

Department Of Microbiology

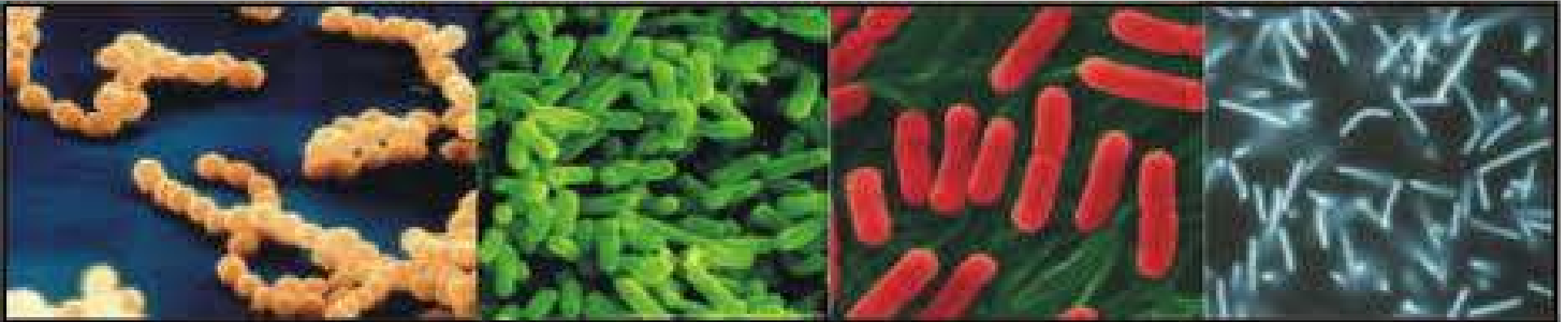


Sir P.T. Science college, Modasa

Name of the Department : **Microbiology**

Year of Establishment : **2006**

Courses offered : **B.Sc. (UG)**
(From: 2006)



Present Faculty Members

❑ **Name** : **Krishna M. Patel**
Designation : Assistant professor(H.O.D.)
Qualification : M.Sc., Ph.D. (Pursuing)
Specialization : Microbiology
Experience : 6 years



❑ **Name** : **Bhavika M. Solanki**
Designation : Assistant professor
Qualification : M.Sc.
Specialization : Microbiology
Experience : 5 years



❑ **Name** : **Darshana R. Patel**
Designation : Assistant professor
Qualification : M.Sc.
Specialization : Microbiology



❑ **Name** : **Apexa P. Joshi**
Designation : Adhoc lecturer
Qualification : M.Sc.
Specialization : Microbiology



Non Teaching Staff of the Department

Technical Staff

☐ **Name** : Mr. Balvant R. Patel
Designation : Lab Assistant
Qualification : B.Sc. (Chemistry)
Experience : 11years



☐ **Name** : Mr. Harihar K. Soni
Designation : Clerk
Qualification : B.com., D.T.P.
Experience : 3 years



Support Staff

☐ **Name** : Mr. Ashokbhai R. Pandya
Designation : Peon
Qualification : 12 Pass
Experience : 11 years



☐ **Name** : Mr. Shankarbhai B. Parmar
Designation : Peon
Qualification : 12 pass
Experience : 5 years



Former Faculty Members

- Name** : Megha N. Upadhyay (Founder of the Dept.)
Qualification : M.Sc., Ph.D.(Pursuing)
Specialization : Microbiology

- Name** : Mrs. Zalak D. Gandhi (Founder of the Dept.)
Qualification : M.Sc.
Specialization : Microbiology

- Name** : Nimisha B. Patel
Qualification : M.Sc. (M.phill)
Specialization : Microbiology

- Name** : Amita N. Prajapati
Qualification : M.Sc. (pursuing)
Specialization : Microbiology

Former Faculty Members

Name : Mr. Rajesh Chaudhary
Qualification : M.Sc., Ph.D.
Specialization : Microbiology

Name : Keta G. Pathak
Qualification : M.Sc. Ph.D.(Pursuing)
Specialization : Microbiology

Name : Monita V. Patel
Qualification : M.Sc. Ph.D.(Pursuing)
Specialization : Microbiology

Courses Available

B.Sc. (Microbiology)

Semester	Core Compulsory	Name of the Subject	Elective Subject
Semester-I	(MB-01) (Lab-1)	Fundamentals of microbiology Practical	Cell biology
Semester-II	(MB-02) (Lab-2)	Fundamentals of bacteriology Practical	Introduction to biochemistry

Courses Available

B.Sc. (Microbiology)

Semester	Core Compulsory	Name of the Subject	Elective Subject
Semester-III	(MI-201) (Mi-202) (Mi-203 PR)	Microbial Physiology Soil and water microbiology Practical	Environmental pollution
Semester-IV	(MI-204) (MI-205) (MI-206 PR)	Microbial biodiversity Food and dairy microbiology Practical	Biodiversity

Courses Available

B.Sc. (Microbiology)

Semester	Core Compulsory	Name of the Subject	Elective Subject
Semester-V	(MI-501) (MI-502) (MI-503) (MI-504) (MI-505 PR)	Molecular basis of microbial genetics Techniques in gene transfer Classical genetics r- DNA technology Practical	Bioinformatics
Semester-VI	(MI-601) (MI-602) (MI-603) (MI-604) (MI-605 PR)	Immunology Industrial microbiology Medical microbiology Bioprocess technology Practical	Heamatology and blood banking

Infrastructural facilities of the Department

- ❖ Laboratories : 02
- ❖ One Class room with ICT facility
- ❖ Store Room & Preparation Room
- ❖ Staff Room
- ❖ Washing Room



Equipments Facility

Distilled water plant	- 02	Colony counter -	01
Autoclave	- 02	Electronic Balance	- 02
Hot air oven	- 02	Incubator shaker	- 01
Electrical Centrifuge	- 01	Computer	- 01
Incubator	- 04	Lesser Printer	- 01
B.O.D. Incubator	- 01	Simple Microscope	- 10
Laminar air flow	- 01	Light Microscope	- 10
Colorimeter	- 02	Electric water bath	- 01
Refrigerator	- 02	Magnetic stirrer	- 01
PH – Meter(Digital)	- 01		

INCUBATORS



Oven



Incubator shaker



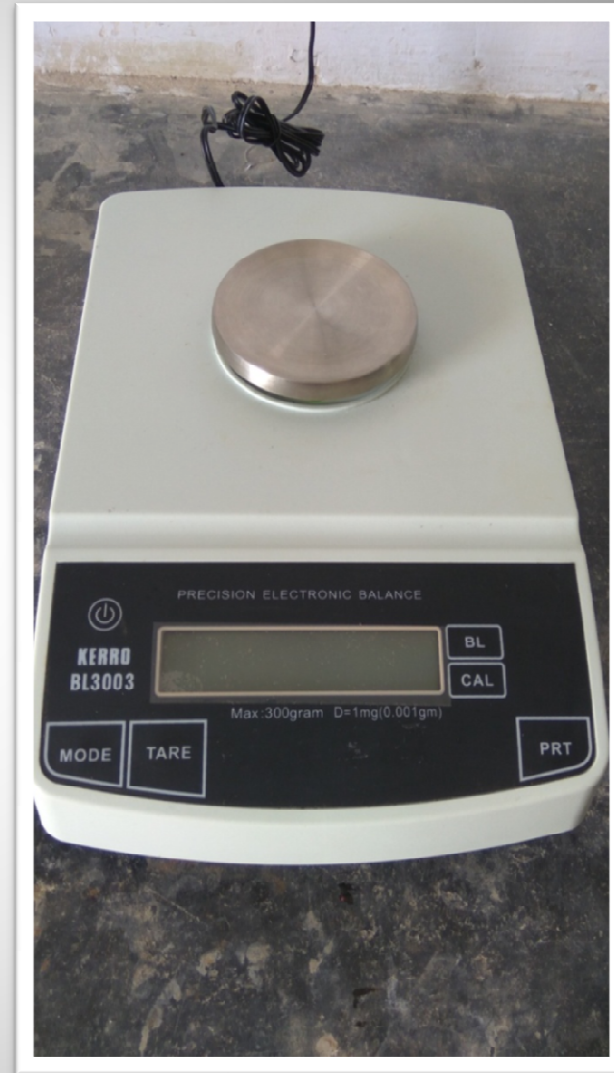
B.O.D. Incubator



Autoclave



Balance



COLORIMETER



DISTILLED WATER PLANT



LAMINAR AIR FLOW



pH METER



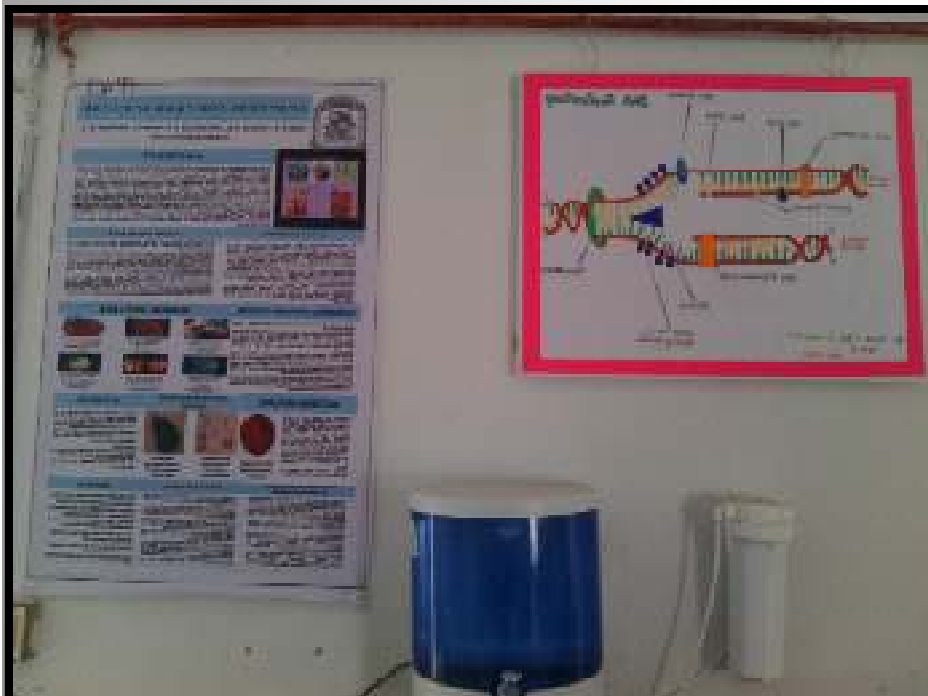
Teaching Methods

Following methodology are used (including B.B. methods)

- Lectures by PPT presentations**
- Charts**
- Demonstration of practical**
- Assignment Work**
- Active participation through question-answering**
- Group discussion**
- Surprise Tests**
- Power point presentation seminars by students**



Practical and Assignment work

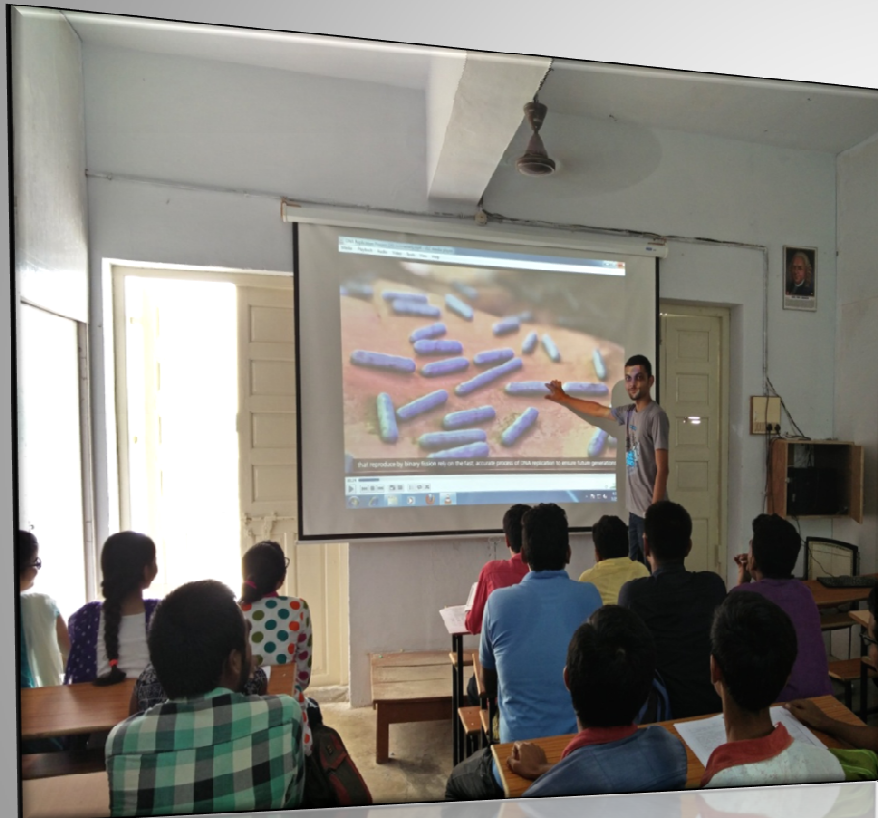


Lectures by PPT presentations



Group discussion

Student seminar by PPT Presentation



No. of RESEARCH PAPERS Published during Last 5 Years

Name of Faculty	International	National	Total
Prof. K. M. Patel	01	00	01
Total Research Papers Published = 01			

Research Publications (Last 05 Years)

□ Prof. K.M. Patel (HOD)

Sr No	Title	Name of Journal / Book	Page No.	Month
1	Chemical and biological treatment of oil polluted soil around refinery area of modasa.	International journal of applied and pure science and agriculture	104-108	2016

Conference/seminars/workshops Participated/Presented by Faculty During Last Five Years

Sr. No.	Name of the Faculty	Seminars/Conferences/Workshops			Participated /Presented	Total
		Inter-national	National	State		
1	Smt. K. M. Patel	0	03	02	02/03	05
2	Smt. B. M. Solanki	00	00	01	01/00	01
3	Smt. D.R.Patel	00	00	00	00/00	00
4	Ms. Apexa P. Joshi	00	0	01	01/00	01

Student Profile

Name of the Course	Applications received	Selected	Enrolled		Pass (%)
			Male	Female	
2011-12					
B.Sc. Sem-I	39	39	06	33	69.23
B.sc. Sem-II	39	39	06	33	75.80
S.Y.B.Sc.	14	14	02	12	92.85
T.Y.B.Sc.	24	24	05	19	95.83
2012-13					
B.Sc. Sem-I	62	62	23	39	67.27
B.Sc. Sem-1I	54	54	19	35	92.59
B.Sc. Sem-1II	43	43	11	32	92.85
B.Sc. Sem-1V	43	43	11	32	93.02
T.Y.B.Sc.	14	14	02	12	92.85

Student Profile

Name of the Course	Applications received	Selected	Enrolled		Pass (%)
			Male	Female	
2013-14					
B.Sc. (Sem-1)	80	80	10	70	75.00
B.Sc. (Sem-2)	78	78	10	68	70.20
B.Sc. (Sem-3)	54	54	19	35	83.33
B.Sc. (Sem-4)	54	54	19	35	85.42
B.Sc. (Sem-5)	42	42	11	31	87.80
B.Sc. (Sem-6)	41	41	11	30	92.68
2014-15					
B.Sc. (Sem-1)	90	90	24	66	81.11
B.Sc. (Sem-2)	86	86	23	63	69.50
B.Sc. (Sem-3)	81	81	19	62	97.29
B.Sc. (Sem-4)	72	72	7	65	97.29
B.Sc. (Sem-5)	54	54	20	34	66.66
B.Sc. (Sem-6)	52	52	19	33	92.68

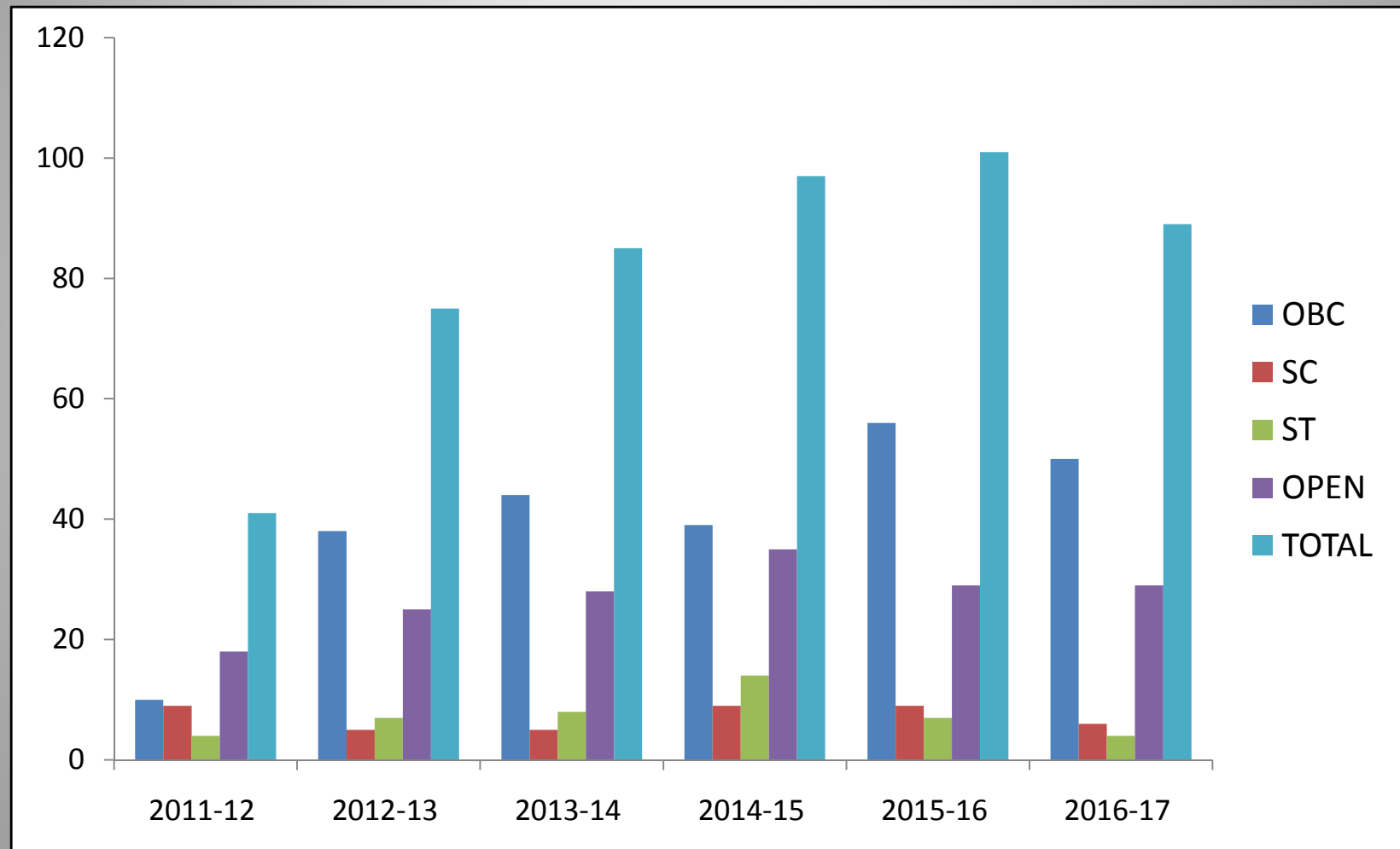
Student Profile

Name of the Course	Applications received	Selected	Enrolled		Pass (%)
			Male	Female	
2015-16					
B.Sc. (Sem-1)	95	95	20	75	79.80
B.Sc. (Sem-2)	95	95	20	75	56.14
B.Sc. (Sem-3)	81	81	19	62	93.23
B.Sc. (Sem-4)	81	81	19	62	87.32
B.Sc. (Sem-5)	75	75	09	66	75.12
B.Sc. (Sem-6)	76	76	09	67	64.10
2016-17					
B.Sc. (Sem-1)	103	103	20	83	78.02
B.Sc. (Sem-2)	103	103	20	83	88.25
B.Sc.(Sem-3)	85	85	20	75	86.15
B.Sc (Sem-4)	85	85	20	75	94.36
B.Sc (Sem-5)	81	81	19	62	81.11
B.Sc (Sem-6)	81	81	19	62	91.0

Category wise strength of students

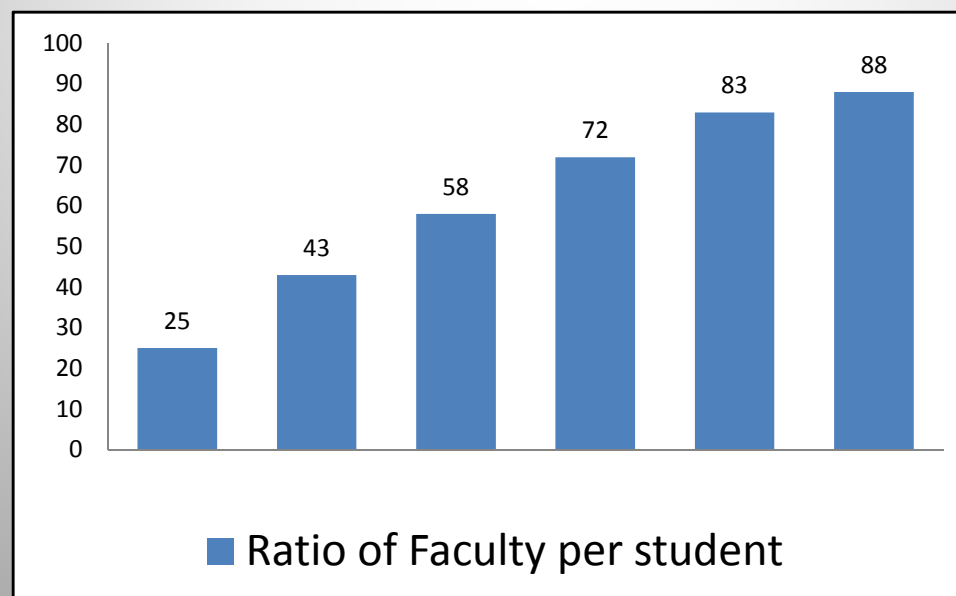
YEAR	M/F	OBC	SC	ST	OPEN	TOTAL
2011-12	M	2	2	3	4	11
	F	8	7	1	14	30
2012-13	M	4	1	1	1	7
	F	34	4	6	24	68
2013-14	M	5	3	2	2	12
	F	39	2	6	26	73
2014-15	M	8	1	9	10	28
	F	31	8	5	25	69
2015-16	M	13	4	1	4	22
	F	43	5	6	25	79
2016-17	M	13	2	3	3	21
	F	37	4	1	26	68

Category wise strength of students

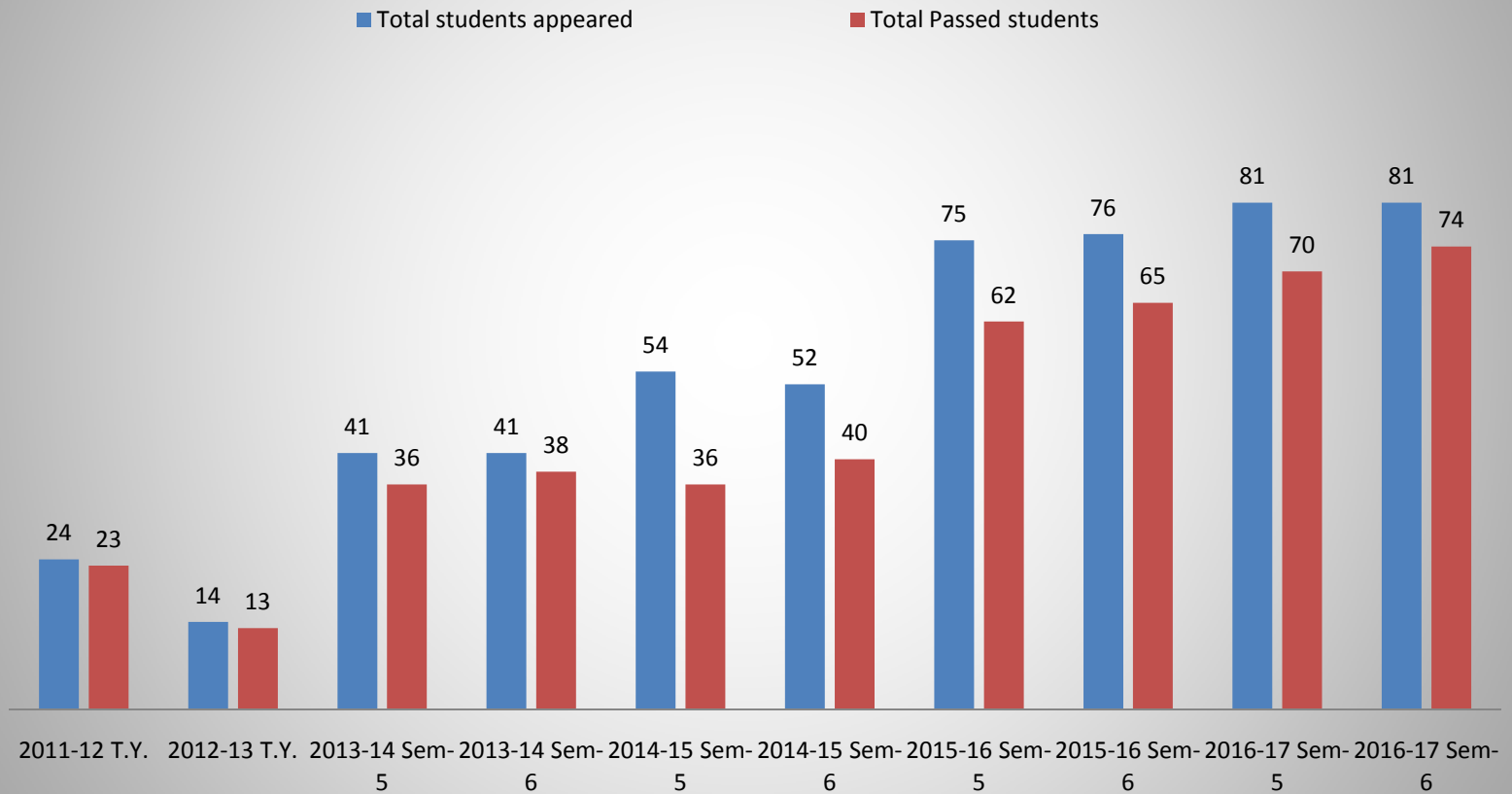


Student – Teacher ratio per Faculty

Year	Programme	Ratio
2011-12	B.Sc.	25:1
2012-13	B.Sc.	43:1
2013-14	B.Sc.	58:1
2014-15	B.Sc.	72:1
2015-16	B.Sc.	83 :1
2016-17	B.Sc.	88:1

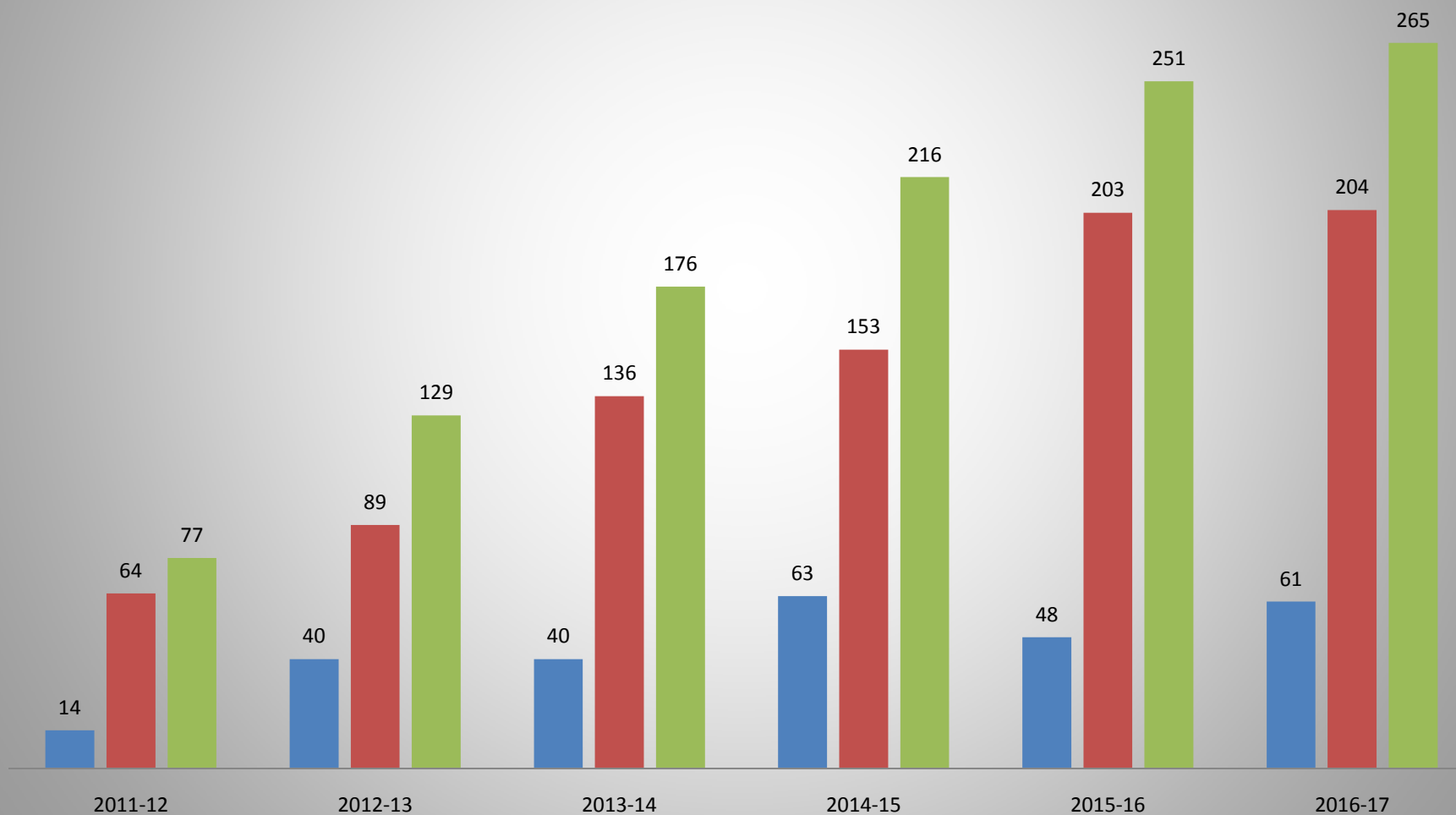


Last Five Years Result of T. Y. B.Sc.



Male - Female Ratio in Microbiology Subject

■ Male ■ Female ■ Total



Departmental Activities

- Participation in Seminars & Conferences
- Classroom Seminars
- Assignment Work**
- Guest Lectures
- Educational and historical Tour**
- PowerPoint & Poster Competition



List of Senior Visiting Faculty

No.	Name	Designation	Specialization
1	Dr. S.C. Parikh	Principal of S.M. Panchal science college, Talod	Microbiology
2	Mr. N. A. Patel	Former HOD, H.N.S.B. science College, Himmatnagar	Microbiology



Guest lecture by Prof. Naresh Patel

Classroom seminar



Poster presentation by students



Historical tour



Photo Gallery



**Day celebration
by students**

Photo Gallery



**Last day of
B.Sc. Sem-VI students**

Photo Gallery



Wall Painting by students

Student's Achievement

No.	Name of Students	Address	Designation
1	Mrs. Monita Patel	P.H.C. Dadhalia	As a Lab technician
2	Himani Gandhi	Adarsh science college, patan	Assistant professor (H.O.D)
3	Jignesh Pandya	Adarsh science college, patan	Assistant professor
4	Dhaval prajapati	Science college, Gadh	Assistant professor (Incharge Principal)
5	Rohit Prajapati	Claris Pharmaceutical, Ahmadabad	As a microbiologist in Quality control department
6	Paresh Rathod	Claris Pharmaceutical, Ahmadabad	As a microbiologist in Quality control department
7	Bhoomika Patel	Claris Pharmaceutical, Ahmadabad	As a microbiologist in Quality assurance department

Student's Achievement

No.	Name of Students	Address	Designation
11	Jinal Shah	Civil hospital, Ahmadabad	As a Lab technician
12	Kashyap Raval	Veeda pharmaceutical, Ahmadabad	As a microbiologist in quality control department
13	Mittal Rathod	Sir P.T. science college, Modasa	As a laboratory assistant
14	Minal Jayswal	Government college, Megharaj	As a lecturer
15	Zaz ummehani	P.H.C. Jitpur	As a Lab technician
16	Nikita Charan	Science college, Veeravada	As a assistant professor
17	Sonal Damor	Civil hospital, Gandhinagar	As a lab technician

Student's Achievement

No.	Name of Students	Address	Designation
18	Palak Chauhan	P.H.C.,Bolundra	As a Lab technition
19	Apexa Joshi	Sir P.T. science college, Modasa	As a laboratory assistant
20	Mansi Soni	B-Kanae English medium school,Modasa.	As a teacher
21	Rajesh Tirgar	P.H.C. Shamlaji	As a Lab technition
22	Riya Rathod	New tech Laboratory,Modasa.	As a Lab technition
23	Ashish Rudani	Ashirwad Laboratory,Anand	As a Lab technition
24	Sonal Patel	Crystal school,Lunawada.	As a teacher

Extension Activities by Faculty

Mrs. K.M.Patel

- Examiner of T.Y.B.Sc. H.N.G. Uni. Microbiology Practical examination
- Judge of Mehndi Competition and rangoli competition in College NSS Camp and in college campus
- Guide the students for the preparing Project Report, PPT Presentation, Poster Presentation, at College & University Level.
- Actively Participated in “Mahila Sashatrikaran” a Guj. Govt. Programme on 15th Aug 2015
- Participate in various Seminars of Women’s Development
- Active member of WDC (women development cell)

Extension Activities by Faculty

Mrs. B.M. Solanki

- Judge of Mehndi Competition and rangoli competition in College NSS Camp and in college campus
- Guide the students for the preparing Project Report, PPT Presentation, Poster Presentation, at College & University Level.
- Actively Participated in “Mahila Sashatrikaran” a Guj. Govt. Programme on 15th Aug 2015
- Participate in various Seminars of Women’s Development
- Active member of WDC (women development cell)

College Level Committee

Smt. K.M. Patel

- H.O.D (Microbiology)
- Admission Committee
- Academic activity Committee
- Cultural Committee
- WDC committee

Smt. B.M.solanki

- SCOPE committee
- WDC (Member)

Smt. D.R. patel.

- Debate committee
- WDC member

Opportunities

- To Improve laboratory for UG students.
- To make collaboration with other institutes and colleges.
- To arrange campus interviews for UG students so that students can get their jobs easily before the completion of graduation.
- To arrange more lectures by various science-subject experts from outside the department and educational and historical tour for the students to grow their knowledge.
- We used our limited infrastructure by other alternative way to minimize our infrastructure facility.

Future Plans

- To arrange more campus interviews.
- To subscribes Research Journals and e-Journals.
- To develop Research Lab by adding more instruments.
- To do minor/major research projects by faculties.

THANK YOU

