	Dr Sadhana Natu	An Interdisciplinary workshop for PhD Students of Sociology and Psychology	Department of Sociology SPPU
3	Dr Sadhana Natu	Presentation about Disha Peer support and speak out group	University of Massachusetts, Amherst, USA group at Women's Studies Centre, SPPU
4	Dr Sadhana Natu	Testing and Review Expert for new E book	McGraw Hill International Publishers

11. List of senior visiting faculty:

- A. Dr. Manisha Gupte: Co- founder MASUM
- B. Dr. Medha Kumthekar: Former HOD SNDT University
- C. Varsha Pingale: Psychologist and Researcher
- D. Kahelee Shinde : Psychologist

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

**Dr. Sadhana Natu**

Nature of the Project	Duration Year From- To	Title of the project	Name of the funding agency	Total grant		Total Grant received till date
				Sanctioned	Received	
Minor project And Consul tancy	May 2016 to Sept 2016	Impact Assessment and Evaluation of Therapeutic Groups in Low Income Communities- Bapu Trust Seher Mental Health Project	Forbes Marshal l CSR	1,25,000	1,25,000	Same

19. Publications:

Sr. No.	Name of the Teacher(s) Author	Title of the Paper	Name of the journal	Volume & Pages	Year of publica- tion	ISBN/ ISSN No.	Impact factor
1	Smita Kulkarni and Dr Sadhana Natu	The Study of Government's Efforts of Psycho-socio-political Empowerment of Women in the Panchayat Raj Institution: Document Analysis Approach	IOSR Journal of Humanities and Social Sciences	Vol 21, issue 10, Pp 27-31	2016	ISSN: 2279-0845	1.607
2	Silvia Fernandes and Dr Sadhana Natu	Internet Addiction: Can CBT help?	International journal of Indian Psychology	Vol 4, Issue 1 No 76,	2016	ISSN 2348-5396 ISBN: 978-93-86162-13-7	Info base Index India 3.3 Research bible 5.1, Global impact factor 0.5
3	Silvia Fernandes and Dr Sadhana Natu	Internet Addiction : A Focus group discussion approach	IOSR Journal of Humanities and Social Sciences	Vol 21, Issue 10, pp 19-23	2016	ISSN: 2279-0845.	1.607

4	Dr Sadhana Natu	Impact Assessment and Evaluation of Therapeutic Groups in Low Income Communities- Bapu Trust Seher Mental Health Project	Published by Bapu Trust on Mind and Discourse	Pgs 50	2016	-	-
5	Dr Sadhana Natu	Youth Suicides in Purandar Taluka, Pune District; an exploratory Study	Published by MASUM, Pune	Pgs 50	2015	ISBN 978 93 81352 06 9	-
6	Dr Sadhana Natu	Youth and Mental Health : Urban, Rural and Fringe Realities	Conference proceedings Siddhivinyak College, Pune	-	2015	ISBN 978 81 931444 0 4	-
7	Dr Sadhana Natu	College Mental health : The Disha Experience	Medico Friends Circle Bulletin	Vol 365-66, Pgs 10-13	2015	-	
8	Shivani Vani and Dr Sadhana Natu	Caught in the Web : Matrimonial websites and their complexities	Mindscape : Research Compendium	Vol I	2016		
9	Shivani Vani and Dr Sadhana Natu	Conflict and Terrorism in the contemporary world	Mindscape : Research Compendium	Vol I	2016		
10	Sonika Sharma and Dr Sadhana Natu	Marriage partner : suitability and selection	Mindscape : Research Compendium	Vol I	2016		
11	Sonika Sharma and Dr Sadhana Natu	Kashmir Conflict : A psycho social enquiry	Mindscape : Research Compendium	Vol I	2016		
12	Prithvi Bhushan and Dr Sadhana Natu	Micro Expressions : A psychological enquiry into the concept and its applications	Mindscape : Research Compendium	Vol I	2016		

13	Hemant Raghunauth and Dr Sadhana Natu	To marry or not to marry : A multi-cultural perspective	Mindscape : Research Compendium				
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## 20. Areas of consultancy and income generated :

Nature of the Project	Duration Year From-To	Title of the project	Name of the funding agency	Total grant		Total Grant received till date
				Sanc-tioned	Recei-ved	
Minor project And Consul-tancy	May 2016 to Sept 2016	Impact Assessment and Evaluation of Therapeutic Groups in Low Income Communities- Bapu Trust Seher Mental Health Project	Forbes Marshall CSR	1,25,000	1,25,000	Same

## 23. Awards / Recognitions received by faculty and students

- Dr. Sadhana Natu- Special Invitee for Pan University Network in Global Health and International Collaborative Meet by SPPU.
- Dr. Sadhana Natu was Resource Person for various workshops at State, National and International level.

**Students' Achievements****Table 1: Student participation in scientific events**

Sr. No.	Name of the students	Name of the event	State/ National / Inter-national	Prize/ Medal Won
<b>International conference 2016-17 Poster presentation</b>				
1	Sonika Sharma	INTAR	International	
2	Shivani Vani	INTAR	International	
<b>National Conference 2016-17 Poster presentation</b>				
1	Shivani Vani	National Academy of Psychology Annual Conference	National	
2	Sonika Sharma		National	
3	Pritvi Bhushan		National	
4	Lavina Johnson		National	

## 24. List of eminent academicians and scientists /visitors to the department

1. Mr. Achyut Godbole, renowned Marathi Author
2. Ms. Neelambari Joshi, author.
3. Dr. Manisha Gupte: Co founder MASUM
4. Dr. Medha Kumthekar: Former HOD SNDT University
5. Varsha Pingale: Psychologist and Researcher

6. Kaheele Shinde : Psychologist

25. Seminars/ Conferences/ Workshops organized & the source of funding

Sr. No	Title	Date	No of Participants.
1	For Faculty- Learning and Learner Centered Teaching	21/10/2016	10 assistant professors from Arts Faculty
2	For Students - Goal Setting Workshop	07/09/2016	30 students

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc.?

- **Sachin Shinde** is completing his PhD at London School of Tropical Medicine.
- **Harshada Naik** has completed a Diploma in Global Mental Health Law.

32. Details on student enrichment programmes (special lectures/ workshops/ seminar)

1. Release of the Disha In house magazine Kaleidoscope Volume IX on the topic '100 years of psychology in India'- An annual magazine of the Disha Student Study Circle, Kaleidoscope encourages students to make an attempt to putting their thoughts in writing and laying down the basic for research writing. 19 December 2016
2. PSY - WORLD- The activity of the Department of Psychology involves activities like handwriting analysis, drawing analysis and presentations on topics like Military Psychology, Forensic Psychology and so on. This activity helps to build micro and macro skills of students. Learning occurs by doing. It helps students make the connection from theory to applications. Students learn event management skills, presentation skills and are a part of the process from idea to product. 20 December 2016. This year we had 375 footfalls for this event.

33. Teaching methods adopted to improve student learning:

- Introduced students to various online resources like American Psychological Sciences Wikipedia Initiative.
- Students are going to be facilitated in making an information brochure about courses after PG and UG for Science students.

34. Paper Presentation

Sr. No	Name of Staff	Level	Details
	Dr. Sadhana Natu	International	Chaired International Symposium Titled Gender and Sexuality Challenges and possibilities in the developing world at International Conference of Psychology, Japan. July 2016
2	Dr. Sadhana Natu	International	Discussant in International Symposium in Indian Psychology need for critical perspective and discursive practices.' International Conference of Psychology (ICP), Japan July 2016
3	Dr. Sadhana	International	Interdisciplinary Research in Mental Health at Pan



	Natu		University Network in Global Health and International Collaborative Meet by SPPU (PUNG) September 2016
4	Dr. Sadhana Natu	International	INTAR Peer Support Group and Youth Mental Health- Disha Experience. November 2016
5	Dr. Sadhana Natu	National Chaired Symposium	NAOP: Teaching Psychology Critical Perspectives National Symposium.IIT Madras , December 2016
6	Dr. Sadhana Natu	Chaired Paper Reading Session	NAOP 2016 at IIT Madras , December 2016
7	Dr. Sadhana Natu	Resource Person for Pre conference Workshop	NAOP 2016 at IIT Madras , December 2016 on Qualitative Methodology
8	Dr. Sadhana Natu	Resource Person for Psychology Education and Training Workshop	NAOP 2016 at IIT Madras , December 2016, Syllabus at National level on Social Psychology

Faculty Invited as resource person: Dr. Sadhana Natu was invited as resource person at the following:

1. MASUM – Meaning of Counseling and need for Feminist Counseling, July 2016
2. BAPU Trust National Dissemination- Youth and Mental Health in the context of sustainable development, May 2016
3. Modern Law College- How to initiate a counseling cell, youth and mental health. August 2016
4. Abeda Inamdar College and Bapu trust- Experience of running peer support and speak out groups. August 2016
5. Vidyarthathani manch- ‘Anti Sexual harassment- Legalities and Psychosocial Realities’ at College
6. National Consultation on Anti Sexual Harassment organized by Women’s Studies SPPU. Invited as Core group expert.
7. Department of Sociology SPPU- Need for Multi-disciplinarity for Masters Students.

Activities related with Gender Sensitization/Activities for Health.

1. Gender Champions Club and Department of Psychology organized a Debate conducted on the Topic ‘Gender Equality has already been established in India’. Dr. Mansi Palshekar author, activist and Gender studies expert was invited to Chair the debate.
2. Dr. Sadhana Natu was a resource person to conduct a workshop on the topic ‘Anti Sexual harassment’ for Vidyathani Manch.
3. National Consultation on Anti Sexual Harassment organized by Women’s Studies SPPU. Invited as Core group expert.
4. Workshop on Self Confidence taken by Disha coordinators for Marathi medium girls.

5. World Suicide Prevention Drive: Students conducted a drive in the college campus to spread awareness about the Prevention of Suicide

### Any other Information

Internship opportunity KOSHISH was offered to students at UG level with the view to :

- Provide exposure to students
- Provide a bird's eye view of practices in the field
- Perspective building for everyday practices in psychosocial and people centered work

Number of Students	Name of Org	Nature of task	Remuneration	Duration
03	Bapu Trust	Conducting Interviews for Evaluation for Seher Project	Paid	One month (May 2016)
04	Bapu Trust	Baseline survey for the Bapu Trust	Paid	One month (June 2016)
05	Bapu Trust	Conducting Corner meetings, client observations, observing group meetings	-	15 days
04	Stri Mukti Sangathana	Poster making, Visiting schools, visiting the basti to perform street play	-	15 days
05	Karwack	Conducting a survey with Parents of hobby classes	-	10 days
02	Alochana	Transcriptions, field visits, collaborating articles.	-	15 days
05	Dr. Bhooshan Shukla	Observing and making case histories	-	10 days

### Department of Sociology

1. Courses in collaboration with other universities, industries, foreign institutions

Sr. No.	NGO / INDUSTRY	Nature of Course.
01	Lokayat	Film Screening on Various Issues
02	Tathapi	Domestic Violence & Various Issues

2. Number of papers published in peer reviewed journals (national / international / district) by faculty and students –

FACULTY NAME	RESEARCH PAPER	JOURNAL / CONFERENCE	YEAR
Dr. Jyoti Gagangras	Role Of Women In Administration	Sociology of gender (Poona College)	Dec 2016 (ISBN 978-93-24457-20-7)
	Traditional Education Through New Technology, Syllabus Designers Perspective.	‘Dnyanmay’, Research Journal, Progressive Education Society.	Dec 2016
	Comparative Study Of Women Administrators And Entrepreneurs In Pune District- A Socio Economic Perspective	Indian Sociological Society, Research Journal	Nov 2016

- 3 Student Projects

- A) Percentage of students who have done In-house projects including inter departmental / Programme

ACADEMIC YEAR	TITLE	TOTAL NUMBER OF STUDENTS	STUDENTS DONE PROJECT
2016-17	Socio-Economic Survey of ‘Florist at Chatushruni Temple, During Navaratri’	Conducted by Department of Sociology and Economics.	25

4. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts.

YEAR	TITLE	EXPERTEE	DURATION AND DATE	LEVEL
2015-16	Poster Competition		Sep 2016	FOR UG & PG students
	Child Abuse Awareness Workshop		Oct 2016	
	Film Screening.	Abhivyakti-Lokayat	24 Dec 2016	
	Street-Play on “Women-Foeticide”	Tathapi	07 Jan 2017	
	Street-Play on “Smart-City”			

5. **CONTRIBUTION TO SOCIAL CAUSE :**

NAME	WORK	YEAR
Dr. Jyoti Gagangras.	Provided Funds to ‘One Book One Smile’ organization, PUNE. (Rs/- 1000)	Oct 2016
	Provided Funds for Students Scholarship, Modern College, Ganeshkhind, Pune. (Rs/- 1000)	2016

6. **Recognition**

- Ph D Guide for Sociology by S.P. Pune University

7. **Proposed Activities :**

- State level Seminar on ‘Social and Cultural Transformation through Ages’ jointly with Department of History in association with BCUD, S.P. Pune University
- One day Soft skill Workshop jointly organized with Board for Students’ Welfare, S.P. Pune University

### Department of Biotechnology

#### 6. Participation of the department in the courses offered by other departments:

Title of the Course	Topics/Subjects	Name of the faculty members
B.Voc (Food Processing)	Teaching and Practical	Mr. Tushar Khare

#### 7. Courses in collaboration with other universities, industries, foreign institutions

- Workshop on “Bacterial Identification based on 16s r RNA and rpo beta gene” for M.Sc. students in collaboration with ATG Labs on 5<sup>th</sup> -6<sup>th</sup> Aug 2011.
- Workshop on carrier advancement technique for B.Sc and M.Sc students in collaboration with Pacemakerz, Pune, 13-15<sup>th</sup> Feb 2014.

#### 10. Faculty profile with name, qualification, designation, specialization 2016-2017

Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr. Rekha Gupta	Ph.D. Botany	Head and Associate Professor	Plant Biotechnology	23-R 20-T
Mrs. V. Randive	M.Sc Microbiology, SET	Assistant Professor	Microbiology	11-T 4-R
Mr. Aditya Mulay	M.Sc. Biotechnology, NET	Assistant Professor	Animal Biotechnology	5-R
Mr. Omkar Indari	M.Sc. Biotechnology, NET	Assistant Professor	Biotechnology	-
Mr. Tushar Khare	M.Sc. Biotechnology	Assistant Professor	Biotechnology	1-T 4-R
Mrs. Ankita Pasalkar	M.Sc. Biotechnology	Assistant Professor	Biotechnology	-
Mrs. Mayuri Gosavi	M.Sc Computer Science	Assistant Professor	Computer Science	1-T 3- Industry

T: Teaching; R: Research

#### 13. Student -Teacher Ratio (programme wise)

Course	Number of students	Number of teachers	Student -Teacher Ratio
B.Sc.	170	08	22:1
M.Sc.	45	04	12:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Lab Assistant: 01  
 Lab Attendant: 00  
 Peon: 03

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.**

NET/SET: 07

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received****Details of Extra-Mural Research Projects:**

Sr. No.	Name of the investigators PI and CO-I	Title of the project	Funding agency	Total amount sanctioned in Rs.	Duration of project
1.	Dr. Vinay Kumar	Elicitation of diosgenin production in <i>Helicteres isora</i> suspension cultures	S. P. Pune University	2,40,000	2016-2018

**18. Research Centre /facility recognized by the University**

University committee visited the department. The result is awaited.

**19. Publications: Publications in last FIVE years**

Name of the Faculty	Articles in peer-reviewed indexed journals		Books with ISBN	Book Chapters with ISBN	Proceedings	Total Publications	Total Impact Factor	Total Citations	h-index	SJR
	International	National								
Dr. Rekha Gupta	04	-	-	--	--	04	8.78	87	4	--
Mr. Tushar Khare	06	--	--	01	--	06	9.5	10	02	--
Mr. Aditya Mulay	08	--	--	--	01	08	21.088	80	06	18.4

*Total Citations Courtesy: Google Scholar™*

**List of Faculty Publications :**

S. No.	Name of the authors	Title of the article	Name of the Journal	Vol No.	Page No.	Year	DOI (if any)	ISSN No. of journal	Impact Factor
1	Shriram, V., Kumar, V., Devarumath, R., Khare, T.S. and Wani, S.H.	MicroRNAs as potential targets for abiotic stress tolerance in plants	<i>Frontiers in Plant Science</i>	7	817	2016	doi.10.3389/fpls.2016.00817	1664-462X	<b>4.45</b>
2	Wani SH, Kumar V, Shriram V, Sah SK..	Phytohormones and their metabolic engineering for abiotic stress tolerance in crop plants.	<i>The Crop Journal</i>	4	162-176	2016	doi:10.1016/j.cj.2016.01.010	2214-5141	-
3	Ashwini C Makhale , Parikshit A Bhamburkar, Rekha Gupta, Aditi Deshpande	Isolation of alkalophilic protease producing bacteria from soil and optimization of parameters for protease activity	<i>Asian Journal of Microbiology , Biotechnology and Environmental Sciences</i>	13(2)	371-376	2011		0972-3005	<b>0.676</b>
4	Gupta, Rekha; Prathemesh, Madhuri Rath, Nikhil N Jadhav;	isolation/characterization and identification of endophytic bacteria by 16S rRNA partial sequencing technique from roots and leaves of Prosopis cineraria plant	<i>Asian Journal of Plant Science and Research</i>	5	335-346	2015		2249-7412	<b>1.5</b>
5	Gupta, Rekha; Kedari, Ashwini;	Comparative studies on phytochemical analysis, relative antioxidant potential and free radical scavenging activity from different parts of plant Tridax procumbens	<i>European Journal of Biotechnology and Bioscience</i>	3	11-19	2015		2321-9122	<b>5.4</b>

6	Ashwini Kedari, Rekha Gupta	Evaluation of hemostatic and antimicrobial ability of different parts of plant <i>Tridax procumbens</i> with phytochemical screening	<i>International Journal of Plant, Animal and Environmental Sciences</i>	6		2016	DOI: 10.21276/Ijpaes	2231-4490	1.21
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**21. Faculty as members in****a) National committees**

**Dr. Geeta Morwal** - Member Advisory board of Vocational courses, S P Pune University.

**b) Editorial / Reviewer Boards:**

**Mr. Tushar Khare** - **Member, Reviewer Board:** Reviewer of the Journal: *Archives of Agronomy and Soil Science* (Taylor and Francis, UK).

**25. Seminars/ Conferences/Workshops organized & the source of funding:**

- Summer Training on “Gene Isolation and amplification” for TY BSc students, 20-25<sup>th</sup> June 2016, under DBT Star College scheme.
- Research Induction Program for Life Sciences Post-Graduate students, 6-7<sup>th</sup> September 2016, under DST-FIST Program.

**26. Student profile programme/course wise:**

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
FY BSc (16-17)	120	80	32	48	ND
MSc Part I (16-17)	100	23	5	18	ND

\*M = Male \*F = Female; ND: Result not yet declared

**27. Diversity of Students**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
FY BSc (16-17)	96	04	0
MSc Part I (16-17)	94	06	0

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**  
NET-1, SET - 1**31. Number of students receiving financial assistance from college, university, government or other agencies**

- **Leela Poonawala Foundation Fellowship for Post-Graduate girl students**
  1. Ayushi Mokati (2016-17)
- **DBT-BCIL (Biotech Consortium India Limited, DBT, New Delhi) (2016-17)**
  1. Manish Gidwani



2. Snehal Paigude
3. Prajakta Pednekar
4. Kunal Agarwal
5. Akshay More
- **UGC Single Girl Fellowship for post-graduation (2016-17)**
  1. Gouri Jadhav

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts**

**1. Certificate course (duration 3 months)**

- A certificate course in Skill development on “Natural Product Biotechnology” for MSc students (from 23-12-2016) for enriching their curriculum and employability.

**2. Extra curricular scientific activities**

- A scientific movie with interactive session was organized for both graduate and post graduate students on 21-12-2016 to increase awareness about general health, immunity and viral outbreaks.
- A scientific Quiz competition was organized in the Department for BSc and MSc students on 24-12-2016 to promote communication, presentation skills and knowledge acquisition from various fields of Biological sciences.
- Science exhibition organized on 17.12.16: Students of B.Sc., M.Sc. participated.

**Guest lecture**

S. No	Topic of the lecture	Speaker (Guest Faculty)	Date
1	Career opportunities in the field of Stem cells & Drug discovery technology	Graham T Dempsey Director, Research & Development, Q State Biosciences, USA	21-12-2016

## Department of B.Voc.

1. Names of programmes/ courses offered:

### Levels of Awards

The certification levels will lead to Diploma/Advanced Diploma/B. Voc. Degree in one or more vocational areas and will be offered under the aegis of the University.

Sr. No.	Level	Programmes offered (Multiple exits) for under graduate level
1.	UG	First year B.Voc. Food Processing Technology ( <b>Diploma</b> )
		Second Year B.Voc. Food Processing Technology ( <b>Advanced Diploma</b> )
		Third Year B.Voc. Food Processing Technology ( <b>Bachelor of Vocational</b> )
2.	UG	First year B.Voc. Green House Technology ( <b>Diploma</b> )
		Second Year B.Voc. Green House Technology ( <b>Advanced Diploma</b> )
		Third Year B.Voc. Green House Technology ( <b>Bachelor of Vocational</b> )

Sr. No.	Award	Duration	Corresponding NSQF level
1	Diploma	1 Year	5
2	Advanced Diploma	2 Year	6
3	B.Voc. Degree	3 Year	7

### B.Voc. affiliated to Savitribai Phule Pune University, Pune.

2. Names of Interdisciplinary courses and Departments/ Units involved: **Yes**

- a) Department of Biotechnology
- b) Department of Botany
- c) Department of Political Science
- d) Department of English
- e) Department of Computer Science
- f) Department of Microbiology
- g) Department of Statistic
- h) Department of Commerce

5. Annual/Semester/Choice based credit system (Program wise):

### Semester (Credit System)

Sr. No.	Level	Programmes offered	Annual/ Semester/ Choice based Credit system
1.	UG	F.Y.B. Voc. Food Processing Technology	Semester, Credit system
		S.Y.B. Voc. Food Processing Technology	
		T.Y. B. Voc. Food Processing Technology	
2.	UG	F.Y. B. Voc. Green House Technology	Semester, Credit system
		S.Y. B. Voc. Green House Technology	
		T.Y. B. Voc. Green House Technology	

6. Participation of the department in the course offered by other departments: **Yes**
7. Number of teaching posts sanctioned, filled and actual:

Position	Sanctioned	Filled
Professor	-	-
Associate Professors	1	-
Asst. Professors	2	5
Others Dept (Ad-hoc faculty)	-	4
Clock Hour Basis	-	1

10. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

**List of faculty (2016-2017)**

Sr. no.	Name	Qualification	Designation	Special Subject	Exp. Years
1	Shweta Raichurkar	M.Tech. NET	Assistant Professor	Food Science & Technology	3
2	Shraddha Velhal	M.Tech.	Assistant Professor	Process & Food Engg.	3
3	Akshata Devi	M.Tech. NET	Assistant Professor	Food Science & Technology	1
4	Mrunal Pardeshi	M.Sc.	Assistant Professor	Biotechnology	0.5
5	Neeta Patil	M.Tech.	Assistant Professor	Food & Fermentation Technology	-
6	Madhura Kirane	M.Com.	CHB	Commerce	2

12. Percentage of classes taken by temporary faculty – programme-wise information

2016-2017 Food processing Technology		% of Classes by Ad-hoc		% of Classes by C.H.B		% of Classes by Permanent faculty	
1	F. Y. B.Voc.	100	100	-	-	-	-
2	S. Y. B.Voc.	100	100	-	-	-	-
3	T.Y.B.Voc.	80	100	20	-	-	-

13. Programme-wise Student Teacher Ratio

Sr. No.	Subject	Strength	Faculty		Student : Teacher Ratio	
			Theory	Practical	Theory	Practical
	2016-2017 Course - Food processing Technology					
1	F.Y.B.Voc	50	1	1	17:1	17:1
2	S.Y.B.Voc	37	1	1	18:1	18:1
3	T.Y.B.Voc.	23	1	1	23:1	23:1

14. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sr. No.	Year	Number of non-teaching staff					
		Peon		Lab assistant		Administrative staff	
		Sanctioned	Filled	Sanctioned	Filled	Sanctioned	Filled
2	2016-17	-	1	-	0	-	0

16. Research centre facility recognized by the University: N.A.

- a) Publications: Number of papers published in peer reviewed journals (national / International) by faculty and students:

Publication	Mrs Shweta Raichurkar	Miss Neeta Patil	Total
Journal International	2	1	3
Journal National	2	-	2
International Conference/Seminar/Symposium	1	-	1
National Conference/Seminar/Symposium	1	-	1
State/regional Conference/Seminar	2	-	2
		Total	9

17. Student projects :

Students from B.Voc. Food Processing Technology have completed Industry Training (minimum 90 hours per semester). List of companies is as listed.

List of Industries where students have completed Industry Training during academic year 2014-2017.

Sr. No.	Name of the company	Name of the company	Name of the company
1.	Aloe Fresh Pvt. Ltd., Ahmednagar .	Liberty Entrepreneur, Lonavala.	Radheshyam Foods, Pune.
2.	Aqua Fresh, Baramati	Maganlal Food Products, Lonavla	Rich Fresh Mineral water, Pune.
3.	Asian Bakers, Satara.	Mahanand Dairy, Mumbai	Rocher Ferrero, Baramati.
4.	Asuvara Spices and Pickles, Satara	Majalgaon Shakari Sakar Kharkhana, Majalgaon, Beed	Sahara Agro Pvt. Ltd., Pune.
5.	Atharva Food Products, Pune	Mapro Foods Pvt. Ltd., Wai	Samapda Milk processors, Junnar

6.	Babli Food Products, Pune	Mehta Dairy Pvt. Ltd., Kolhapur	Scheiber Dynamics Dairies,
7.	Bisleri International Pvt Ltd., Mumbai.	National Institute of Green House Technology, Pune.	Sheetal Industries, Pune
8.	Dnyanraj Agro Industry, Kolhapur.	New Era Foundation,	ShriGanesh Food Products, Satara
9.	Ferrerro India Pvt. Ltd., Baramati	N-Joy Aqua, Malajgaon, Beed.	Shrikant Masala, Pune
10.	Frosteer Ice creams Pvt. Ltd. , Kolhapur	Parag Milk food Pvt. Ltd., Chakan	Srinivas Foods, Pune
11.	Ganeshkrupa Masala Udyog, Satara	Parle Agro, Mumbai	STK Pvt. Ltd., Pune
12.	Girme Farms, Pune	Parle Pvt. Ltd., Mumbai	Suhana Masala, Pune
13.	Gokul Dairy, Kolhapur.	Peony Food Products, Pune	Tripur Dairy, Pune
14.	Hindustan Coca Cola Brverage Pvt. Ltd., Pune.	Pesico India Holdings Pvt. Ltd	Venky's Nutrition, Pune
15.	Horticulture Green House Technology, Pune	Prabhat Dairy Limited	Vidya Food Products, Baramati
16.	Kate Food Pvt. Ltd., Pune.	Pratik Food Products, Pune	Waze Foods, Kolhapur
17.	Katraj Dairy, Pune.	Pratik Masale, Pune	WS Bakers, Pune
18.	Laxmi Water Industries, Satara.	Pravin Masale, Pune	

## 18. Diversity of students

Name of course	Academic year	% Students from same state	%Students from other States	% Students from abroad
F.Y. B.Voc. Food Processing Technology	2016-2017	100	0	0
S.Y.B.Voc. Food Processing Technology		100	0	0
T. Y.B.Voc. Food Processing Technology		100	0	0

## 30 Details of Infrastructural facilities:

Internet facility for staff and students : **03 Computer**

32. Details on student enrichment programme (special lecture/ workshops/seminar) with external experts.

**2016-17**

<b>Sr.</b>	<b>Title</b>	<b>Duration and Dates</b>	<b>Level</b>
1	Study skills	1 day- 23-09-16	F.Y.B.Voc
2	World Food Day- Theme: Climate is Changing, food and agriculture must too. a) Poster Competition b) Innovative product development c) Model Making d) Rangoli with food ingredients	1 day- 03.10.16	F.Y.B.Voc, S.Y.B.Voc., T.Y.B.Voc.

33. Teaching methods adopted to improve student learning :
- Power Point Presentations for actual working of machinery used in food industry
  - Industrial visits and educational visits. Making reports on study tour and visits.
  - Inter Departmental practical approach (Biotechnology)
  - Video clips and animations on concerned subjects.
  - Brain storming sessions and Group discussions.
  - Food Quiz, Debate Competitions and Food Vocabulary games.
  - Assignments and class tests to judge their level of understanding
  - On Field activities (Food products, packaging materials and others)
  - Knowledge up gradation activities (Collection of newspaper articles related to advanced technology and recent updates in food industry).
  - Videos on industry processes, safety practices and other topics related to concerned subjects.
  - Market survey.
  - Result analysis and Feedback from students.
  - Regular assignments and class tests.
  - Data analysis through classroom interaction, result analysis, projects, assignments and seminars.
  - The Department plans and executes various curricular and co-curricular activities for achieving the stated learning outcomes
  - Case study
  - Regular interval revisions.

Department of Botany

1. Dr. Raval Prachi and Dr. Kshirsagar Prachi - Attended a State level conference on 'Climate change and ecology organized by Department of Botany and Chemistry, Baburao Gholap College, Sangavi, Pune – 411027 on 14<sup>th</sup> & 15<sup>th</sup> December 2016.
2. Dr. Raval Prachi and Dr. Kshirsagar Prachi - Attended a one day workshop on 'Biological invasion w.r.t. conservation of Indian wild-life jointly organized by Biosphere and Pune Forest Division and Pune wild-life wing, Govt. of Maharashtra Botanical Survey of India, ME FCC and bio-diversity management committee P.M.C. Pune on 6<sup>th</sup> October 2016.
3. Dr. Kshirsagar Prachi - XXVI Annual conference of Indian Association for angiosperm Taxonomy and International seminar on 'Conservation and sustainable utilization of Bio-diversity' organized by Department of Botany- Shivaji University. Kolhapur. From 7<sup>th</sup> - 9<sup>th</sup> November- 2016.
4. Dr. Raval Prachi - A paper published in a proceedings of National Conference on Recent trends in Botany organised by Padamashri Vikhe Patil College, Pravaranagar.
5. Renovation of Botanical Garden
6. Development of plant nursery which will be run for commercial selling of plants by students of Earn & Learn scheme.
7. Four students worked as volunteer at KISAN-2016 held at Moshi. Pune from 14<sup>th</sup> – 18<sup>th</sup> December.
8. SCIENCE Exhibition "Anubhuti" held by Modern College of Art. Science & Comm. Ganeshkhind twenty one students participated with their eight projects. A project presented by F.Y.B.Sc. student Alfiya Attar received third prize and title of the project was floristic study of Ghodeshwar.

### Department of Chemistry

3. Number of teaching posts:

Position	Sanctioned	Filled
Professor Emeritus	—	—
Associate Professors	01	01
Asst. Professors	12	12
Others	-	-

4. Faculty profile with name, qualification, designation, specialization

**Year: 2016-17**

	Name of the staff	Qualification	Designation	Specialization	No. of Years
1.	Dr. Madhuri. S. Kulkarni Head of Dept.	M.Sc. Ph.D. NET	Asso. Prof.	Organic Chem.	15
2.	Mr. Dnyaneshwar Thakar	M.Sc. NET	Asst. Prof	Inorganic Chem.	9
3.	Mrs. Anuradha Bhamidi	M.Sc. NET	Asst. Prof	Inorganic Chem.	9
4.	Dr. Sushama Katade	M.Sc. Ph.D	Asst. Prof	Organic Chem.	9
5.	Dr. Mukula Kulkarni	M.Sc. Ph.D	Asst. Prof	Physical Chem.	9
6.	Dr. Mohini Kute	M.Sc. Ph.D	Asst. Prof	Physical Chem	10
7.	Mrs. Ketaki Saravate	M.Sc. NET, SET	Asst. Prof	Organic Chem.	6
8.	Mrs. Gayatri Shrotriya	M.Sc. NET	Asst. Prof	Organic Chem.	10
9.	Mrs. Revati Nagarkar	M.Sc. NET	Asst. Prof.	Organic Chem.	7
10.	Dr. Supriya Rishikeshi	M.Sc. Ph.D. NET	Asst. Prof	Analytical Chem	4
11.	Dr. Ritu Mamgain	M.Sc. Ph.D	Asst. Prof	Organic Chem.	2
12.	Ms. Sampada Sonawane	M.Sc. NET	Asst. Prof	Organic Chem.	3
13.	Ms. Varsha Kand	M.Sc.	Asst. Prof	Inorganic Chem.	1

5. Number of academic support staff (technical) and administrative staff; sanctioned and filled : Laboratory attendants-2; Peons-3
6. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil. / P.G. :  
Ph.D. : 6      M.Sc. NET/SET : 8



7. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received :

Sr. No.	Name of staff member	Title and Nature	Funding agency and other details
1	Dr. Sushma Katade	Synthesis and Characterization of Pyrazole Derivatives (2016-18)	BCUD, SPPU Minor (1,90,000)

8. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: 2 UGC projects completed; Total Grant – Rs. 3,45,000/- , BCUD-2,90,000/-
10. Publications: Number of papers published in peer reviewed journals : 01 national
11. Faculty as members in Indian Association of Chemistry Teachers:  
 1. Gayatri Shrotriya  
 2. Ketaki Saravate
12. List of eminent academicians and scientists / visitors to the department  
 1. Dr. Sandeep A. Pingale, TROVAGENE, California, USA on 21.12.2016  
 2. Prof. B. H. Shrikanth, Sciencia on 6 December 2016  
 3. Dr. Geeta Sharma, Department of Chemistry, S. P. Pune University  
 4. Dr. Neeta Zatakia, Department of Chemistry, S. P. Pune University  
 5. Interaction with Prof. Kaoru Yamanouchi, Vice Dean, School of Science, University of Tokyo.
13. Student profile programme/course wise:

Year	Name of the Course/programme UG-B.Sc., PG-M.Sc.	Applications received	Selected	Enrolled	
				*M	*F
2016-17	UG	29	29	06	23
	PG	177	44	23	21

\*M = Male \*F = Female

14. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? - 03
15. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts.  
 i. Summer Training programme for S.Y.B.Sc. students under Star DBT 27<sup>th</sup> - 30<sup>th</sup> June 2016  
 ii. Skill Based Course in Analytical Chemistry -Self funded- Ongoing.

### Department of Computer Science

3. Names of Interdisciplinary courses and the departments/ units involved:

Sr. No.	Name of Department	Name of Course	Name of the staff	Academic Year
1	Computer Science	Computer Networking and Hardware Skill Development Course	Mr. Kumod Sapkal	2016-17

4. Participation of the department in the courses offered by other departments:

Sr. No.	Name of Department	Name of Course	Name of the Subject	Name of the staff	Academic Year
1	B.Voc.	B.Voc.	Computer Application in Food Industry	Mr. Niket Tajne	2016-17
2	Microbiology, Commerce, Chemistry, Economics	M.Sc.(Micro), M.Com, MA	Introduction to Cyber Security	Mr. Amol Patil	2016-17
3	Microbiology, Chemistry	M.Sc.(Micro), M.Com, MA	Introduction to Cyber Security	Ms. Sonal Kulkarni	2016-17

5. Courses in collaboration with other universities, industries, foreign institutions, etc.:  
i. Faculty Development Program on “Linux Administration” by Mr. Uday Basak, Focus IT Training Solution.
6. Details of courses/ Programme discontinued (if any) with reasons: M.C.A (Science) course is discontinued, since Savitribai Phule Pune University has discontinued this course from science faculty.
9. Number of teaching posts A.Y. 2016-17

	Sanctioned	Filled	Actual (including CAS&MPS)
Professor	-	-	-
Associate Professors	-	-	-
Asst. Professors	21	21	-
Others	07	06	05

7. Faculty profile with name, qualification, designation, specialization.

Sr. No.	Name	Qualification	Designation	Specialization	Years of Experience
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1	Dr. S. S. Bhatambrekar	M.Sc, M.C.A(Science)	H.O.D.	M.Phil.(Physics), Ph.D. (Computer Science)	24
2	Mr. Kumod Sapkal	M.C.A(Science), NET -JRF	Asst. Prof.	Pursuing Ph.D.	15
3	Dr. Pallawi Bulakh	M.Sc. (Comp. Sci.)	Asst. Prof.	M.Phil. (Comp. Sci.), NET, Ph.D.	15
4	Mrs Dipali Meher	M.C.S, NET	Asst. Prof.	M.Phil. (Comp. Sci.), Pursuing Ph.D.	13
5	Mrs. Ranjana Shevkar	M.Sc.(Scientific Computing), SET	Asst. Prof.	M.Phil.(Pursuing)	12
6	Mr. Ambike Satish	M.C.A(Sci.)	Asst. Prof.	Pursuing Ph.D.	7
7	Ms. Sonal Kulkarni	M.Sc. (Comp. Sci.)	Asst. Prof.		9
8	Mrs. Meenal Jabde	M.Sc. (Comp. Sci.)	Asst. Prof.		9
9	Mr. Chirantan Dixit	M.E.(Comp. Sci.), M.B.A.(systems, Marketing)	Asst. Prof.		7
10	Mr. Prasanna Chavan	M.C.A.(Sci)	Asst. Prof.		6
11	Mr. Nilesh Arote	M.Sc. (Comp. Sci.)	Asst. Prof.		4
12	Mr. Niket Tajne	M.C.A. (Sci)	Asst. Prof.	Pursuing Ph.D.	4
13	Ms. Dipali Tamhane	M.Sc.(Comp. Sci.), SET	Asst. Prof.		4
14	Ms. Nisha Rathod	M.C.A. (Sci.)	Asst. Prof.		4
15	Mr. Amol Patil	M.C.A. (Sci.),SET	Asst. Prof.		2
16	Mr. Vedant Mulay	M.Sc. (Comp .Sci.)	Asst. Prof.		2
17	Ms. Ashwini Pawar	M.Sc. (Comp. Sci.)	Asst. Prof.		2
18	Ms. Priya Pai	M.Sc. (Comp. Sci.)	Asst. Prof.		1
19	Mrs. Trupti Sohoni	M.Sc. (Comp. Sci.)	Asst. Prof.	M.Phil. (Comp. Sci.)	4
20	Ms.Yashoda Barve	M.Sc (IT), SET	Asst. Prof.		8
21	Ms. Bilquis Kacha	M.Sc. (Comp. Sci.)	Asst. Prof.		1

## 8. List of senior visiting faculty :

Sr.	Name of Lecturer	Topic
1	Mr. Atul Patil, Assistant Professor, COEP	Soft skill
2	Ms. Yogini Joshi, Consultant in Soft Skill	Soft skill
3	Ms. Priti Jog, Vising lecturer, MIT Pune	Soft skill

10.	4	Mr. Piyush Pahade, Consultan in Softskill	Soft skill
	5	Mr. Girish Jog, (Director of Avocado System)	Interaction 2016-17
	6	Mr. Kailash Tare, Director of Architecture in NASDAQ	Soft skill

Student-

Teacher Ratio (program wise):

Course Name	Student-Teacher Ratio
B.Sc.(Computer Science)	30:1
M.Sc.(Computer Science)	12:1

11. Number of academic support staff (technical) and administrative staff; Sanctioned and filled:

Academic Year	2016-17		
	Sanctioned	Filled	Actual
Technical (System Admin)	02	02	02
Others	01	--	--

12. Qualifications of teaching faculty with DSC/D.Litt./Ph.D./MPhil/PG.:

Degree	Number of Faculties
Ph.D.	2
M.Phil..	4
Ph.D.Registered	4
PG	10
NET	3
SET	4

13. Publications:

- a) Publication per faculty : Number of papers published in peer reviewed journals (national/International) by faculty and students

Sr. no	Name of Staff	Number of Publications
1	Dr. S. S. Bhatambrekar	1
2	Mrs. Dipali Meher	1
3	Smita Dhongde	1
4	Satish Ambike	1
5	Chirantan Dixit	2
6	Savita Mohurle	3

Sr. No.	Detail / Particulars	Total
1	Monographs	1
2	Chapter in Books	1
3	Books Edited	1
4	Books with ISBN/ISSN Numbers with details of publishers	4
5	CitationIndex	1
6	SNIP	1

7	SJR	1
8	Impactfactor	1
9	h-index	1

## 14. Student projects:

- Akhilesh Chauhan student of F.Y.B.Sc. Presented paper on “Isolation and Characterization of Lectins from Red Kidney Bean and Chick Pea”, on 28-29 July 2016 in IISER Pune.
- Leave Management Application: This is an application to sanction college employee leaves. Without waiting long in the queues to approve the leave, apply digitally here & also see for either it is CL/DL/Medical leave with the sanction status. Student Details: Aniket Deshpande & Swapnil Dani
- Student Feedback Application : This is an application to get feedback from all stakeholders & analyze of data. Student Details : Vishal Singh & Rutuja Mokashi
- Credit Based System : This is an application to record for Mark Entry for Internal Evaluation for credit based system. Student Details: Kedar Labde & Prashant Satpute

## 15. List of eminent academicians and scientists/visitors to the department:

Sr. No.	Eminent academicians and scientists/visitors to the department
1	Dr. Vilas Kharat, HOD, Computer Science Department, SPPU, Pune
2	Dr. Anil Sahastrabudhe, Ex Director COEP, Pune
3	Mr. Sachin Teke, founder of m-indicator App, Mumbai
4	Dr. Shaligram, HOD Electronics , SPPU Pune
5	Dr. Captain Chitale, Ex-Dean PUMBA.
6	Dr. Shailaja Shirwaikar, Head of Computer Science Department, N.S. Wadia College.
7	Dr. Ajay Kumar, Associate Professor, J.S.P.M.
8	Dr. Jyoti Yadav, SPPU Pune
9	Dr. Ashok Kolaskar, Ex-Vice Chancellor of Pune University
10	Dr. Y.S. Patil, Professor, VAMNICOM
11	Mr. Shankar Kalmani, Director, Sarathi Group
12	Mr. Wakasukini, Fin Techno Bridge, Partner
13	Mr. Anandsagar Shiralkar, M.D., Fin Techno Bridge , Pune
14	Mr. Sanjay Gandhi, CEO, Jetking
15	Mr. Sameer Mahajan, Symantec, Pune
16	Dr. G.S. Mani, Senior Scientist , DRDO, Pune
17	Dr. Sanjay Kadam, CDAC, Pune
18	Mr. Sheetal Pansare, CEO, Future Dream
19	Mr. Vivek Sawant, Director, MKCL
20	Mr. Sunil Avhad, Vice President, IGATE
21	Mr. Girish Jog, Director Engineer, AVOCADO
22	Mr. Pranav Wangikar, H.R. Manager, Persistent
23	Mrs. Sheetal Parekh, EXFO pvt. Ltd.

16. Seminars/ Conferences/ Workshops organized & the source of funding  
A) Soft Computing (2012-13)

17. Student profile programme / course wise:

Academic Year	Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass %
				*M	*F	
2015-16	F.Y.B.Sc. (Comp. Sc.)	217	217	85	132	73.3
	S.Y.B.Sc. (Comp. Sci.)	146	146	72	74	87.11

\*M=Male \*F=Female

18. Diversity of Students:

Academic Year	Name of the Course	% of students from the same state	% of students From other States	% of students from abroad
2015-16	F.Y.B.Sc. (Comp. Sci.)	99.13	0.8	0
	S.Y.B.Sc. (Comp. Sci.)	97.94	1.36	00.68
	T.Y.B.Sc. (Comp. Sci.)	99.23	0.76	0

19. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sr. No.	Name of student	Exam	Post
1.	Dipali Meher	NET	Asst. Professor
2.	Dipali Tamhane	SET	Asst. Professor

20. Student progression:

Student progression	Against % enrolled
UG to PG	90%
PG to M.Phil.	1%
PG to Ph.D.	1%
Ph.D. to Post-Doctoral	Nil
<b>Employed</b>	
• Campus selection	60%
• Other than campus recruitment	35%
Entrepreneurship/Self-employment	5%

## 21. Details of Infrastructural facilities

- a) Library: Central Digital library made available to staff and students
- b) Internet facilities for Staff & Students: 24 hours AIRCEL 10mbps (megabits per sec)
- c) Class rooms with ICT facility: 06
- d) Laboratories: 04

## 22. Number of students receiving financial assistance from college, university, Government or other agencies:

Academic Year	Agency/ Name of the scheme	Class	Number of Students
2015-16	SC & ST Scholarship	F.Y.Comp.Sci.	27
		S.Y.Comp.Sci.	39
		T.Y.Comp.Sci.	18
		MSc-I	3
		MSc-II	2

## 23. Details on student enrichment program (special lectures / workshops / Seminar) with external experts:

- Skill development Programs

## 24. Teaching methods adopted to improve student learning:

- Assignments, notices Through mails and flint app
- Research Paper Review
- Open Book Test
- Remedial Lectures & Practicals
- Question Paper Solving

## 25. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Students take part in various activities of college and university namely

- Contributed to College Welfare funds
- Financial support to underprivileged students by Staff (Shrawani Sutar)

## 26. Highlights of the department

- Induction program for PG Students & their parents.
- Students participated in Science Association Competition like posters, projects & power point presentation.
- Students involved in research paper writing.

## Annexure-I

Details of Books with ISBN/ISSN numbers with details of publishers:-

<b>Research Publication in Journal and Proceeding</b>			
<b>Sr. No.</b>	<b>Name of Author</b>	<b>Journal / Proceeding Details</b>	<b>Year of Publication</b>
1	Mr. Chirantan P. Dixit	International Journal of Innovative Research in Science Engineering and Technology	2016
2	Mr. Chirantan P. Dixit	International Journal of Innovative Research in Computer and Communication Engineering	2016
3	Mrs. Dipali Meher	International Journal of Science and Research	2016
4	Mrs. Smita Dhongade and Mr. Satish Ambike	International Journal of Information Technology & Computer Science respective Pezzottaite Journals	January-March-2015
5	Dr. S. S. Bhatambrekar, Savita Mohurle, Madhuri Khandagale, Madhavi Chandlekar and Kavita Chaudhari	Proceedings of Eleventh The IIER International Conference, Singapore	Feb-15
6	Dr. S. S. Bhatambrekar, Sonal Kulkarni, Savita Mohurle, Pranav kumar, Shashank Naik, Shrikant Pokale	International Conference on Information Technology and Management Science (ICITMS 2014), Hon Kong	May-14
7	Dr. S. S. Bhatambrekar, Savita Mohurle and Sonal Kulkarni	Progress in Science and Engineering Research Journal	Apr-14



## Department of Electronic Science

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

**Dr. Saroj Hole was awarded with Ph.D. degree on 26th August 2016.**

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG -  
**1-Ph.D., 1-Submitted thesis, 3-Enrolled for Ph.D., 2 P.G.**

19. Publications:

- a) Publication per faculty:

Number of papers published in peer reviewed journals (national / international) by faculty and students:

**International:-**

Name of the Paper	Name of the Author	Conference/Journal	ISSN number
WSN Application For Crop protection To Divert Animal Intrusions In The Agricultural Land	Varsha Bapat	Computer and Electronics in Agriculture( Elsevier) Accepted in December 2016	0168-1699
Development of Crop Damage Simulation Tool for Animal attack on the crop field	Varsha Bapat	Agriculture, Ecosystems and Environment (Elsevier), June 2016. Under review	0167-8809
Comparative study on Glare Effect and Luminous Intensity Distribution Due to positional Changes of Luminaries	Pradnya Pathakji	International Journal on Recent and Innovation Trends in Computing and Communication	2321-8169

**National:-**

Name of the Paper	Name of the Author	Conference/Journal
A New Method To Teach Embedded System Design	Varsha Bapat	National Conference on " Innovative Teaching techniques" at MIT, Kothrud, Pune 6-7th December 2016
A poster on "Development of Risk Alert System Tool To Estimate Risk Of Animal attacks on Crops", selected for National Conference.	Varsha Bapat	National Conference on Applications of Electronics and Computer Science, At Kaveri College, Pune. 20,21st January 2016
A poster on "LPG Gas Sensor Driver" selected for National Conference.	Mrinalini Bhadane	National Conference on Applications of Electronics and Computer Science, At Kaveri College, Pune. 20, 21st January 2016

20. Areas of consultancy and income generated:
- Consultancy for Development of Renewable Energy Park in a school premises at Thane, Mumbai under Thane Municipal Corporation through Foundation for Innovative Research
22. Student projects: Designed microcontroller based **Electronic Voting Machine**.
23. Awards / Recognitions received by faculty and students:  
**Dr. Saroj Hole:-** Ph.D. notification 63/2016 dated 26/08/2016 from Sant Gadgebaba Amravati Vidyapeeth.
24. List of eminent academicians and scientists/visitors to the department

Sr. No.	Name of Academician / Scientist	Designation	Institute
1.	Dr. A. D. Shaligram	Head	Department of Electronic Sc., SPPU, Pune
2.	Dr. G. S. Mani	Vice Chair, IEEE, Pune Section, Professor,	JSPM engineering College, Hadapsar.
3.	Dr. Aditya Abhyankar	Professor and Head	Department of Technology, SPPU, Pune.
4.	Dr. Sandeep Meshram	Associate Professor	Department of Geology, College of Engineering, Pune
5.	Mr. Arvind Dandekar	Director	Green 3Di, Architechure and Interior Consultant
6.	Mr. Sharad Pustake	Advisor, Cleantech and Energy	Department of Science and Technology, SPPU, Pune.
7.	Mr. Bhuvanesh Kulkarni	Consultant	Independent Education Management Professional

25. Seminars/ Conferences/Workshops organized & the source of funding
- **Department has organized State Level Workshop on "Role of Advanced Sensors in Development of Smart City" under Quality Improvement Programme of Savitribai Phule Pune University.**
  - Workshops/Training Programs **attended** by the staff
    1. One of the staff members completed 3-days Training on "Raspberry Pi"
    2. Two of the staff members participated in One day workshop on COMPSOL software tool for research on 30<sup>th</sup> Aug. 2016.
    3. Two of the staff members participated in Two days workshop on "Research Methods and tools required in Data analysis"
    4. One of the staff member attended 7 days short term course in 'Recent trends in Microfluidics' organized by Dept. of Nanoscience, Mumbai University.

30. Details of Infrastructural facilities  
180-Experimental kits,  
20 Computers using windows-7 Operating System,  
8-Application software.
33. Teaching methods adopted to improve student learning: Shown International Motivator Mr. Sandeep Maheshwari's audio visual clip 'Never Give Up' to the students for their encouragements.
34. Participation in Institutional Social Responsibility (ISR) and Extension activities:
  - Department has taken initiative for E-Waste management of the college and Awareness drives in the nearby society. College has entered into an MOU with Kuldeep e-Waste Company in this regard. Total E-Waste collection of 430 Kgs. from Electronics and Computer department.
  - One of the staff member extends help for placement of M.Sc. Electronics Students, Department of Electronics, SPPU, Pune .
35. Highlight of the department  
Student involvement in preparation of Experiment kits.

### Department of Mathematics

4. Name of Interdisciplinary courses and the departments / units involved

Interdisciplinary Courses (Undergraduate)	B.C.A.(Science)
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5. Annual / semester / choice based credit system (programme wise) :-

Pattern	Name of the program
Credit system	F.Y.B.C.A.(Science)

10. Faculty profile with name, qualification, designation, specialization

Details of Faculty recruited in 2016-17

Name	Qualification	Designation	Specialization	Experience (years)
Ms. Pradnya Nanavare	M.Sc., SET	Assistant Professor	Mathematics	----
Ms. Ragini Wadkar	M.Sc.	Assistant Professor	Mathematics	----
Ms. Jayashree Shinde	M.Sc.	Assistant Professor	Mathematics	----

11. List of senior visiting faculty :-

Sr. No.	Name of the Visiting Faculty
1	Ms. Apeksha Pawar

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty :-

Sr. No.	Class	Percentage of lectures delivered By temporary faculty	Percentage of practicals taken by temporary faculty
1	B.Sc.	00	00
2	B.Sc.(Computer Science)	00	12.5

## 13. Student-Teacher Ratio (programme-wise) :-

Sr. No.	Class	Student Teacher Ratio (theory + practical)
1	B.Sc.	15 : 1
2	B.Sc. (Computer Science)	35 : 1

## 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M-Phil/ PG. :-

Qualification of Teaching faculty with PG :-

Sr. No.	Name	Qualification
1	Mrs. Swati Kandharkar	M.Sc.
2	Mrs. Shamal Deshmukh	M.Sc. , NET , SET , M.Phil.- Thesis submitted
3	Mrs. Jayshree Jain	M.Sc. , NET , SET
4	Mrs. Pratibha Pawar	M.Sc. , NET
5	Ms. Pradnya Nanavare	M.Sc. , SET
6	Ms. Ragini Wadkar	M.Sc.
7	Ms. Jayashree Shinde	M.Sc.

## 17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total Grants received:-

Departmental student's projects funded by DBT

Sr. No.	Name of the Project
1	Tower of Hanoi
2	Beauty of Mathematics
3	Prey predator model
4	Musical Maths
5	Mathematics in nature
6	Pythagoras theorem
7	Pascal triangle
8	Platonic solids

Department has received funds from DBT

- Recurring – Rs. 2,00,000/-

## 20. Areas of consultancy and income generated :-

Sr. No.	Name of the faculty	Area of expertise
1	Mrs. Swati Kandharkar.	Discrete Mathematics, Algebra.
2	Mrs. Shamal Deshmukh.	Operator Theory.

3	Mrs. Jayshree Jain.	Operations Research.
4	Mrs. Pratibha Pawar.	Graph Theory.
5	Ms. Pradnya Nanavare.	Linear Algebra
6	Ms. Ragini Wadkar.	Differential Equations
7	Ms. Jayashree Shinde.	Complex Analysis, Topology

## 22. Student projects :-

- a) Percentage of students who have done in-house projects including inter-departmental/ programme : - 36%

## 23. Awards/recognitions received by faculty and students:

Mrs. Swati Kandharkar received certificate of appreciation by Ministry of Finance, Government of India as a taxpayer in 'Bronze' category.

## 24. List of eminent academicians and scientists/ visitors to the department :-

Sr. No.	Name of the Visiting Faculty	Designation	Institute
1	Mrs. Jyoti Kajale	Expert	
2	Dr. Prashant Alegaonkar	Associate Professor	Defense Institute of Advanced Technology, Pune.
3	Dr. Jacob Marthene	Assistant Professor	University of Massachusetts-Amherst, USA
4	Dr. Maitreyee Kulkarni	Research student	Louisiana University, USA

## 26. Student profile programme/ course-wise :-

Name of the Course / programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			*M	*F	
F.Y.B.Sc.	75	75	53	22	-----
S.Y.B.Sc.	34	34	19	15	-----
T.Y.B.Sc.	22	22	08	14	-----
F.Y.B.Sc.(Computer Science)	286	264	166	98	-----
S.Y.B.Sc.(Computer Science)	119	119	56	63	55.46

\*M=Male \*F=Female

## 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc.	----	----	----
B.Sc. (Computer Science)	98.27	0.99	0.74

## 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. :-

Sr. No.	Name of the student	Cleared the examination
1	Mr. Vipin Mugave	IIT-JAM

## 30. Details of Infrastructural facilities :-

- a) Internet facility for staff and students : - 01 computer for staff  
(Speed 500 KBPS, AIRCEL)
- b) Staff Room : 1 well-furnished.

## 32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

## • Guest Lectures :

Name Of the Guest	Date	Topic
Dr. Jacob Matherne	24 December 2016	Career In Mathematics
Dr. Maitreyee Kulkarni		

- C- programming certificate course
- Guidance lectures for Competitive Examination.
- Organizing student activities such as Mathematics Club, Screening of Mathematical videos.
- Bridge course for Biotechnology students.

## 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Interactions with 3<sup>rd</sup> and 4<sup>th</sup> standard students during NSS camp on 'Fun in Mathematics'.
- Participation in 'Tree Plantation Drive'.

Department of **Microbiology**

6. Participation of the department in the courses offered by other departments:

**Environmental Science:** During 2016-17 Mrs. Gauri Bhagat and Ms Yashashree Waikar have participated in teaching Environmental Science course for SYBSc (Computer Science, Biotechnology, General Science and B. Voc) students.

9. Number of teaching posts

	Sanctioned	Filled
Asst. Professors	11	11

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sr. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1	Dr. Manasi	MSc, PhD, SET	Assist. Prof.	Microbiology	2.5 yrs	_____
2	Dr. Sougata	MSc, PhD.	Assist. Prof.	Microbiology	1.5 yr	_____
3	Mr. Shrikant Bhute	M.Sc., SET, CSIR-UGC NET; Pursuing Ph.D (Thesis submitted) Mr. Shrikant Subhash Bhute Teaching experience of 4	Assist. Prof.	Microbiology	4 yrs	—
4	Ms Debangi Chattopadhyay	M.Sc	Assist. Prof.	Microbiology	3.5 yrs	—
5	Ms Yashashree Waikar	M.Sc	Assist. Prof.	Microbiology	2 yrs	—

11. List of senior visiting faculty:

Guest Lectures by:

- Dr. Yogesh Shouche**, Scientist E, MCC-NCCS, on 'Next Generation Sequencing' for M. Sc. I students. (2016-17) at MCC-NCCS.
- Dr. Santosh Sutar**, Assistant Professor, Yashvantrao Chavan School of Rural Development, Shivaji University, Kolhapur delivered two days lecture on "Non-parametric tests (Run test, Sign test, Wilcoxon's signed Rank test, Mann-Whitney test) and its problem solving" on 19/09/16 and 20/09/16 for MSc I students.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Sr. No.	Class	Lectures	Practicals
1	FYBSc	0 %	0%

13. Student -Teacher Ratio (programme wise):

Sr. No.	Class	Student -Teacher Ratio (For lectures)	Student -Teacher Ratio (For practical batches)
1	FYBSc	70:1	20:1
2	SYBSc	33:1	21:1



3	TYBSc	5.5:1	13:1
4	MSc I	11:1	11:1
5	MSc II	11:1	14:1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:

Sr. No.	Qualification	Number
1	Ph.D	4
2	Pursuing Ph.D (thesis submitted)	1
3	M.Phil	1
4	NET/ SET	7
5	M. Sc	6

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

a) **DBT-STAR scheme:**

UG projects carried out (2016-17):

- a) Interdisciplinary project: 1 MSc II Microbiology student (Tanay Bhagwat) with 2 TYBSc Physics students)  
b) 24 students (8 projects):

S.no	Name of Project	Participating students	Class
1	Can dog drool kill the germs	Mohini Nikam, Komal Sathe	SYBSc
2	Grains Agar / Biofertilizer	Tejas Chavan, Mahesh Choudhari, Bhushan Talele, Shubham Barmukh, Jaydeep Kshirsagar, Dhananjay Mukhekar, Amol Sarode	TYBSc
4	Antimicrobial activity of copper nanoparticles	Prajakta Birjadar, Jyoti Jagtap, Renuka Bhalerao, Apurva Pankar	TYBSc
5	Microbial Contamination of Indian Notes in Circulation	Apurva Pankar, Jyoti Jagtap, Priyanka Patel, Prajka Birajdar	TYBSc
6	Cellulase activity/ pond water organisms	Partik Shirsathe, Arinjay Gire, Bishwarup Sarkar, Rucha Joshi , Manish Pawar , Grishma Deshpande, Kanchan Sawant	FYBSc
7	Pani Puri KA Tension	Rutuja Tiwari, Parineeta Maske, Akshata Gole	TYBSc
8	Effect of <i>Solaneum Melongela</i> on Oral Microbiota of Street Dogs	Gandhali Ghate, Jaydeep Kshirsagar, Tejas Chavan	MSc I & TYBSc

b) DST-FIST:

PG Projects: 26 students (13 projects) (2015-16):

Sr.No.	Name of Students	Title of Project
1	Lata Mahajan Bharati Gole	Bioconversion of Glycerol into value added compounds using Fungi
2	Shweta Nalawade Kajal Mulla	Isolation and characterization of Endophytes from <i>Dioscorea pentaphylla</i> , <i>Gloriosa superba</i> and <i>Dioscorea oppositifolia</i> with respect to their plant growth promoting potential
3	Rashmi Natu Manali Saindane	Evaluation of antimicrobial activity of extracts of some traditionally used medicinal plants against pathogens causing UTI.
4	Yogita Patil Gayatri Sahastrabuddhe	Screening of actinomycetes for the production of anticancer enzyme L-asparaginase
5	Ankita Joshi Apoorva Joshi	Isolation and characterization of plant growth promoting Rhizobacteria from rice rhizosphere
6	Prashant Jambhale Vyankatesh Naik Kishor Sonawane	Biocontrol of <i>Fusarium</i> - wilt pathogen of Pomegranate
7	Anuja Patil Pranita Sahasrabuddhe	Plasmid profiling and study of selected virulence factors of Multidrug resistant clinical isolates of <i>Pseudomonas</i> , <i>Klebsiella</i> and <i>E.coli</i>
8	Snehal Dixit Sonali Pawar Reshma Sawant	Antimicrobial and antibiofilm activity of <i>Allium sativum</i> (Garlic), <i>Syzygium aromaticum</i> (Clove oil), and <i>Sapindus mukorossi</i> (Reetha) on multidrug resistant clinical isolates of <i>Pseudomonas</i> , <i>Klebsiella</i> and <i>E.coli</i>
9	Sukomal Kate Kashmira Badgujar	Screening and isolation of pigment producing bacteria from soil
10	Maliyackal Jini Chacko	<i>Barleria prionitis</i> leaf extract mediated synthesis of silver and gold nanoparticles showing antibacterial and antibiofilm activity
11	Sonal Gurav	<i>Dioscorea oppositifolia</i> tuber extract mediated synthesis of silver nanoparticles and gold nanoparticles showing antibacterial and antibiofilm activity.
12	Ashwini Harke	Anticancer activity of silver and gold nanoparticles synthesized using <i>Gloriosa superba</i> rhizome extract
13	Shraddha Kadlak Smita Dhumane Sayali Borde	Isolation and characterization of Pectinase producing organisms

19. Publications:

a) Publication per faculty:

Number of papers published in peer reviewed journals (national/international) by faculty and students

Research Publications of faculty: 2016-17: 4

Dr. Sougata Ghosh: 3

Mr. Shrikant Bhute: 1

Details are as follows:

- Ghosh S**, Gurav SP, Harke AN, Chacko MJ, , Joshi KA, Dhepe A, Charolkar C, Shinde VS, Kitture R, Parihar VS, Banerjee K, Kamble N, Bellare J, Chopade BA (2016) *Dioscorea oppositifolia* mediated synthesis of gold and silver nanoparticles with catalytic activity. *Journal of Nanomedicine and Nanotechnology*. 7:5.

2. Suryavansh MV, **Bhute SS**, Jadhav SD, Bhatia MS, Gune RP, Shouche YS (2016) Hyperoxaluria leads to dysbiosis and drives selective enrichment of oxalate metabolizing bacterial species in recurrent kidney stone endures. *Scientific Reports*. 6:34712:DOI: 10.1038/srep34712
3. **Ghosh S**, Chacko MJ, Harke AN, Gurav SP, Joshi KA, Dhepe A, Kulkarni AS, Shinde VS, Parihar VS, Asok A, Banerjee K, Kamble N, Bellare J, Chopade BA (2016) *Barleria prionitis* leaf mediated synthesis of silver and gold nanocatalysts. *Journal of Nanomedicine and Nanotechnology*. 7:4.
4. **Ghosh S.**, Harke A.N., Chacko M. J., Gurav S.P., Joshi K.A., Dhepe A., Dewle A., Tomar G.B., Kitture R., Parihar V.S., Banerjee K., Kamble N., Bellare J., Chopade B.A.(2016) *Gloriosa superba* mediated synthesis of silver and gold nanoparticles for anticancer applications. *Journal of Nanomedicine and Nanotechnology*. 7:4.

**Cumulative Citation Index**

S. No.	Staff Member	No: of Citations
1	Sougata Ghosh	416

**h-Index**

S.no	Staff Member		h-index
1	Sougata Ghosh		11
<u>Impact Factor</u> S.no	Staff Member	Journal	Impact factor
1	Sougata Ghosh	Journal of Nanomedicine and Nanotechnology	3.57

**Patents :**

1. **Ghosh S.**, Harke A.N., Chacko M.J., Gurav S.P. (2016) *Gloriosa superba* mediated synthesis of silver and gold nanoparticles. Indian Patent (Filed) Application number 201621016060 A.
2. **Ghosh S, Gurav SP, Harke AN, Chacko MJ.** (2016) An optimized process for *Dioscorea oppositifolia* mediated synthesis of gold and silver nanoparticles. Indian Patent (Filed) Application number 201621028221 A
3. **Ghosh S, Chacko MJ, Gurav SP, Harke AN.** (2016) Process optimization for synthesis of silver and gold nanoparticles using *Barleria prionitis* leaf. Indian Patent (Filed) Application number 201621027956 A

20. Areas of consultancy and income generated

Area of expertise:

Sr. No.	Name of Staff member	Area of Expertise
1	Dr. Neelima Kulkarni	Protein biochemistry, extracellular metabolites
2	Gauri Bhagat	General Microbiology, Immunology, Water Potability Testing
3	Mr. Shrikant Bhute	Microbial diversity, DNA sequencing, Next Generation DNA Sequencing.
4	Debangi Chattopadhyay	Teaching and learning through games, Microbial diversity and Taxonomy; Molecular Biophysics and Instrumentation
5	Yashashree Waikar	Chromatography, Water Potability Testing

22. Student projects

- Percentage of students who have done in-house projects including inter departmental/programme: 10% UG ; 71.5% PG
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 28.5% PG

23. Awards / Recognitions received by faculty and students:

Sr. No.	Authors	Award won
1	Dr. Manasi Tukdeo	Qualified SET exam held in May 2016
2	Mrs. Sneha Ogale	<b>Selected as Trainer</b> for the series of State-level Pedagogy workshops for school science teachers conducted jointly by IISER-Pune with the Maharashtra State government. The workshops were conducted from 4th Oct to 7th Oct 2016 and 22-24 Nov 2016.
3	Mr. Soching Luikham (T.Y.BSc) and Mr. Sougata Ghosh (Staff)	<b>Won Consolation Prize</b> in poster presentation at <b>2nd Mini-Symposium on Cell Biology</b> organized by NCCS, Pune 11th May, 2016
4	Mr. Abhijit Kulkarni	Qualified CSIR NET-LS
5	Ms. Jayashree Khadilkar	Qualified SET exam held in May 2016
6	Divya Shah	Lila Poonawalla Foundation Scholarship
7	Priyanka Manani, Bhakti Thakkar, Shivani Kulkarni	Weikfield Malhotra Foundation Scholarship
8	Sanchita Gramopadhyay	DST-Inspire Scholarship
9	Soching Luikham	Best Student Trophy of the college: Pride of Modern
10	Soching Luikham	Best Question Award at International Symposium on Microbial Ecology and Systematics, 16-17 Sept 2016
11	Sandesh Shinde	Best Question Award at International Symposium on Microbial Ecology and Systematics, 16-17 Sept 2016
12	Pranav Pande	Selected as Ph. D. student at Institut National de la Recherche Scientifique, University of Quebec, Canada
13	Purva Chavan	Selected as PhD student, Helmholtz Zentrum Muenchen, Munich, Germany
14	Unmesha Thanekar	GATE, 2016

24. List of eminent academicians and scientists / visitors to the department:

Sr. No.	Name	Designation, Organization/ Institute
1	Mrs. Supriya Sule	Member of Parliament
2	Dr. Santosh Sutar	Assistant Director/Assistant Professor, Yashvantrao Chavan School of Rural Development, Shivaji University
3	Mr. Mihir Thatte	Vaintey Chem Products Pvt. Ltd
4	Dr. Abhishek Kukemane	Bijasu Pvt. Ltd., Pune
5	Dr. Sandeep Chorghade	Postdoctoral Research Associate at University of Illinois at Urbana Champaign, Illinois, USA
6	Mr. Gaurav Gunjal	SRF, IISc
7	Mr. Nitin Gaikwad	Associate Director, Biocon, Bangalore

25. Seminars/ Conferences/Workshops organized & the source of funding a) National: NA  
b) International: NA  
Workshops Conducted:

Sr. No.	Title	Resource persons	Class & No. of students benefitted	Conducted by (name of the department)	Dates
1	Physicochemical and Microbiological analysis of Soil	Mr. Mihir Thatte, Vaintey Chem Products Pvt. Ltd. and Mr. Shreyas Kumbhare (ICMR-SRF, MCC-NCCS)	21 S.Y. B. Sc. Microbiology students	Microbiology, Dept, MCASC, GK	24/06/2016 and 25/06/2016
2	Biochemical techniques and instrumentation	Dr. Sougata Ghosh, Dr. Manasi Tukdeo (MCASC, GK) and Mr. Shreyas Kumbhare (ICMR-SRF, MCC-NCCS)	45 T.Y. B. Sc. Microbiology students of Dept, MCASC, GK, MCASC, Shivajinagar and Abasaheb Garware College, Pune	Microbiology, Dept, MCASC, GK	01/07/16, 02/07/16 and 04/07/16
3	Research Induction Program	Dr. Neelima Kulkarni & Dr. Sougata Ghosh (Microbiology), Dr. Vinay Kumar (Biotechnology), Dr. R. Kshirsagar (Zoology)	M. Sc. students of Microbiology, Zoology & Biotechnology	Dr. Vinay Kumar (Biotechnology), Dr. R. Kshirsagar (Zoology), Mrs. Sneha Ogale (Microbiology)	06/09/16 and 07/09/16

26. Student profile programme/course wise:

Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
F.Y.BSc.	282	250	97	153	NA
M.Sc. I	149	42	4	38	NA

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
F.Y.BSc	247	03	01
S.Y.BSc.	143	0	0
T.Y.BSc	128	01	0
M.Sc. I	40	2	0
M.Sc. II	43	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Students qualifying Competitive Examinations from 2016-17:

Number of Students qualify National level Examinations like :	Total: 3
i) CSIR-UGC NET -LS	i) 1 (Abhijeet Kulkarni);
ii) ICMR-SRF	ii) 1 (Shreyas Kumbhare)
iii) SET	iii) 1 (Jayashree Khadilkar, 2016-17)

31. a) Scholarships:

1	Divya Shah	Lila Poonawalla Foundation Scholarship
2	Priyanka Manani, Bhakti Thakkar, Shivani Kulkarni	Weikfield Malhotra Foundation Scholarship
3	Sanchita Gramopadhye	DST-Inspire Scholarship

b) Staff have sponsored 2 students to participate in International Symposium; additionally 2 students were sponsored by scientists (Dr. Yogesh Shouche, Dr. Tapan Chakravarty) from MCC-NCCS and one student by Dr. Ashish Polkade for the same.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

**1. Visits:**

Sr. No.	Class	Date of visit	Institute/ Industry visited	What seen	No of students	Accompanying teachers
1	MSc I	07.10.16	MCC-NCCS, Sai Trinity Building, Pune	Automated Gene Sequencers, MALDI & FAME facilities	43	Dr. Manasi Tukdeo, Mr. Shrikant Bhute, Ms. Yashashree Waikar
2	MSc II	14.10.16	National Centre for Cell Science, Pune	FACS facility	42	Dr. Sougata Ghosh, Ms. Yashashree Waikar, Ms. Amruta Godbole
3	M.Sc. II	15.10.16	PMC's Sewage Treatment Plant, near Dr. Naidu Hospital, Pune	Primary and secondary treatment plant, Grit removal, chlorination and aeration tank	42	Dr. Kavita Parekh, Dr. Sougata Ghosh, Ms. Amruta Godbole

2. **Interactions:** of current students with **well-placed alumni** in order to make students aware of opportunities available and skill-sets required:

- o Gaurav Gunjal, SRF, IISc, Bangalore

3. **Workshop Conducted: In addition to those mentioned earlier:**

Members of Organizing team: Mrs. Sneha Ogale, Dr. Mrs. Neelima Kulkarni

Sr. No.	Dates	Topic	Organized by	Class	No. of students
1	16.9.16 and 17.9.16	Two day International Symposium on Microbial Ecology and Systematics	AMI (Pune Unit) in collaboration with MCC-NCCS at NCL	M. Sc.	14

4. **Training course conducted:**

Sr. no.	Title	Status
1	Certificate Course: "Applied Techniques in Industry and Laboratories". Coordinator: Dr. Mrs. Kavita Parekh, Assistant Coordinators: Mr. Prasad Deshmane & Ms Gauri Bhagat	<b>Sanctioned by UGC;</b> started in academic year (2012-13)

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

1. **Water Potability Testing:** of **drinking water** available at our college, which is a basic need of everybody in the college. This activity was undertaken by T.Y.BSc. Microbiology students.
2. **Financial Aid:**
  - a) Staff members of the department have given financial support to a student for his educational fees: A sum of Rs. 4000/- to Hanuman Dighe (MSc II)
  - b) Staff members have also contributed to "Student Welfare Fund" established by all the staff members of the college.
  - c) Donation to Manavya from the profits of Vividha stall, 'Sonar Bangla', Jan 2016.

## Department of Physics

4. Names of Interdisciplinary courses and the departments / units involved:
- Presently students are working for their projects in other departments like Electronics, Chemistry, Microbiology and Biotechnology
  - Some students are also doing projects with Department of Electronic Science, Savitribai Phule University of Pune.
7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Courses	Name of the Institution
Skill development course titled “ <b>Repair and Maintenance of Electrical Home Appliances</b> ”	Govt. ITI, Aundh, Pune

10. List of senior visiting faculty:

Sr. No.	Name of the Visiting Faculty
1	Dr. Vinay Malik – Department of Biotechnology
2	Dr. Mukula Kulkarni – Department of Chemistry
3	Mr. Niket Tajane – Department of Computer Science
4	Dr. Saugato Ghosh – Department of Microbiology

12. Qualifications of teaching staff with D.Sc. / D. Lit /Ph.D. / M. Phill. /P.G.:

Ph.D. (Registered)	01
Ph.D. (Registration under process)	01

16. Student projects:

Sr. No.	Title of Project	In collaboration with
1	Development of hearing prosthesis using mechanical transducer	Department of Electronic Science, Savitribai Phule Pune University
2	Analysis of solar panel efficiency.	Department of Electronic Science
3	Evaluation of antimicrobial activity of metal nano particles using electrical impedance	Department of Microbiology
4	Optimization of parameters to improve adhesive properties of ink used in Tabla.	Department of Chemistry



4	Synthesis and characterization of physicochemical properties of ink used in Tabla.	Department of Chemistry
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## 17. Achievements by faculty and students:

**Faculty:****Mrs. Varsha Joshi -**

1. Online course “**Learning physics through simple experiments**” by Dr. H.C. Verma was completed successfully during 20 September 2016 to 20 November 2016.
2. Attended National conference titled “**Environment And Development**” On 9<sup>th</sup> and 10<sup>th</sup> September 2016 at B. N. Purandare College, Lonawala.
3. Attended State Level conference titled “**Role of e-learning in Higher Education**” on 29<sup>th</sup> and 30<sup>th</sup> September 2016 at B. R. Gholap College, Sagavi, Pune.

**Mr. Mahendra Waghmare –**

- Presented a paper at 6<sup>th</sup> International Science Congress (ISC) 2016 titled ‘Synthesis and characterization of Dy<sup>3+</sup> Doped Ni-Co Nanoferrite’. 8<sup>th</sup>-9<sup>th</sup> December, 2016 organised by International Science Community Association in collaboration with Hutatma Rajguru Mahavidyalaya.

**Mrs. Chhaya Abnave -**

1. Online course “**Learning physics through simple experiments**” by Dr. H.C. Verma was completed successfully during 20 September 2016 to 20 November 2016.
2. Attended a workshop “**Joy of Learning Physics through Demonstrations**” at Mahatma Phule Mahavidyalaya, Pimpri.

**Mrs. Archana Gadre-**

1. Online course “**Learning physics through simple experiments**” by Dr. H.C. Verma was completed successfully during 20 September 2016 to 20 November 2016.

**Students:**

1. A student of T.Y.B.Sc. Harsh Kamble attended “**Summer school in Physics**” programme (SSP2016) conducted by and at Dept. of Physics, SPPU, Pune, from 9<sup>th</sup> to 20<sup>th</sup> May 2016.
2. Students of T.Y.BSc Mr. Sangram Gholap and Mr. Kalpesh Mahamunkar Presented a poster titled “**Antimicrobial Activity using Electrical Impedance; a Biological Approach**” in Avishkar 2016, Zonal Level Research Project Competition of SSPU held at SP College Pune on 19 -12-2016
3. Students of T.Y.B.Sc. Ruttika Kedare Presented a poster titled “**Plastic Bricks**” in Avishkar 2016, Zonal Level Research Project Competition of SSPU held at SP College Pune on 19 -12-2016
4. Mr. Nitin Bhosale and Ruttika Kedare attended a Guest lecture titled “**Solar Energy**” on 25<sup>th</sup> November 2016 at F.C. College, Pune.

5. Miss. Rutticka Kedare of T.Y.B.Sc. and Mrs. Varsha Joshi presented a research paper '**Development and Analysis of Bricks made from waste Plastic Bags: Plastic Brick**' at the international conference on GO Green organized by C.T.Bora College, Shirur on 12-13 January 2017.

### Science Exhibition

Students participated enthusiastically in project, model competition and poster competition of the science exhibition Anubhuti. About 30 students participated in the exhibition.

- Harsh Kamble and Yash Kamble students of T.Y.B.Sc. got first prize in poster "Hearing Prosthesis" at college level.
- Ruttika Kedare a student of T.Y.B.Sc. won the third prize in poster on "Plastic brick" at college level.
- Nachiket Kortikar a student of T.Y.B.Sc. won second prize in project competition on "Slayer exciter Circuit" at college level.

### 18. Seminars / Conferences/ Workshops organized and source of funding

- Department had organized a workshop on "**Advance Synthesis Methods**" for T.Y. BSc Physics students under DBT star college Scheme, Government of India, New Delhi. Dr. Jayashree Pant and Dr. Sopan Rathod, Department of Physics, Abasaheb Garware College, Pune, Dr. Mukula Kulkarni, Department of Chemistry, Modern College, Ganeshkind were the resource persons.

### 20. Details of Infrastructural facilities

3 additional computers are allotted to the department.

### 22. Details of student enrichment programmes :

- **Guest Lecture :**  
By Dr. Sadhana Natu was organized for T.Y. B.Sc. students on "Life Skill Management".
- **Field visit :**  
F.Y.B.Sc. and S.Y.B.Sc. — Visit was organized on 30<sup>th</sup> September 2016 at Govt. ITI, Aundh, Pune

### 24. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Department celebrated an alumni meet.
- To help F.Y. B.Sc. students understand the basic concepts in physics, small educational video clips were displayed and discussed along with the regular practical sessions.
- Survey of electricity consumption was conducted by the department for energy audit.

## Department of Statistics

### 1) Summer internship program:-

As a consequence of linkage with NSSO, Pune, two students could get the summer internship in May, June-2016. The details are as under:

Sr. No.	Name of the student	Title of the project	Class	Name of the guide
1.	Mayur Mahajan	Comparative study of RPC data for Jan to Dec.2015	F.Y.B.Sc.	Dr. V Parameswaran Mr. P. M. Deshpande Mr. Narendra Patil
2.	Shubham Kute	Comparative study of urban frame survey data 2007-2012 and 2012-2017 in Satara, Wai and Karad.	F.Y.B.Sc.	Dr. V Parameswaran Mr. P. M. Deshpande Mr. Narendra Patil

### 2) REPORT- “NATIONAL STATISTICS DAY” SPONSERED BY NSSO - 29/06/2016

- The ministry of Statistics and Program Implementation (MOSPI), Government of India celebrates 29<sup>th</sup> June, the birth anniversary of Late Prof. P. C. Mahalanobis, as Statistics Day every year, in recognition of his notable contribution in Statistics towards nation's planning process and socioeconomic development.
- In year 2016, this program was held by our institute, Modern College, Ganeshkhind, Pune-16, on 29<sup>th</sup> June 2016.
- The presence of Dr. Sanjay Kharat (Principal, Modern College, Ganeshkhind, Pune-16), Dr. David Hangal (H.O.D.-Department of Statistics, SPPU), Mr. Uday Deshmukh (Chief Statistician, Government of Maharashtra) graced the inaugural function.

The theme of “Statistics Day-2016” was “Agriculture and Farmer's welfare”.

The following statisticians gave their presentations on this topic:

Sr. No.	Name of the person	Designation	Name of the Institute
1.	Mr. S. M. Sarwade	D.D. & H.O.	NSSO, Pune.
2.	Dr. Amita Dharmadhikari	Associate Professor	Modern College, Ganeshkhind, Pune-16
3.	Dr. Shalini Teke	Associate Professor	S. P. College, Pune
4.	Charuta Dabir	Assistant Professor	Fergusson College, Pune
5.	Dr. Aakanksha Kashikar	Assistant Professor	SPPU, Pune
6.	Dr. Nanda Rajput	Associate Professor	Garware College, Pune

Undergraduate and post graduate students, who did summer internship at NSSO, presented their work done in the projects.

**3) Research activities:-**

a) Research publication:-

Title:- “An effective Display of MPML Bus Time: Use of Stem and Leaf Plot”

Author :- Dr. A. A. Dharmadhikari, Sonia S. Joshi

“Dnyanmaya”, Pune - Vol. I-Issue 3, December-2015-February 2016, ISSN No. 2395-7484, pp 49-52.

b) Ongoing research projects:-

A UGC MRP (35861 - Title “Empirical study of effect of pre-birth education on child development by using advanced statistical methods)

Total grant - Rs. 12,53,600.

Principal investigator:- Dr. A. A. Dharmadhikari

Grant received Rs. 8,80,600 in April-2016.

## Department of Zoology

1. Names of programs offered:

Sr. No.	Level	Programmes offered
1.	UG	F.Y.B.Sc.
		S.Y.B.Sc.
		T.Y.B.Sc.
2.	PG	M.Sc. Part I
		M.Sc. Part II (Entomology)
3.	Research Center	M.Phil. & Ph.D.

2. Courses in collaboration with other universities, industries, foreign institutions etc:  
Skill Development Course (Government Sericulture Unit Baramati, CBRTI Pune, ZSI Pune)
3. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Sr.	Name	Qualification	Designation	Special subject	Exp. years	Ph.D./ M.Phil. students guided
1	Dr. Sanjay S. Kharat	M.Sc., Ph.D., LLB, MBA	Principal	Animal Physiology	25	6
2	Dr. S.A. Inamdar	M.Sc. Ph.D.	Head	Entomology	18	3
3	Dr. R.V. Kshirsagar	M.Sc. Ph.D. B.Ed.	Associate professor	Entomology	20	6
4	Mr. Kishor A. Gound	M.Sc.NET JRF SET, GATE	Assistant professor	Zoology	3	NIL
5	Mrs. Trupti Kale	M.sc. SET	Assistant professor	Zoology	3	NIL
6	Dr. Preeti More Kamble	M.Sc. Ph.D.	Assistant professor	Zoology	0.5	NIL
7	Mr. Pradeep Kumkar	M.Sc.	Assistant professor	Zoology	0.5	NIL
8	Miss Chandani Verma	M.Sc.	Assistant professor	Zoology	0.5	NIL
9	Mr. Pankaj Gorule	M.Sc.	Assistant professor	Zoology	0.5	NIL

## 4. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Sr. No.	Name of the faculty	Nature of work	Details
1	Dr. A. N. Latey	Visiting faculty	SPPU, Pune
2	Dr. Manjeet Arora	Visiting faculty	Wadia College Pune
3	Dr. Yogita Shah	Visiting faculty	Modern College, GK
4	Dr. Soniya Joshi	Visiting faculty	Modern College, GK
5	Dr. M. Paingankar	Guest Lecture	SPPU, Pune
6	Dr. Sudha Ponnusamy	Guest Lecture	IBB, SPPU, Pune
7	Dr. Sudhir Ujalamkar	Guest Lecture	SPPU, Pune
8	Dr. D. G. Naik	Guest Lecture	ARI, Pune
9	Dr. Vishnu Vaze	Guest Lecture	
10	Dr. Baban Ingole	Guest Lecture	NIO, Goa
11	Dr. Pandit Radhakrishnan	Guest Lecture	SPPU, Pune
12	Dr. B. B. Nath	Guest Lecture	SPPU, Pune
13	Dr. S. Basavarajappa	Guest Lecture	University of Mysore, Karnataka
14	Dr. Rohit Vartak	Guest Lecture	Pune
15	Dr. Girish Kadadevaru	Guest Lecture	Karnataka University Dharwad
16	Dr. Satish Pandey	Guest Lecture	Ela Foundation, Pune
17	Dr. Kedar Ahire	Guest Lecture	SPP University, Pune

## 5. Percentage of classes taken by temporary faculty – programme-wise information

Sr. no.	Year	% of classes by temporary faculty		% of classes by Permanent faculty	
		UG	PG	UG	PG
1	2011-12	76.93	NA	23.07	NA
2	2012-13	76.93	NA	23.07	NA
3	2013-14	57.69	NA	42.3	NA
4	2014-15	62.71	75	37.28	25
5	2015-16	62.28	80	37.71	20
6	2016-17	62.28	80	37.71	20

## 6. Qualification of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Sr. no.	Name	Qualification
1	Dr. Sanjay S. Kharat	M.Sc., Ph.D., LLB, MBA
2	Dr. S.A. Inamdar	M.Sc. Ph.D.
3	Dr. R.V. Kshirsagar	M.Sc. Ph.D. B.Ed.
4	Mr. Kishor Gound	M.Sc. NET-JRF, SET, GATE
5	Mrs. Trupti Kale	M.sc. SET
6	Dr. Preeti Kamble	M.Sc. Ph.D.
7	Mr. Pradeep Kumkar	M.Sc.
8	Miss Chandani Verma	M.Sc.
9	Mr. Pankaj Gorule	M.Sc.

7. Research center/facility recognized by the University: **Yes.**

## 8. Areas of consultancy and income generated: Stem cells and Agricultural Entomology

9. **Student projects:-**

Percent of students who have done in-house projects including inter-Departmental/programs

Category	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
In-house projects	-	4.28 %	13%	36.58 %	48.65%	100%

- Percentage of students placed for project in organization outside the institute i.e. Research lab/industry/other agency: 4.76% of M.Sc students

## 10. List of eminent academicians and scientist/visitors to the department:

Sr. No.	Name of the faculty	Details
1	Dr. Kedar Ahire	SPP University, Pune
2	Mr. Manoj Vaikar	SPP University, Pune
3	Dr. Abhay Khandagale	Ramkrushna More College, Akurdi, Pune
4	Dr. Anjali Siras	NCCS, Pune.
5	Dr. S.G.Deshpande	NCL, Pune
6	Dr. Anjolina Jaykumar	Helth Science, SPPU, Pune.
7	Mrs. Jayashree Kute	Whirlpool Company, HR Mumbai

## 11. How many students have cleared national or state competitive examinations such as NET, SET, GATE, Civil Services and Defence Services

- Dhananjay Gire NET (2016)

13. Details of Infrastructural facilities:
  - a) Library: 1010 Books worth Rs. 4, 60,958 in central library
  - b) Internet facility for Staff and students: 7 computers with internet connection and four terminals
14. Participation in institutional social responsibility and extension activities.

Sr. No.	Activity
1	Zoocraft
2	Anubhuti
3	DBT Week

15. Highlight of the department
  - Zoology M.Phil. & Ph.D. research center.



## Faculty of Commerce

1. Courses in Collaboration with other Universities, Industries, Foreign Institutions etc.

Name of the Institution	Activity
Lee Spa	Health and personality grooming
Maharashtra centre for entrepreneurship development	Entrepreneurship Development Programme
Mahindra and Mahindra	Soft Skill Development

2. Qualifications of teaching faculties with

- Ph.D. 3
- M.Phil. 2
- Registered for Ph.D. 9
- Registered for M.Phil. 1

3. Publications

- Number of papers published in peer reviewed journals (national/International) by faculty and students.

- International: 21
- National: 20
- Articles: 12

Sr. No.	Name of the Faculty	International	National	Articles
1	Mrs. Shubhangi Joshi	-	1	-
2	Mrs. Manjusha Kulkarni	-	1	-
3	Shrdsdha Awasare	-	1	-
4	Sujata Deshmukh	-	1	-

- In-house Publication:

1. Commerce Horizon	Research Magazine published for students on the theme e-Commerce
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## 4. Awards/ recognition received by faculties and students.

Students:

S. No	Achievements	Total Students
1	Presented paper at national conference	2

## 5. List of Eminent academicians and Scientist/ Visitors to the department.

S. No.	Name of Guest	Details
1	Pradnya Godbole	DeAsara Foundation

## 6. Seminars/ Conferences/ Workshops organized and the source of funding.

## A. National Conference :

BCUD sponsored National Conference on “Changing Business Culture – Challenges and Opportunities”

## B. Workshop /Training Programmes for Students

(a) One day workshop Insurance Connect

(b) Hands on Training in Vidya Sahakari Bank

## 7. Student profile Programme/ course wise

Name of the Course	Year	Applications received	Selected	*M	*F	Pass percentage
B.Com	2015-16	1905	1349	640	629	72%
M.Com	2015-16	184	113	49	64	93.75%
BBA (CA)	2015-16	324	225	111	114	71%

## 8. Diversity of students.

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Com (2015-16)	94.72	5.21	0.07
M.Com (2015-16)	94.42	5.58	0.07
BBA (CA) (2015-16)	96.52	3.48	NIL

## 9. How many students have cleared national and competitive examinations : 1

10. Number of students receiving financial assistance from college, university, government or other agencies.

- Our Alumni Mr. Sandeep Gollapadi and Ameya Nisal have initiated endowment scholarship. Three needy and deserving students get financial assistance every year.

Details on student enrichments programs (special lectures/ workshops/ seminar) with external experts.

	Activities	Details
1	Hands on Training:	Hands on training at Vidya Sahakari Bank: 12 branches. 85 students took the training.
2	Insurance Connect one day workshop	112 students participated.
2	Bank Connect.	Commerce faculty has organised a programme to support PRADHAN MANTRI JAN DHAN YOJANA in which students guided the villagers in nearby areas to open bank accounts in nationalised Bank. Hundred bank accounts were opened under this initiative.
3	Cost Fest:	It is conducted for costing students to make them aware about practical application of the subject.
4	Poster competition on senior citizen Banking module designing	Poster competition on senior citizen Banking module designing
5	Visit to college of agricultural banking RBI	35 students participated
6	Collaboration with DCRC Library for research work	35 students benefitted
7	Industrial visit to 'Barclays'	60 students participated

11. Teaching methods adopted to improve student learning.

- Presentations – Group & Individuals
- Group discussions on current topics & issues related to the curriculum.
- Role plays
- Case study – framing and solving
- Surveys & quiz on the topics taught
- Practical based on field study
- LCD projector for lecturers and power point presentations by students
- Educational film shows
- Use of internet and web resources by teachers and students
- Educational Visits

## 12. Participation in institutional social responsibility (ISR) and extension activities.

S. No	Activities	Details
1	Agro to Campus	Sell of organic farm products directly from farms.
2	Assistance to Vidya Sahakari Bank	During the training of 85 students at 12 branches our students served the bankers and society during the policy of demonetisation of high denomination currency.
3	Rice Plantation Activity	On 2 <sup>nd</sup> August, 2016 24 students with 2 faculties visited Sate gaon Maval Tahasil to help the Farmers for Rice Plantation Activity.
4	Bank literacy program on cashless movements	On 27 <sup>th</sup> Dec 16 this program was coordinated with Financial Literacy Instutuion of Vidya Bank. Speaker was Mr. Vidyadhar Anaskar
5	Assistance of M.Com. students to Electronics Department for e-waste management and to English department plastic waste management.	Electronic and electric Waste and plastic waste collection at residential colony- Oval Nest at NDA.

## Central Library

### Academic and Teaching :

- **Flipped Classroom:** Library has initiated a new flipped classroom for giving online education and training to our patrons using new educational open source softwares. Prepared online tutorials and videos for demonstration of how to access various electronic resources, OPAC and new audio visual resources available for reference purpose.
- **Online Survey:** Conducted online survey of all readers and generated automatic report

### Criteria 3 :

#### Book: 01

1. Smet, E.D. & **Dhamdhere, S. N.** (2016). "E-discovery tools and applications in Modern Libraries" IGI Global. 2016. ISBN13: 9781522504740|ISBN10: 1522504745|EISBN13: 9781522504757|DOI: 10.4018/978-1-5225-0474-0. Release Date: July, 2016|Copyright: © 2016 |Pages: 400

#### Research Papers in Peer Reviewed Journals: 04

2. Kannan, K.; Basha, Imtiaz & **Dhamdhere, S. N (2015)**. An assessment of satisfaction of research scholars: a case study. International Journal of Library Science. Vol.14 Issue 1, October 2015. ISSN 0975-7546. 1-13.
3. **Dhamdhere, S.N.** & Smet, E.D. (2015). The use of web services for patron education and information by selected top university libraries in USA and India. Journal of Teaching and Education. ISSN: 2165-6266, Vol. 04 Issue 02,175–196.
4. **Dhamdhere, S.N.** & Lihitkar, R. 2016). Integrated Information Discovery Tools in Indian Libraries: A Case Study. Dnyanmay:A Multi Disciplinary Peer Reviewed Research Journal "Integrating Knowledge through Research". Vol.I, Issue 3, December 2015-February 2016. ISSN No.2395-7484. 17-25.
5. **Dhamdhere, S.N. (2016)**. "Flipped Classroom for Educating Library Patrons Online: A Case Study". International Journal of Advanced Engineering Research and Science (IJAERS) (ISSN: 2349-6495(P)| 2456-1908(O). Vol.3, Issue. 8, August 2016. Impact Factor: 4.192.Thomson Reuters ResearcherID: P-3738-2015 ijaer, Thomson Reuters ResearcherID ORCID: 0000-0003-3052-1512, 1-21

#### Papers accepted at the International Conference: 02

6. **Harvard: Dhamdhere, S.N. (2017)**. "Universities Should Pay Attention To Improve Their Library Web-Based Services To Place Higher In World Ranking System". Paper accepted for oral presentation at the International Journal of Arts & Sciences'

(IJAS) International Conference for Education which will be held at Harvard Medical School, 77 Avenue Louis Pasteur, Boston, Massachusetts. The conference will run from 22 to 26 May 2017.

7. **Cambridge: Dhamdhere, S.N.;** Smet, E. D. & Lihitkar, R (2017). “Ranking of world universities correlates with their library rankings”. Paper accepted for oral presentation at **6th International Conference on Educational and Information Technology (ICEIT 2017)** to be held during **March 7-10, 2017 in Cambridge, UK** at **Clare College** is the second oldest of Cambridge’s thirty-one colleges organized by American Research Association, USA. The paper will be publishing in one volume of International Journal of Information and Education Technology (IJIET) (ISSN: 2010-3689) and indexed by EI(INSPEC, IET), Cabell's Directories, DOAJ, Electronic Journals Library, Engineering & Technology Digital Library, EBSCO, Google Scholar, Crossref and ProQuest.

#### **Book Chapters: 06**

1. Goovaerts, M.; Nieuwenhuysen, P. & **Dhamdhere, S. N.** (2016). VLIR-UOS Workshop ‘E-Info Discovery and Management for Institutes in the South’: Presentations and Conclusions, Antwerp, 8-19 December, 2014. E-Discovery Tools and Applications in Modern Libraries. IGI Global. 2016. ISBN13: 9781522504740|ISBN10: 1522504745|EISBN13: 9781522504757|DOI: 10.4018/978-1-5225-0474-0. 1-40.
2. **Dhamdhere, S.N.** & Lihitkar, R. (2016). Commercial and Open Access Integrated Information Search Tools in Indian Libraries. E-Discovery Tools and Applications in Modern Libraries. IGI Global. 2016. ISBN13: 9781522504740|ISBN10: 1522504745|EISBN13: 9781522504757|DOI: 10.4018/978-1-5225-0474-0. 41-55.
3. **Dhamdhere, S. N.** (2016). Florida Virtual School. Sage Encyclopedia of Online Education. Pub. Date: 2016, SAGE Publications, Inc., Thousand Oaks, Print ISBN: 9781483318356 Online ISBN: 9781483318332  
DOI: <http://dx.doi.org/10.4135/9781483318332.n156> . 489-490
4. **Dhamdhere, S. N.** (2016). Textbook Websites. Sage Encyclopedia of Online Education. Pub. Date: 2016. SAGE Publications, Inc. Thousand Oaks, Print ISBN: 9781483318356 Online ISBN: 9781483318332. DOI: <http://dx.doi.org/10.4135/9781483318332.n361>. 1126
5. **Dhamdhere, S. N.** and Danver, S. L. (2016). Massive Open Online Courses. Sage Encyclopedia of Online Education. Pub. Date: 2016. Publishing Company: SAGE Publications, Inc. City: Thousand Oaks, Print ISBN: 9781483318356 Online ISBN: 9781483318332. DOI: <http://dx.doi.org/10.4135/9781483318332.n227>. 716-719

6. **Dhamdhere, S. N.** and Danver, S. L. (2016). Videoconferencing. Sage Encyclopedia of Online Education. Pub. Date: 2016. Publishing Company: SAGE Publications, Inc. City: Thousand Oaks, Print ISBN: 9781483318356 Online ISBN: 9781483318332.DOI: <http://dx.doi.org/10.4135/9781483318332.n379>. 1163-1164

**Criteria 4:**

- **Koha Library Automation Software:** Installed new Koha open source software with international standards and advanced features for library automation. Web OPAC made available on our college website.
- **DSPACE Digital Library Software:** Installed Digital library software DSpace for managing digital resources of our library and creating Institutional Repository. We have initiated to upload and index the electronic documents in this software like question papers, syllabus, audio books, CDs, DVDs, project reports and faculty publications
- **FEDGATE:** We have purchased FEDGATE single search engine for all library and online subscribed resources on a single platform. Readers will able to access NLIST resources, library catalogue, Institutional repository and other open access databases through this search engine.
- **TURNITIN:** Plagiarism check software is made available to all readers of our college.
- **SHELVES:** Added new shelves for increasing collection of book of Rs. 2,17,000/-
- **COMPUTERS:** Replaced 13 PCs with new PCs at UGC Network Resource Centre for providing E-Library facility to our students and staff.
- **BOOKS:** Added during 1<sup>st</sup> April 2016 to 31<sup>st</sup> December 2016
  - Total Books: 701      Amount of Rs. 2,91,449/-
  - Order Placed: 172      Amount of Rs. 1,25,248/-

## Department of Physical Education and Sports

### 1. Interclass Team Events

Sr. No.	Name of the Student	Class	Event	Performance
1	Gaurav Kambale	SYBA	3-A Side Football	Third Place
2	Aniket Bhope	FYBCom	3-A Side Football	Second Place
3	Ebou Jobe	FYBA	3-A Side Football	First Place
4	Ebou Jobe	FYBA	3-A Side Football	Best Player
5	Shubhankar Nitnaware	FYBBA CA	Basketball	Third Place
6	Vaibhav Deshmukh	FYBSc Comp.	Basketball	Second Place
7	Roger Pagare	SYBVoc	Basketball	First Place
8	Roger Pagare	SYBVoc	Basketball	Best Player
9	Pranali Supe	SYBSc	Dodgeball	Second Place
10	Pooja Jeenwal	FYBA	Dodgeball	First Place
11	Saivibhuti Patil	FYBA	Dodgeball	Best Player
12	Shaweri Londhe	SYBSc	Throwball	Second Place
13	Shrutika Mahamunkar	FYBio Tech	Throwball	First Place
14	Smita Khatua	FYBio Tech	Throwball	Best Player
15	Akash Nalawade	SYBCom	Volleyball	Third Place
16	Monika Mohite	FYBio Tech	Volleyball	Second Place
17	Palash Kedari	Mcom	Volleyball	Second Place
18	Nilisha Bhosale	SYBSc	Volleyball	First Place
19	Rushikesh Chaudhari	FYBBA CA	Volleyball	First Place
20	Nilisha Bhosale	SYBSc	Volleyball	Best Player
21	Rushikesh Chaudhari	FYBBA CA	Volleyball	Best Player

### 2. Interclass Individual Events

Sr. No.	Name of the Student	Class	Event	Performance
1	Abhishek Devkar	FYBVoc	Badminton (Doubles)	Second Place
			Badminton (Mix Doubles)	Second Place
2	Aishwarya Madigeri	FYBSc Comp.	Badminton (Doubles)	Third Place
3	Ameya Shelke	FYBio Tech	Badminton (Mix Doubles)	Third Place
4	Amogh Padhye	FYBSc Comp.	Badminton (Single)	First Place
5	Ashutosh Bahirat	FYBCom	Badminton (Single)	Second Place
			Badminton (Doubles)	First Place



Sr. No.	Name of the Student	Class	Event	Performance
6	Avinash Jadhav	TYBCom	Chess	Second Place
7	Divya Khengale	FYBCom	Badminton (Doubles)	Third Place
8	Gaurav Hazare	FYBSc Comp.	Badminton (Single)	Third Place
9	Gaurav Kambale	SYBA	Table Tennis (Doubles)	First Place
			Table Tennis (Single)	Third Place
10	Gayatri Katkam	FYBBA CA	Badminton (Single)	Second Place
11	James Thomas	SYBA	Table Tennis (Doubles)	First Place
			Table Tennis (Single)	Second Place
12	Kalpesh Kadam	MSc Comp	Badminton (Doubles)	Third Place
13	Mayur Jadhav	TYBA	Badminton (Doubles)	Second Place
14	Monika Mohite	FYBio Tech	Badminton (Single)	Third Place
			Badminton (Doubles)	First Place
			Badminton (Mix Doubles)	Third Place
15	Nikhil Jagtap	TYBCom	Table Tennis (Doubles)	Second Place
16	Prajwal Ghadge	FYBCS	Table Tennis (Single)	First Place
			Table Tennis (Doubles)	Second Place
17	Rajkumar Singh	TYBSc Comp	Badminton (Mix Doubles)	First Place
18	Rohan Telakallu	SYBSc	Badminton (Doubles)	First Place
19	Ronit Chandanshiv	SYBSc	Chess	First Place
20	Sayali Jadhav	FYBVoc	Badminton (Doubles)	Second Place
21	Shubham Darakhe	SYBCom	Chess	Second Place
22	Sucheta Naiknaware	FYBio Tech	Badminton (Single)	First Place
			Badminton (Doubles)	First Place
			Badminton (Mix Doubles)	First Place
23	Suyash Ghogare	FYBCom	Chess	Third Place
24	Urja Jadhav	FYBVoc	Badminton (Doubles)	Second Place
			Badminton (Mix Doubles)	Second Place
35	Vaibhav Daware	MSc Comp	Badminton (Doubles)	Third Place

**3. Intercollegiate Level Performers**

1. Shwetali Phalke	FYBCom	Softball
a. Intercollegiate Softball Competition		Bronze Medal
2. Sonita Dahikambale	TYBCom	Softball
a. Intercollegiate Softball Competition		Bronze Medal
3. Sushama Kedar		SYBCom Softball
a. Intercollegiate Softball Competition		Bronze Medal
4. Apeksha Ranawade	FYBA	Softball
a. Intercollegiate Softball Competition		Bronze Medal
5. Rutuja Kumbharkar	FYBCom	Softball
a. Intercollegiate Softball Competition		Bronze Medal
6. Pranjal Kadam	FYBCom	Softball
a. Intercollegiate Softball Competition		Bronze Medal
7. Upasana Zanke	SYBSc	Softball
a. Intercollegiate Softball Competition		Bronze Medal
8. Sunil Shinde	FYBA	Baseball Silver
a. Intercollegiate Baseball Competition		Silver Medal
9. Nikhil Jagtap	TYBCom	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
10. Shahabaz Sayyad	TYBCom	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
11. Amol Dhadwad	TYBCom	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
12. Omkar Pailwan	TYBCom	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
13. Priyawort Phand	SYBCom	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
14. Ashwin daund	FY Biotech	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
15. Ekanksh Sasar	SYBA	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
16. Vaibhav Deshmukh	FYBSc (CS)	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
17. Mahadev Kasare	SYBA	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
18. Ashutosh Gaikwad	SYBA	Baseball
a. Intercollegiate Baseball Competition		Silver Medal
19. Megha Pardesi	SYBA	Softball

**4. Inter Zonal Level Performers**

1. Megha Pardesi	SYBA	Baseball/Softball
a. Intercollegiate Softball Competition		Bronze Medal
b. Interzonal Baseball Competition		Baramati Gold Medal

- ## 5. State Level Performers

- ## 6. National Level Performers

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- P.E. Society's Modern College, Ganeshkhind, Pune

4. Rushikesh Patil      FYBCom      Cycling (Track & Road),  
Triathlon
  - a. All India Cycling (Track) Federation Championship  
Kerala      Participation
  - b. All India Cycling (Road) Federation Championship  
Uttar Pradesh      Participation
  - c. All India Inter University Cycling Championship  
Amritsar      Participation
  - d. Triathlon Team Championship      Goa      Participation
  - e. Intercollegiate Cycling Competition      Pune      Gold Medal
  - f. Interzonal Cycling Championship      Pune      Gold Medal
  - g. Interzonal Road Cycling Competition  
Takali Dhokeshwar      Gold Medal
5. Bhagyashri Pingale      MCom Part II      Softball/Baseball
  - a. Amit Joshi National Softball Championship  
Pune      Silver Medal
  - b. Interzonal Baseball Competition      Baramati      Gold Medal
  - c. Intercollegiate Softball Competition      Pune      Silver Medal
6. Varsha Jadhav      MCA Part III      Softball/Baseball
  - a. Amit Joshi National Softball Championship      Pune      Silver Medal
  - b. Interzonal Baseball Competition      Baramati      Gold Medal
  - c. Intercollegiate Softball Competition      Pune      Silver Medal
7. Akshay Fulambarkar      TYBA  
Cycling/Water polo/Swimming/Triathlon/Biathlon
  - a. 70<sup>th</sup> Senior National Aquatic Championship  
Ranchi      Participation
  - b. National Triathlon Championship      Guwahati      Participation
  - c. Triathlon Team Championship      Goa      Participation
  - d. 26<sup>th</sup> Senior Triathlon State Championship      Nanded      Bronze Medal
  - e. 26<sup>th</sup> Senior Triathlon State Championship (Team)      Nanded      Gold Medal
  - f. All India Waterpolo Championship      Ranchi      Participation
  - g. All India Inter University Waterpolo Championship  
Chandigad      Participation
  - h. Interzonal Road and Track Cycling Competition      Participation
  - i. 7<sup>th</sup> Modern Pentathlon National Championship      Panjim Goa      Silver Medal
8. Akshay Kadam      MA Part I      Water polo/Swimming/Triathlon
  - a. 78<sup>th</sup> Senior State Championship      Balewadi      Silver Medal
  - b. 70<sup>th</sup> Senior National Aquatic Championship      Ranchi      Participation
  - c. Swimming Federation of India Swimathon      Goa      Participation
9. Shraddha Jadhav      FYBCom      Baseball/Softball
  - a. Inter University Baseball Competition      Chandigad      Participation
  - b. Amit Joshi National Softball Competition      Pune      Silver Medal
  - c. Interzonal Baseball Competition      Baramati      Gold Medal
  - d. Intercollegiate softball Competition      Pune      Silver Medal

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|--|----------------|-------------------------------|
| 10. Sukruti Joshi  | TY Biotech     | Baseball/Softball             |
| a. Intercollegiate softball Competition                              | Pune           | Silver Medal                  |
| b. Amit Joshi National Softball Competition                          | Pune           | Silver Medal                  |
| 11. Vijay Ingale   | TYBCom         | Gymnastics                    |
| a. 50 <sup>th</sup> State Artistic Gymnastics Championship           | Sangali        | 4 <sup>th</sup> Place Vault   |
| b. State Gymnastics Championship                                     | Balewadi       | Participation                 |
| c. State Gymnastics Championship                                     | Balewadi       | Pommel Horse<br>Gold Medal    |
| d. State Gymnastics Championship                                     | Balewadi       | Floor Exercise Bronze Medal   |
| e. All India Inter University National Competition                   | Allahabad      | Selection                     |
| 12. Aditi Kale   | SYBCom         | Cricket/Softball/Baseball     |
| a. West Zone Inter University Cricket Championship                   | Bhopal         | Bronze Medal                  |
| b. All India Inter University Baseball Competition                   | Chandigarh     | Participation                 |
| c. Interzonal Baseball Competition                                   | Baramati       | Gold Medal                    |
| d. Intercollegiate Softball Competition                              | Pune           | Bronze Medal                  |
| e. Amit Joshi National Softball Competition                          | Pune           | Silver Medal                  |
| f. Pune District Cricket Association                                 |                | Best Player of the Year Award |
| 13. Shraddha Talekar   | MA Part II     | Gymnastics                    |
| a. Senior State Gymnastics Championship                              | Pune           |                               |
|  | Floor Exercise | Gold Medal                    |
| b. Senior State Gymnastics Championship                              | Pune           |                               |
|  | Uneven Bar     | Silver Medal                  |
| c. Senior State Gymnastics Championship                              | Pune           |                               |
|  | Balance Beam   | Bronze Medal                  |
| d. Senior State Gymnastics Championship                              | Pune           |                               |
|  | Vaulting Box   | Gold Medal                    |
| e. Senior State Gymnastics Championship                              | Pune           | A.A. Gold Medal               |
| f. 55 <sup>th</sup> Senior artistic Gymnastics National Championship | Gurgaon        | Team Silver                   |
| g. 55 <sup>th</sup> Senior artistic Gymnastics National Championship | Gurgaon        | Vaulting Bronze Medal         |

**Class Championship: SYBSc**

**Faculty Championship: Science**

**Best Sports Person of the Year 2016-2017: Miss Shraddha Talekar (MA Part I)**



**Best Outgoing Student Trophy awarded to  
Soching Luikham (M.Sc.-I ,Microbiology)  
Academic year 2016-17 at Annual Prize Distribution Ceremony.**



**NSS Camp at Lawarde-Speech by  
Dr. Keshavanand Swami on Leadership Development**



**Blood Donation Camp**



**Industrial visit to Barclays as a Pre-Placement (Nov-Dec\_2016)**



**College Cleanliness Drive**



**Soft skill Workshop organized for Computer Science students: August 2016.**





**Music - Bandish musical group singing in Srujan 2016 competition 16 at MIT**



**Music – 2<sup>nd</sup> prize won in group singing competition-Srujan 2016 by Group Bandish**



**Soft skill workshop for Arts, Science and Commerce Students  
December 19<sup>th</sup> -30<sup>th</sup>, 2016  
(Mahindra & Mahindra and Nandi Foundation : Resource Person: Ms. Swati Saxena)**





**Inauguration of Yuva Saptah 12<sup>th</sup> January 2017**



**Rangoli Competition : Theme- Samruddha Bharat**



**Staff Academy Inauguration 2016-17**

**Chief Guest :Dr.Vijay Narkhede, Joint Director, Higher Education, Pune  
on Emerging Issues and Role of Teacher in Higher Education**



**Vanmahotsav at Modern College of Agriculture at Kule dakhane, Hadshi**



**Lecture on Benchmarks on quality Education  
By Principal Nandkumar Nikam**



**Office Model Prepared by Commerce students**