

FACULTY OF SCIENCE

Prospectus and Guidelines for Admission in the First Year Master of Science (M.Sc.) Programs

Academic Year 2026-2027



**THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA,
VADODARA-390002,
GUJARAT, INDIA**



H. H. Maharaja Sayajirao Gaekwad-III



MISSION STATEMENT

**Vision and mission as perceived by
H. H. Maharaja Sayajirao Gaekwad-III**

“The progress of a nation requires that its people should be educated. Knowledge is a necessity of man. It instills in him a desire to question and to investigate, which leads him on the path of progress. Education, in the broadest sense, must spread everywhere. Progress can only be achieved by the spread of education. Cooperation is necessary to achieve any worthy end and this readiness to cooperate will not be found in people if they are not educated.”

Contents

GENERAL INFORMATION	4
TENTATIVE DATES FOR ENTRANCE EXAM FOR ACADEMIC YEAR 2026-2027	5
DETAILS OF PG PROGRAMS OFFERED AT FACULTY OF SCIENCE	6
ADMISSION PROCEDURE.....	7
ONLINE APPLICATION FORM.....	7
LIST OF DOCUMENTS TO BE UPLOADED	8
MERIT RULES AND TIE-BREAKER FOR PG.....	8
RESERVATION OF SEATS	9
FEES STRUCTURE	10
CREDIT STRUCTURE.....	11
GRADE POINT SYSTEM	13
HOSTEL ACCOMODATION.....	14
DEPARTMENT PROFILES	15
DEPARTMENT OF COMPUTER APPLICATIONS.....	15
DEPARTMENT OF BIOCHEMISTRY.....	16
DEPARTMENT OF BOTANY.....	19
DEPARTMENT OF CHEMISTRY.....	21
DEPARTMENT OF ENVIRONMENTAL STUDIES.....	24
DEPARTMENT OF GEOLOGY	28
DEPARTMENT OF MATHEMATICS.....	30
DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGY CENTRE.....	32
DEPARTMENT OF PHYSICS.....	34
DEPARTMENT OF STATISTICS.....	36
DEPARTMENT OF ZOOLOGY	37
Faculty Administration.....	39
Heads of the Departments	40

GENERAL INFORMATION

The Maharaja Sayajirao University of Baroda has blossomed from the Baroda College, which is one of the oldest centers of learning in western India. The Maharaja Sayajirao University of Baroda is the only state university with a residential, unitary character having English as the sole medium of instruction. The Maharaja Sayajirao University of Baroda has become internationally renowned over the years. Faculty of Science is a constituent institution of The Maharaja Sayajirao University of Baroda under its direct management and control. This Faculty began as an integral part of Baroda College which was founded by His Highness Sir Sayajirao Gaekwad of Baroda in 1881. He also started the Sayaji Jubilee Institute in 1933 and housed all science subjects under it. The Foundation stone of the Sayaji Jubilee institute was laid in 1926 by Sir Daniel Rufus Isaacs, Viceroy and Governor General of India.

The efforts of establishing a Residential University at Baroda were initiated by Maharaja Sayajirao in 1908, but it became a reality only during the rule of His Highness Pratapsinhrao Gaekwad. The Maharaja Sayajirao University of Baroda came into existence on 30th April 1949. Through the constitution of the University, all the science departments were reconstituted as Faculty of Science. The Faculty of Science steadily made significant strides in various disciplines of science and attracted students from all over India and from other countries. It soon developed into a cosmopolitan center of education. The growth of the faculty thus amply complimented the pioneering efforts of the great visionary, Maharaja Sayajirao Gaekwad, who had taken great pains to improve science education.

TENTATIVE DATES FOR ENTRANCE EXAM FOR ACADEMIC YEAR 2026-2027

Sr. No	Program	Exam	Last date of application for entrance test – MSUIS	Tentative Date of Entrance test	Time
1.	PG	Geography	16-06-2026	19-06-2026	10:00 am to 11:00 am
2.	PG	Physics	16-06-2026	19-06-2026	10:00 am to 11:00 am
3.	PG	Statistics	16-06-2026	19-06-2026	12:00 noon to 1:00 pm
4.	PG	Zoology	16-06-2026	19-06-2026	12:00 noon to 1:00 pm
5.	PG	Botany	16-06-2026	19-06-2026	03:00 pm to 04:00 pm
6.	PG	Environmental Studies	17-06-2026	20-06-2026	12:00 noon to 1:00 pm
7.	PG	*Biochemistry	17-06-2026	20-06-2026	10:00 am to 11:00 am
8.	PG	*Medical Biotechnology	17-06-2026	20-06-2026	10:00 am to 11:00 am
9.	PG	Microbiology	17-06-2026	20-06-2026	2:00 pm to 3:00 pm
10.	PG	Geology	17-06-2026	20-06-2026	2:00 pm to 3:00 pm
11.	PG	Chemistry	19-06-2026	22-06-2026	01:00 pm to 02:00 pm
12.	PG	Mathematics	19-06-2026	22-06-2026	10:00 am to 11:00 am
13.	PG	M.Sc. Advanced Computing	19-06-2026	22-06-2026	12:00 noon to 1:00 pm

**There will be common entrance exam for both the programs. However, student need to apply separately for both if wish to be considered for both programs.*

#The dates are tentative and subject to change. Applicants are advised to regularly visit the website/application portal for updates and notifications.

#Registration and subject selection on GCAS portal, and registration for entrance test on MSUIS admission portal is must.

DETAILS OF PG PROGRAMS OFFERED AT FACULTY OF SCIENCE

Seats and eligibility in each subject

Sr. No.	Subject offered at M.Sc.	Program Type GIA – Grant-in-Aid HPP – Higher Payment Program	Intake Capacity	Eligibility [Students with following Subject(s) at 3-Year/ 4-Year undergraduate program in Graduation or as stated are eligible to apply for M. Sc.]
1.	M.Sc. Advanced Computing	HPP Regular	17	UG Degree with a Computer Applications/ Computer Science/ Computer Engineering/ Data Science from a recognized institution.
		HPP Special	03	
2.	Biochemistry	GIA	22	UG Degree with a science subject as major and minimum 8 credits in the Life Science courses
		GIA-HPP	06	
3.	Botany	GIA	15	UG Degree with a science subject as major and minimum 8 credits in the Life Science courses
4.	Chemistry	GIA	15	UG Degree with a science subject as major and minimum 8 credits in the Chemistry courses
		GIA-HPP	10	
5.	Environmental Studies	GIA-HPP	45	UG Degree with a science subject as major and minimum 8 credits in the Life Science courses
6.	Geography	GIA	15	UG Degree with a Science/Arts subject as major and minimum 8 credits in the Geography courses
7.	Geology	GIA	15	UG Degree with a science subject as major and minimum 8 credits in the Geology courses
8.	Mathematics	GIA	30	UG Degree with a Science/Arts subject as major and minimum 8 credits in the Mathematics courses
9.	Medical Biotechnology	GIA-HPP	22	UG Degree with a science subject as major and minimum 8 credits in the Life Science courses
10.	Microbiology	GIA	15	UG Degree with a science subject as major and minimum 8 credits in the Life Science courses
		GIA-HPP	03	
11.	Physics	GIA	30	UG Degree with a science subject as major and minimum 8 credits in the Physics courses
12.	Statistics	GIA	15	UG Degree with a science subject as major and minimum 8 credits in the Statistics courses
13.	Zoology	GIA	15	UG Degree with a science subject as major and minimum 8 credits in the Life Science courses

*Excluding EWS and other supernumerary seats

For admission to M.Sc. program of MSU, a candidate shall have successfully completed UG Degree with a science subject as major obtaining 50% (for General), 45% (for SEBC) and Pass (for SC & ST) marks in aggregate or equivalent CGPA.

ADMISSION PROCEDURE

ONLINE APPLICATION FORM

- Registration shall be completed through the GCAS portal by duly filling the online application form.
- Candidates must provide accurate personal, academic, and contact details, including complete particulars of the qualifying examination, based on which eligibility and category (as per the location of the bachelor's degree) shall be determined.
- Scanned copies of all necessary documents must be uploaded in the prescribed format on the GCAS portal; failure to upload relevant documents shall result in denial of applicable reservation benefits.
- Upon successful submission, login credentials for the postgraduate admission portal shall be communicated via registered email and SMS.
- Candidates shall subsequently register for the relevant departmental entrance examination(s) on The Maharaja Sayajirao University of Baroda website, along with payment of the prescribed fee for each department applied to.
- The entrance examination schedule shall be notified on the University website; candidates are advised to refer to it regularly for updates.
- Admission round schedules and all related communications shall be published exclusively on the admission portal.
- Candidates shall be invited to participate in online admission rounds strictly on the basis of merit.

- Selected candidates shall receive an admission offer through the portal and must confirm or decline within the stipulated time.
- Upon confirmation, candidates shall remit the prescribed fee through the provided payment link to secure admission.
- The admission portal shall serve as the sole medium for all updates and communications regarding the postgraduate admission process.
- Login credentials for the admission portal (used for subject preference filling and admission rounds) shall be distinct from those issued at the time of GCAS registration; candidates are required to retain both credentials securely.

LIST OF DOCUMENTS TO BE UPLOADED

Scanned copies of the necessary documents must be uploaded as per GCAS guidelines <https://gcas.gujgov.edu.in/>.

MERIT RULES AND TIE-BREAKER FOR PG

For candidates applying for M.Sc. program of MSU, the merit of the candidate shall be decided entirely on the basis of candidate's performance in the Entrance examination conducted by MSU.

The criteria for deciding merit order in case of candidates having equal merit marks shall be based on the following descending sequence, namely-

1. Aggregate marks obtained in the last two semesters or final year in case of yearly pattern.
2. External Marks obtained in the last semester or final year in case of yearly pattern.
3. External Marks obtained in the second last semester.
4. Date of Birth (Age).

RESERVATION OF SEATS

RESERVATION OF SEATS AS PER GOVERNMENT OF GUJARAT

Government of Gujarat rules for the reservation of seats will be applied: SC: 7%, ST: 15%, SEBC: 27%. The remaining 51% of seats will be open for all categories. The scanned copies of all original certificates should be uploaded at the time of filling out the online application form. If any relevant certificate is not uploaded, the candidate will NOT be considered for the claimed reservation category.

A candidate, irrespective of her/his reservation category, for admission, will be first considered for Open category (open for all) based on merit.

- a) The candidates applying under EWS, SEBC, **SC and ST categories are required to** produce a valid certificate from competent authority of Government of Gujarat in the prescribed format.
- b) The **SEBC category applicants** are required to produce a valid **non creamy layer certificate** from a competent authority.
- c) There will be 10 % supernumerary seats for **Economically Weaker Sections (EWS) (additional seats over and above the total number of available seats)**, reserved for the **candidates from Gujarat State only**. Within this 10% quota, **33%** seats shall be further sub-reserved for female students belonging to the same Economically Weaker Sections.
- d) **Reservation for physically disabled students: 5%** of the total seats are reserved for the persons with benchmark disability in accordance with the provisions of the section 32 of the rights of persons with Disabilities ACT, 2016. They should produce a **recent/current year certificate of Civil Surgeon** stating the type of disability, extent (%) of disability and state (progressive/ non progressive) of disability. Only those students who have **minimum 40% disability** are eligible to be considered for the reservation. A scanned copy of this certificate must be uploaded, while filling the application form, for claiming the reservation under this category.

- e) **Reservation for wards of Defense persons (Ex/In- Service):** 1% of the total seats are reserved under this category. The scanned copy of a certificate issued by competent authority must be uploaded for claiming reservation under this category.
- f) **Reservation for Kashmiri Migrants:** 1 % of total seats are available as supernumerary seats reserved for this category.
- g) **Reservation for wards of the Staff of the University:** 1 % of total seats are available as supernumerary seats reserved for the wards of the in-service staff of The Maharaja Sayajirao University of Baroda. This reservation is available only for the seats under regular fees category. The scanned copy of a certificate issued by competent authority must be uploaded to avail this benefit.

RESERVATION OF SEATS

50% of seats are open for all, including MSU candidates

50% of seats are reserved for MSU candidates

FEES STRUCTURE

Candidates can confirm their admission by making online payment of the fees within three days from the date of the allocation of subject groups. **The payment of fees should be made ONLINE through the admission portal only; Cash transactions are not allowed at any stage of the admission procedure.**

If the fee is NOT PAID within the stipulated time, the admission of candidate will automatically get cancelled and NO EXTENSION will be granted for the payment of fees.

The fee for the first TWO Semesters, including Examination fee is:

	GIRLS	BOYS
Grant in Aid (GIA)	Rs. 9910/year	Rs. 11,110/Year
GIA-HPP	Rs. 53,450/year	Rs. 53, 450/year
Environment Studies - HPP	Rs.1,03,230/year	Rs.1,03,230/year
M.Sc. Advanced Computing - HPP-Regular	Rs.1,26,000/year	Rs.1,26,000/year
M.Sc. Advanced Computing - HPP-Special	Rs. 2,07,000/year	Rs. 2,07,000/year

* The fee is subject to change from time to time as per the directives of the Maharaja Sayajirao University of Baroda and Government of Gujarat.

The successful payment of fees will be reflected on the admission portal within 24 hours after the payment of fees. Candidates are advised to preserve the transaction number and the fee receipt which can be downloaded from the admission portal.

The refund of fees for cancellation of admission will be as per university rules.

CREDIT STRUCTURE

1. UNIFORM CREDIT STRUCTURE OF POSTGRADUATE PROGRAM

2. Framework for PG programs

a. A uniform 22 credit structure for each semester shall be adopted across the state for 2-year Program

- Students who exit at the end of 2nd Semester/Ist year shall be awarded a postgraduate Diploma
- One paper from Major should be a vocational Course in 2nd semester
- Out of total credits of Major, 3 credits to be allotted to BKS in First year and 2 credits to be allotted to BKS in Second year

b. Credit framework shall strictly follow:

- UGC curriculum and Credit framework for PG programs (2024)
- National Credit Framework

PROGRAMME TYPES AND CREDIT STRUCTURE

1. 2-Year PG Course (Coursework only)
2. 2-Year PG (Coursework + One semester Research)
3. 2-year PG (Coursework + Two semester Research)

[1] TWO YEAR PG WITH COURSEWORK ONLY

All the semesters of PG programme shall follow same course category and credit structure for all the four semesters.

SEMSTER I, II, III and IV (22 CREDITS)

<u>COURSE CATEGORY</u>	<u>CREDITS</u>
Major course	4
Major course	4
Major course	4
Major course	4
Major/Multidisciplinary Course (Major/Foundation/Multidisciplinary/Interdisciplinary Advanced/Centre specific/Generic Elective	4
Skill enhancement Course	2
TOTAL	22

[II] TWO YEAR PG WITH COURSEWORK AND ONE SMESTER RESEARCH

The first three semesters of PG programme shall follow course category and credit structure as indicated below followed one semester of research/dissertation.

SEMESTER I, II and III (22 CREDITS)

<u>COURSE CATEGORY</u>	<u>CREDITS</u>
Major course	4
Major course	4
Major course	4
Major course	4
Major/Multidisciplinary Course (Major/Foundation/Multidisciplinary/Interdisciplinary Advanced/Centre specific/Generic Elective	4

Skill enhancement Course	2
TOTAL	22

SEMESTER IV (22 credits)

<u>COURSE CATEGORY</u>	<u>CREDITS</u>
Research/Dissertation	22
TOTAL	22

GRADE POINT SYSTEM

A system comprising of 7 grade points (4 to 10) will be followed for evaluating a candidate in every course. Both mid-semester and end-semester exams are counted for final grade points.

Grade points	Description	Percentage of Marks	Division/Grade	Range
10	Outstanding	90%-100%	First/O	Above 9.01
9	Excellent	80%—89.9%	First/A	8.01-9.00
8	Very Good	70%-79.9%	First/B	7.01-8.00
7	Good	60%-69.9%	First/C	6.01-7.00
6	Fair	50%-59.9%	Second/D	5.01-6.00
5	Average	40%-49.9%	Pass/E	4.01-5.00
4-0	Dropped	Below 40%	F	Below 4.00

$$\text{Semester Grade Point Average (SGPA)} = \frac{\sum (\text{Credit} \times \text{Grade Points})}{\text{Total Credits of respective semester}}$$

* The sum is taken over the courses of the respective semester.

AWARD OF CLASS

Marks-sheets of all semesters of M. Sc. will simply indicate the result as either Pass or Fail or ATKT but not the class. The class will be indicted only in the last Semester mark sheet. The class will be awarded based on the Cumulative Grade Point Average (CGPA), computed as:

$$\text{CGPA} = \frac{\sum (\text{Semester credits} \times \text{SGPA})}{\text{Total Credits of all Semesters}}$$

IMPORTANT

- ❖ The admissions will be strictly based on the merit. Just fulfilling the eligibility criteria DOES NOT GUARANTEE admission.
- ❖ The admission to any of the course is PROVISIONAL and subjected to fulfillment of eligibility criteria.
- ❖ If the information provided by the candidate is incorrect or if any unfair practice is followed or the candidate is unable to submit any of the required certificates in the stipulated time period, her/his admission is liable to cancellation.

HOSTEL ACCOMODATION

At the Maharaja Sayajirao University of Baroda, hostel facility is available at the main campus. There are limited hostel seats available so, students are advised to apply for hostel accommodation immediately after getting the admission. Those students who have confirmed their admission by paying the applicable fees will only be eligible for hostel application and will be provided hostel accommodation on the merit basis. Visit the website <https://hostels.msubaroda.ac.in/> for further details and application.

DEPARTMENT PROFILES

DEPARTMENT OF COMPUTER APPLICATIONS

ABOUT THE DEPARTMENT

In year 2026 Faculty of Science introduced M. Sc. Advanced Computing that is specially designed for the graduates in computer/IT discipline in CBCS pattern. In order to provide the platform to strengthen the existing academic programs and to initiate and promote research activities in the field of Computer Applications, University established Department of Computer Applications through a senate resolution in 2013. The aims and objectives of this department are given below:

- To provide platform to strengthen the existing two academic programme and to start new programme in the field of computer applications.
- To undertake and promote research activities in computer applications and related areas.
- To obtain grants from funding agencies for various academic/ research initiatives.
- To support the education of computer science in the faculty as well as University.
- Intends to support development and maintenance of software intensive systems for automation of services and operations of Faculty and University.

FACILITIES

- Computer Laboratory with LAN and Wifi facility
- Library

DEPARTMENT OF BIOCHEMISTRY

ABOUT THE DEPARTMENT

The Department of Biochemistry was established in 1955 through the initiative of Dr. K. G. Naik, a professor of the Department of Chemistry. Under Prof. C. V. Ramakrishnan's leadership, it evolved into a leading centre for research and postgraduate studies in Biochemistry and Nutrition. The department has a strong research environment, focusing on areas such as structural biology, protein engineering, biosensors, metabolic engineering, plant growth, antibiotics, and human diseases including diabetes, cancer, PCOS and neurodegenerative disorders. It offers M.Sc. programs in Biochemistry and Medical Biotechnology, with around 40 research scholars engaged in advanced research. The department receives funding from major agencies such as DBT, DST, UGC, CSIR, SERB, ICMR, BRNS, UGC-DAE, GSBTM and GUJCOST, along with industry support, and maintains global collaborations with over 45 scientists. In the past five years, it has published more than 150 international research papers with over 8000 citations. Department of Biochemistry celebrated its platinum jubilee by organising 93rd SBC(I) meeting and an international conference in December 2024. The department regularly organizes national and international conferences and hosts prestigious lecture series, including those named after Prof. C. V. Ramakrishnan, Prof. Telang, and Prof. L. J. Parekh, featuring eminent scientists such as Nobel laureates Dr. Venkatraman Ramakrishnan and Dr. Ada Yonath.

THRUST AREAS OF RESEARCH

The research areas encompass a broad spectrum of interdisciplinary life science domains, including structural biology, protein engineering, the ubiquitin-proteasome system, biosensors, and nanobiotechnology. They further extend to plant-based studies such as phytoremediation, the discovery of anticancer molecules from plants, and mechanisms underlying plant tolerance to heavy metal stress. Investigations also focus on reproductive neuroendocrinology in the context of

polycystic ovarian syndrome, along with the therapeutic potential of phytopharmaceuticals. Additional areas include metabolic engineering in yeast, bioprospecting of microbial endophytes, and the application of nanobiotechnology in addressing antimicrobial resistance. Research also addresses the biology and therapeutic strategies for neurodegenerative disorders, particularly Huntington's disease, alongside the development of point-of-care diagnostics for autoimmune diseases and antimicrobial-resistant pathogens. Furthermore, studies explore the role of macrophages in diabetes and obesity, neurodegeneration, pharmacology, and the discovery of herbal drugs.

RESEARCH FACILITIES

The Department of Biochemistry is equipped with well-developed infrastructure to support advanced teaching and research, including dedicated laboratories for faculty members and specialized experimental facilities. It houses an animal house facility and a BSL-II laboratory for safe biological and cell-based studies. Key instrumentation includes Digital Droplet PCR, a fluorescent microscope, multimode reader, HPLC, UV-visible and fluorescence spectrophotometers. Additional facilities such as a cell culture room, lyophilizer, and sonicator support diverse biochemical and molecular analyses. These resources provide strong practical training to postgraduate students and promote a dynamic, research-oriented academic environment.

GRANT PROCURED

Research funding grants from UGC-DAE, BRNS, NRDC, DST-SERB, GSBTM, ICMR, were obtained multiple times in past five years.

STUDENTS' ACHEIVEMENT

Each year students are placed at reputed pharmaceutical industries like, Dr. Reddy's Lab, Torrent Pharma, Sun Pharma, Zydus Cadila, Meril along with local biotech and pharma companies. Many students clear national level exams like GATE,

CSIR, BRNS etc. Many students opt for PhD/teaching/research positions in academics in India and abroad.

NOTABLE ALUMNI

The Department of Biochemistry takes pride in its distinguished alumni who have made significant contributions across academia, research, industry, defense, and sports. Notable alumni include Dr. Thomas Pucadyil, a Shanti Swarup Bhatnagar awardee and Director of BRIC-NCCS, Pune; Sir A. J. Patel associated with the MRC, UK; Dr. Ashok Kulkarni from the NIH; and Dr. A. Surolia, former Director of NII. Other eminent alumni include Dr. M. S. Patel, Dr. Girish Shah, and Dr. R. T. Ravi, who have contributed to global academia and industry. The department has also produced leaders like Prof. H. Padh, former Vice Chancellor of Sardar Patel University. Beyond science, alumni such as Col. Sofiya Qureshi have served the nation in the Indian Army, while Madhuri Parmar has represented excellence in sports at the national level, reflecting the department's diverse and impactful legacy.



DEPARTMENT OF BOTANY

ABOUT THE DEPARTMENT

The Department of Botany, The Maharaja Sayajirao University of Baroda is one of the premier centers for education and research in plant sciences. Established with a vision to promote excellence, the Department has consistently contributed to academic development, scientific innovation, and extension activities across diverse areas of botany.

The Department offers undergraduate, postgraduate (with full time dissertation in the fourth semester), and doctoral programme, integrating botany with modern molecular approaches. With a strong emphasis on field-based learning and laboratory research, the Department plays a pivotal role in biodiversity conservation, sustainable utilization of plant resources, and environmental awareness.

RESEARCH FACILITIES

The Department is equipped with modern infrastructure and research facilities, including:

- Well-equipped laboratories for Plant Taxonomy, Physiology, Anatomy, Ecotoxicology, Ecology, Remote Sensing -GIS and Biotechnology
- Herbarium with rich regional plant collections
- Botanical Garden for teaching and conservation purposes
- Molecular Biology and Tissue Culture facilities
- Microscopy and imaging systems
- Field research support for ecological and biodiversity studies

GRANTS RECEIVED

The Department has successfully secured research funding from various national agencies such as:

- Ministry of Environment, Forest and Climate Change (MoEFCC)

- Department of Science and Technology (DST)
- Science and Engineering Research Board (SERB)
- Department of Biotechnology (DBT)
- Indian Space Research Organisation (ISRO)
- University Grants Commission (UGC)
- Gujarat State Biotechnology Mission (GSBTM)
- Knowledge Consortium of Gujarat (KCG)

STUDENT ACHIEVEMENT

- Selection in national-level competitive examinations (NET, GATE, CSIR-JRF)
- Participation and awards in national and international conferences
- Successful placements in academic, research, and industrial sectors
- Contributions to research publications and field-based projects

NOTABLE ALUMNI

The Department has produced distinguished alumni contributing to academia, research institutions, environmental services, biotechnology industries, and conservation organizations. Notable alumni include

- Dr. Kamlesh Lulla (Senior Scientist, NASA)
- Dr. C.B.S. Dutt (Former Deputy Director, NRSC)
- Prof. P.B.Kavi Kishor (Emeritus Professor, Osmania University)
- Dr. M. Sanjappa (Former Director, Botanical Survey of India)

DEPARTMENT OF CHEMISTRY

ABOUT THE DEPARTMENT

Established in 1949 with the university (previously part of Baroda College under Mumbai University pre-independence), the Department of Chemistry has risen to UGC's Centre for Advanced Studies (CAS-II) through dedicated faculty efforts. It excels in teaching and research, offering 3/4-year B.Sc. Honours, 2-year M.Sc., and PhD programs. Students gain strong practical training and secure industry placements via campus drives. Research has evolved consistently for over 50 years, earning UGC DRS/DSA, DST FIST (Level II), GUJCOST Centre of Excellence in Material Science/Nanopolymeric Materials, and DST-PURSE. Labs and classrooms are modernized with industry/UGC funding. The department boasts its own library of references, theses, and reports, complementing university facilities. Faculty are invited nationally/internationally for lectures, sessions, reviews, books, affirming its global mark.

THRUST AREAS OF RESEARCH

Staff members of our department have been actively engaged in following Research areas:

Asymmetric Synthesis

Bioinorganic Chemistry

Catalysis

Chemosensors

Coordination Chemistry

Drug Delivery

Environmental Chemistry

Environmental Chemistry

Green Chemistry

Material Chemistry

Medicinal Chemistry

Nanoscience

Organometallic Chemistry

Synthetic Organic Chemistry

RESEARCH FACILITIES

Department of Chemistry has the combination of modern infrastructure, hands-on equipment for PhD and MSc students, and the acquisition of sophisticated instruments through various funding programs of the Department as well as

research projects sanctioned to the faculties. These facilities not only enhance the quality of teaching and research but also ensures that students gain practical exposure to cutting-edge technology, which is crucial for their future careers in academia or industry.(List of Sophisticated Instruments)

- ❖ Nuclear Magnetic Resonance Spectrometer-NMR(400MHz)
- ❖ Atomic Absorption Spectrometer (AAS) ; FT-IR Spectrometer
- ❖ Gas Chromatograph-Mass spectrometer (GC-MS)
- ❖ CHNSO Analyzer ; Polarizing Optical Microscope with Hot stage (POM)
- ❖ Digital Polarimeter ; Differential Scanning Calorimeter (DSC)
- ❖ Thermogravimetric analyzer (DTA-TGA)
- ❖ Digital Refractometer ; DLS Particle Size Analyzer
- ❖ Fluorescence Spectrofluorimeter ; UV-Vis and UV-VIS-NIR Spectrophotometer

GRANTS PROCURED

Several advanced research projects have been sanctioned to our faculty members by prestigious funding agencies such as **UGC, CSIR, UGC-DAE, DST-SERB, ANRF, GSBTM, and GUJCOST**. These initiatives have significantly contributed to the Department's research output, resulting in a growing number of **high-quality publications, patents, and successful Ph.D. completions**.

STUDENTS ACHIEVEMENT

- Holistic Development: Postgraduate curriculum features seminars, industrial visits, dissertations, and faculty-guided research to build critical thinking, research aptitude, and practical skills.
- Co/Extracurricular Excellence: Students shine in activities inside/outside university, showcasing versatility and leadership.
- Academic Achievements: Strong performance in NET (JRF/LS), GATE, SLET, IIT JAM; many admitted to IITs, NCL, top universities for advanced studies.

- Industry Connections: Robust ties ensure career readiness; ~80% PG students placed in R&D/industry via campus interviews.
- Campus Recruitment: >15 reputed companies visit yearly, rating students top in the state.

NOTABLE ALUMNI

The distinguished alumni of Department of Chemistry have excelled across academia, research organizations, industry and administration. Notable among them are:

- DR. J. S. Yadav Former Director, IICT-Hyderabad & Director, Indrashil University, Ahmeadabad,
- Shri C K Shah Member, MSU Alumni Foundation Inc, USA.
- Dr Rakesh Kohli Former-Director, Mass-spectrometry Facility, University of Pennsylvania.
- Prof K Seshan, Retd. Professor, University of Twente, Netherlands.
- Dr. Rajeev Rehani Executive Vice President and Head, API, Dr Reddy's Laboratories Ltd.
- Dr. Hasit Dangi, Vice President - Operations Product and Application Development, National Peroxide Limited.
- Dr. Mathew Jacob, Manager, Clariant International Ltd, Basel, Switzerland.
- Dr. Paresh Sanghvi Global Technical Manager, Deltech Europe Ltd. UK.
- Dr. Jigar Desai Deputy General Manager Zydus Research Centre, Ahmeadabad,
- Dr. Bharat Newalkar, General Manager, R & D B.P.C.L.Ltd.,
- Dr. G Kalpana Ex. Vice President, Reliance Industries Ltd. Vadodara.

More graduates are well placed in other leading universities and pharmaceutical industries in India and abroad.

DEPARTMENT OF ENVIRONMENTAL STUDIES

ABOUT THE DEPARTMENT

Launched in 2000 as UGC Innovative self-finance B.Sc. (Hons) Environmental Science, the Department added M.Sc. (2010) and Ph.D. (2016) programs. It trains students in environmental monitoring/management, EIA, remote sensing/GIS, disaster management, EHS, climate change, SDGs, ESG, and biodiversity—preparing them for roles in GPCB, CPCB, IOCL, EHS/ETP, labs, consultancies, and NGOs. Collaborates with industries, NEERI, ISRO, GEMI for real-world exposure via visits. Facilities include library, GIS/SPSS computer lab, biology lab, and two instrumental environmental labs.

THRUST AREAS OF RESEARCH

- ❖ Environmental Monitoring and Management
- ❖ Developing sustainable and efficient materials for pollutant removal, particularly low-cost biosorbents, nano-adsorbents, and biochar
- ❖ Climate Change and Mitigation
- ❖ Environmental Biotechnology, Modelling, Impact and Risk Assessment
- ❖ Waste Management and Resource Recovery
- ❖ Disaster Mitigation and Management
- ❖ Biodiversity and Ecosystem Conservation
- ❖ Water Resources and Watershed Management
- ❖ Carbon Monitoring and Sequestration
- ❖ Remote Sensing and Data Management

RESEARCH FACILITIES

The Department houses state-of-the-art laboratories equipped with advanced analytical instruments to support cutting-edge research and innovation.

Key facilities include:

- ❖ Atomic Absorption Spectrophotometer (AAS)
- ❖ UV-Visible Spectrophotometer

- ❖ BOD Incubator
- ❖ Refrigerated Centrifuge
- ❖ Flame Photometer
- ❖ Gas Chromatography System (GC-FID/TCD)
- ❖ Total Organic Carbon (TOC) Analyzer
- ❖ Respirable Dust Sampler
- ❖ Gaseous Pollutant Sampler
- ❖ Jar Test Apparatus
- ❖ Microwave Digester

GRANT PROCURED

The Department is actively engaged in externally funded research projects that address key environmental challenges:

GSBTM-Sponsored Project, VMC-Sponsored Project

STUDENTS' ACHIEVEMENT

Our students consistently excel in academics, sports, and professional arenas, reflecting the Department's commitment to holistic development.

Isha Singh – Recognized as a Youth Icon by the Ministry of Youth Affairs and Sports

Bhumika Joshi – Represented at State and National levels in Swimming, Yoga, and Rock Climbing.

NOTABLE ALUMNI

- Dr. Bhavik Patel, Director, Sustainable Ecology Foundation
- Dr. Akshaya Verma, Department of Hydrology, IIT Roorkee
- Mr. Kaustubh Gokhale, Water Dots, Vadodara
- Ms. Sneha Shahi, ATREE, Bangaluru
- Dr Aalap Dixit, Assistant Professor, Oklahoma State University, USA
- Dr Vikas Lakhani, Lecturer and Education Coordinator, University College Tilburg, Tilburg University, Netherlands

DEPARTMENT OF GEOGRAPHY

ABOUT THE DEPARTMENT

Established in 1952 under Prof. V.A. Janaki's leadership, the Department of Geography at The Maharaja Sayajirao University of Baroda is a premier center for geographical education. The Postgraduate Program offers holistic insights into human-environment interactions, blending physical, environmental, and human geography with specialties like health geography, regional analysis, EIA, and geomorphology. It emphasizes global issues: climate change, ocean studies, resilience, urban development, geopolitics, sustainable planning, population dynamics, pollution, and hazards. Practical training includes GIS, Remote Sensing, photogrammetry, surveys, and fieldwork. The dissertation fosters independent research, critical thinking, analytics, and writing skills—preparing students for exams, research, and careers. The structured curriculum builds critical thinking, analytical skills, and professionalism.

THRUST AREAS OF RESEARCH

- Physical geography – climate studies, geomorphology and soils
- Human geography - Regional planning, Health, Medical geography, Urban studies, Social geography, Industrial geography, Tourism geography, Political geography
- Geospatial Technologies.

RESEARCH FACILITIES

- Remote sensing and GIS lab
- Soil and water testing lab
- Surveying instruments - Digital theodolites, Digital planimeters, GPS devices

STUDENTS' ACHEIVEMENT

- **Prakriti Young Geographers' Club** - National Institute of Event Management, Ahmedabad 2019
- **Sarthak Musale** - Parade Commander - 15th August 2018
- **Archana Meena** - Represented University in West Zone Inter-University Hockey Tournament 2018-19
- **Archana Meena** - Represented and attained 3rd Position at University in West Zone Inter-University Hockey Tournament 2017-18
- **Paumil Adhari** - Represented University in West Zone Inter-University Hockey Tournament 2016-18
- **Manali Parmar** - Represented in All India Inter University Yoga Competition - Chennai 2019
- **Aditya Singh** - Second prize for poster presentation at National Symposium on Climate Change, Pollution and Harmony with Nature
- **Shashikant Patel** - First prize for poster presentation at National Symposium on Climate Change, Pollution and Harmony with Nature
- **Aditya Singh** - First Prize at Science Exhibition organized by Faculty of Science

NOTABLE ALUMNI

The Department of Geography boasts a distinguished global alumni network excelling in academia, research, administration, and professions—serving as ambassadors of its excellence and inspiring students. Recently rejuvenated under Dr. Ami Rawal, the alumni group fosters collaboration among students, alumni, industry, and academia. It actively shares geographical info, mobilizes resources for students, and circulates job opportunities.

DEPARTMENT OF GEOLOGY

ABOUT THE DEPARTMENT

Established in 1951 (Faculty of Technology & Engineering), the Department of Geology moved to Faculty of Science in 1965 under Prof. S.S. Merh, adding UG/PG courses and research. Extension built in 1987. Now with 14 faculty, it offers B.Sc., M.Sc., and certificates. Over 150 PhDs awarded; 7 ongoing with fellowships. Renowned nationally/internationally for Quaternary Geology, Palaeoclimatology, Geomorphology, Neotectonics, Sedimentology, Petrology, Paleontology, Ichnology, Palaeohydrology, Hydrogeology, and Remote Sensing. Faculty secure DST/AMD funding, publishing cited research in top journals—leading Earth Science contributions.

THRUST AREAS OF RESEARCH

The Department is known for producing high-quality research publications in reputed national and international journals. All staff members have excellent academic credentials and are recognized for guiding research students. Some of the staff members possess very high citation index, a reflection of the high-quality research being carried out in the Department. Some of the aspects of research being actively pursued by the staff members of the Department are as follows.

- a) Quaternary climatic and Hydrogeological changes in Western India.
- b) Evolution of Coastal plains and sediment disposal system along Gulf of Cambay and Kachchh.
- c) Geometry and nature of active faults in Gujarat.
- d) Evolution of Great and little Rann of Kachchh using subsurface cores.
- e) Structural and metamorphic history of the Aravalli Group of rocks of NE Gujarat.
- f) Sedimentological studies of Mesozoic and Cenozoic sequences in Gujarat and India.

RESEARCH FACILITIES

- Geochemistry, Micropaleontology, Paleontology, Petrology and Petrography, Remote Sensing and GIS, and Sedimentology Labs

- Scanning Electron Microscope (SEM) with Energy Dispersive X-ray Analyzer (EDX),
- Sedigraph, Atomic Absorption Spectrophotometer (AAS), Differential Thermal Analysis (DTA),
- Ground Penetrating Radar (GPR), Kappa Bridge, along with high magnification Leica microscopes, binocular microscopes, and optical microscopes, Thin section cutter, Museum showcasing rock, mineral, and fossil.

GRANT PROCURED

- Department of Science and Technology (DST), Atomic Minerals Directorate (AMD), Gujarat Mineral Development Corporation Limited.

STUDENTS' ACHIEVEMENT

Geology students at The Maharaja Sayajirao University of Baroda excel annually in NET, GATE, and GSI exams. Placements include giants like Vedanta, JSW Steel, Schlumberger, plus oil/gas firms, GMDC, and MOIL. Research scholars gain from international collaborations, earning awards at national/international conferences. Students shine in SPG India chapter via presentations, workshops, and competitions—producing industry-ready, research-focused geoscientists.

NOTABLE ALUMNI

1. Prof. S.S. Merh- Founder, Department of Geology
2. Dr. S. R. Nayak- Former Secretary, Ministry of Earth Sciences, New Delhi
3. Dr. R. A. Chansarkar- Former Director, DRDO, New Delhi
4. Prof. D.R. Gadekar- Ex-Head, Department of Geology, UGC member, Ex-VC Dr. B. R. Ambedkar University, Lucknow
5. Dr. K. L. N. Rao- Former Director, Western Onshore Basin, ONGC Ltd. - Vadodara
6. Dr. S. Srinivasan- Former ED, Exploration, ONGC Ltd. - Dehradun
7. Prof. L.S. Chamyal - National Geoscience Awardee, Ex-Head, Department of Geology

DEPARTMENT OF MATHEMATICS

ABOUT THE DEPARTMENT

Welcome to the Department of Mathematics at MS University of Baroda. A premier DST-FIST supported center since the 1930s, we are among the rare departments in India to offer a B.A. in Mathematics, alongside B.Sc., M.Sc., and Ph.D. programs.

Internationally acclaimed for our research and dynamic teaching, our faculty actively drives global academic collaborations. Supported by an NBHM-funded library, modern computing labs, and a fully integrated digital campus, we provide an environment where students flourish into leaders in academia and industry.

Our students consistently excel in national competitive exams like UGC-CSIR NET, GATE, and GPSC. They regularly secure research positions at premier institutes—including TIFR, ISI, IITs, HRI, and DRDO—often supported by prestigious NBHM fellowships. Additionally, our students demonstrate outstanding performances at state and national-level mathematical competitions.

THRUST AREAS OF RESEARCH

Harmonic Analysis

Topology and Dynamical systems

The Classical General Theory of Relativity

Fluid Dynamics

Function Spaces

Fractional calculus

RESEARCH FACILITIES

Exceptional research requires exceptional resources. To meet this need, the Department ensures access to top-tier books, software, and journals. We maintain two well-equipped computer labs with 50 workstations and licensed MATLAB software, alongside high-performance computers for every faculty member. Our NBHM-sponsored departmental library boasts a specialized collection of 2,491 books, monographs, and journals. Additionally, researchers benefit from the vast journal subscriptions available at the University's Smt. Hansa Mehta Library.

STUDENTS' ACHEIVEMENT

Our student's achievement record is healthy. Several students have cleared UGC-CSIR NET, GATE, GSLET, GPSC and other competitive examinations. Our students have also been selected for pursuing researches in the recent past at various Institutes and organizations such as The Indian Institute of Mathematical Sciences at Chennai, The Indian Statistical Institute at Calcutta, Tata Institute of Fundamental Research at Mumbai. HRI at Allahabad, DRDO and various IIT's. Our student's performance is outstanding at various National/State Mathematical Competitions. Many of our students have also been awarded NBHM research fellowships. Many of our students are working in various sectors such DRDO, TCS, MGVCL, software companies, etc. Our student's performance is outstanding at various National/State Mathematical Competitions. One of our past students is working as Senior IOS developer at PayPal, USA and is involved in developing apps for different apple products.

NOTABLE ALUMNI

- Prof. Dishant Pancholi, Awarded of the prestigious Shanti Swarup Bhatnagar Prize in Mathematics in 2019.
- Pooja Sharma, Flight Lieutenant in Indian Air Force
- Professor Dimplekumar Chalishajar, Virginia Military Institute, Lexington, Virginia, USA.
- Dr. Bhavin Moriya, Departamento de Matematica, Universidade Federal de Viçosa, Vicosá, Minas Gerais, Brazil.
- Dhara Shah, Graduate Research Assistant, Evidence – Based Cyber Security Research Group, Atlanta, USA.
- Satish Vaidhya, Director, Business Solutions, BrainWave Labs, Pune, India.

DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGY CENTRE

ABOUT THE DEPARTMENT

Established in the year 1964, the Department of Microbiology and Biotechnology Centre offers **M.Sc. Microbiology and M.Sc. Biotechnology (DBT funded - through GAT-B)** courses. Both courses continue to be very popular, attracting brilliant students from all over the country. The Department also offers Ph.D Microbiology and Ph.D Biotechnology. In 2020, the Department started B.Sc. Microbiology at satellite campus at M.K. Amin College of Science, Arts and Commerce at Padra under High Payment Program. This course has since 2023 been adopted for the B.Sc. Honours (4 year Program) under New Education Policy.

The backbone of the department is the intellectual rigor provided by the dedicated faculty and students coming from all across the country. The department has produced 175 Ph.Ds. Research papers are regularly published in journals of international repute. The alumni of the department have occupied positions of great responsibility in different institutions and industries in India and abroad.

THRUST AREAS OF RESEARCH

Agricultural Microbiology, Medical Microbiology, Genomics, Antimicrobial Resistance, Biopolymers, Fungal Molecular biology, Probiotics, Parasitology, Agricultural Biotechnology

RESEARCH FACILITIES

Research labs – 8; M.Sc. Labs - 3

Central Instrumentation Facility, Cold Rooms, Common Internet and computer room (supported by FIST), High end Instruments Available: HPLC, GC, Real-time PCR, PCRs, Gel- Documentation systems, Green House, Cell Culture Lab (With CO₂ incubator and inverted microscope), Spectrophotometers, Incubator shakers, Lyophilizer,

GRANT PROCURED

Infrastructure Grants from Govt of India - DSA, COSIST, DST FIST – 3 times

Teaching Grant - DBT – M.Sc. Biotechnology Teaching Program – Since 1985

Research Grants - Indian Council of Medical Research - ICMR
Gujarat State Biotechnology Mission – NETWORK PROGRAM on AMR

STUDENTS' ACHEIVEMENT

Placements – Each year students are placed at reputed pharmaceutical industries like, Dr. Reddy's Lab, Torrent Pharma, Sun Pharma, Aurigene, Kashiv Biosciences, Zydus Cadila, Serum Institutes etc.. Majority of students (75%) clear GATE, 25% students clear CSIR – JRF while few students clear CSIR – LS. Few notable past student's achievements are AIR 1 (CSIR-NET); AIR 1 (GATE) Around 45% students are progressed for Ph.D at prestigious National Institutes like – IISc Bangalore, NCBS, TIFR, IIT Bombay, IIT Gandhinagar etc.

NOTABLE ALUMNI

Microbiology

- Prof. Dipankar Nandi, Prof. Utpal Tatu, Dr. Samay Pande – IISC Bangalore,
- Dr. Tushar Vaidya – Scientist, CCMB Hyderabad,
- Prof. Satya Dandekar – UC – Davis, USA
- Dr. Hamsa Puthalakath - La Trobe University, Australia
- Dr. Rustom Mody - Senior Vice President & Head of R&D (Biologics)- Sun Pharmaceutical Industries
- Dr. Gunjan Mehta- Associate professor, IIT Hyderabad
- Dr. Pratik Chandrani- Assistant Professor, (ACTREC), Tata Memorial Centre, Navi Mumbai.
- Prof. Aniruddha Deshpande-Sanford Burnham Prebys, La Jolla, California, USA

Biotechnology

- Dr. Rupa Sridharan- Associate Professor, University of Wisconsin–Madison
- Dr. Kavita Babu- Associate Professor, IISER Mohali
- Prof. Prashant Phale- Professor, IIT Bombay
- Dr. Vivek Singh- Scientist, LVPEI (L.V. Prasad Eye Institute)

DEPARTMENT OF PHYSICS

ABOUT THE DEPARTMENT

The Department of Physics at The Maharaja Sayajirao University of Baroda, established in 1949, is a premier center for education and research in fundamental and interdisciplinary physics. With strong academic programs, cutting-edge research, and national and international collaborations, the department nurtures skilled physicists for advanced studies and scientific innovation. Faculties are experts in their respective fields, with extensive knowledge and experience in teaching, research, and innovation. Department is regularly sponsored by major funding agencies such as, ANRF, DST, SERB, UGC, MOES, DAE-BRNS, DRDO, etc. The Department had been awarded University Grants Commission's Department Research Support (DRS) phases I, II & III, and COSIST programs and the Department of Science & Technology had awarded DST-FIST.

THRUST AREAS OF RESEARCH

The Department of Physics focuses on key thrust areas of research including Condensed Matter Physics, Electronics and Communication, Nuclear Physics, and Spectroscopy. Supported by well-developed infrastructure, the Department promotes research-oriented study that fosters critical thinking, problem-solving, and innovation. These efforts contribute to the generation of new knowledge and its application in addressing real-world scientific and technological challenges.

RESEARCH FACILITIES

The Department of Physics is equipped with advanced instrumentation and computational facilities to support high-quality teaching and research. It houses High Performance Computer Clusters (HPCs) for data-intensive simulations and modelling. Experimental capabilities include a Laser Raman spectrometer and FTIR for vibrational and molecular analysis, as well as X-ray diffraction for crystallographic studies. The presence of an HPGe spectrometer enables precise gamma-ray spectroscopy, while a UV-Vis spectrofluorometer supports optical and

photophysical investigations. Collectively, these facilities provide a strong foundation for both fundamental and applied research in physics.

GRANT PROCURED

The Department of Physics has secured substantial research funding under national-level programs, reflecting its strong research capabilities and infrastructure development. Notably, funding exceeding ₹700 lakhs has been received under the ANRF-Partnership for Accelerated Innovation and Research (PAIR) programme. In addition, the Department has been awarded ₹200.23 lakhs under the DST-FIST Physical Sciences project. These grants have significantly strengthened the Department's research facilities and supported advanced scientific investigations.

NOTABLE ALUMNI

The department of Physics has a strong legacy of producing distinguished alumni who have excelled across academia, administration, defense and civil services, research organizations and industries. Notable among them are Shri. Sam Pitroda Chairman, National Knowledge Commission and former Scientific Advisor to Prime Minister, Government of India. Prof. Venkatraman Ramakrishnan, MRC Laboratory of Molecular Biology, Cambridge University, has been awarded 2009 Nobel Prize. Prof. A.K. Roychaudhuri, Director, S.N. Bose National Centre for Basic Sciences, Kolkata.

DEPARTMENT OF STATISTICS

ABOUT THE DEPARTMENT

Department of Statistics was established in the year 1949. Currently there are 16 faculty members, including 3 Professors, 2 Associate Professors, and 11 Temporary faculty members. Department is actively involved in research in the areas of Probability, Machine Learning, Statistical Inference, Operations Research and Design of Experiments. Department has produced 21 Ph.D's in various areas and 7 students are currently pursuing Ph.D. The Department has to its credit more than 100 research papers in national as well as international reputed journals in last five years. The department also has a Statistical Service Unit, which provides statistical consultation to the researchers. Population Research Centre (PRC) of the Department is a fully developed PRC funded by MoFHW, India. At present, the major functions of the centre are Research and Consultation Services. The research findings of the center have helped the Gujarat State as well as the Central Government in formulating policies as well as revising the on-going health and family planning programs.

THRUST AREAS OF RESEARCH

Probability and Statistical Inference
Machine Learning and Data Science
Multivariate and Categorical Data Analysis
Operations Research and Optimization
Sampling, Surveys, and Population Studies

RESEARCH FACILITIES

Two rack mountable server HP DL380 Gen server P/N 719064 - B 21 with necessary software for virtualization VMware Horizon for 70 concurrent users.

For more info. Please visit:

<https://drive.google.com/file/d/13uiWPxDagACUR9JRI0mYFbPFjZc4a8RM/view?usp=drivesdk>

DEPARTMENT OF ZOOLOGY

ABOUT THE DEPARTMENT

The Department of Zoology at The Maharaja Sayajirao University of Baroda, established in 1951, is a centre of excellence in teaching and research, offering B.Sc., M.Sc., and Ph.D. programmes, with over 275 Ph.D. graduates. Built under visionary leadership, the Department integrates classical zoology with modern, applied, and field-oriented approaches. The NEP-2020 aligned M.Sc. curriculum offers multidisciplinary flexibility and research project options, fostering critical thinking and skill development. The Department has received UGC-DRS/DSA support and is strengthened by FIST infrastructure, with funding from ANRF, DST-SERB, DBT, ICMR, GSBTM and others. With diverse research domains and a strong academic environment, it nurtures innovation, ethics, and holistic scientific growth.

THRUST AREAS OF RESEARCH

The major thrust areas include Animal Diversity, Systematics and Ecology; Cellular and Molecular Neuroscience; Development, Regeneration and Toxicology; Mechanobiology; Metabolic Physiology, Endocrinology and Disease Biology; and Nutrigenomics and Cancer Biology. These domains collectively address key scientific questions spanning biodiversity and evolution, developmental and regenerative processes, physiological regulation, cellular and molecular signalling mechanisms, and the pathophysiology of diseases. The Department emphasizes translational relevance while maintaining strong roots in fundamental research, thereby contributing to both knowledge generation and societal applications.

RESEARCH FACILITIES

The Department of Zoology offers well-developed infrastructure to support advanced teaching and research, including dedicated research and teaching laboratories, a CCSEA-approved animal house, specialized facilities for cell and molecular biology, ecology-based studies, and a central instrumentation facility. The Department houses seven well-equipped research laboratories enabling work in

animal cell culture, cell biology, molecular biology, and ecology, providing valuable hands-on training for M.Sc. students.

GRANT PROCURED

Research has been a defining strength of the Department of Zoology since its inception, with a strong emphasis on integrating teaching and research. Over the decades, the Department has awarded more than 275 Ph.D. degrees and contributed over 2000 research publications in reputed national and international journals. Faculty members have secured numerous extramural research grants from leading agencies such as UGC, ICMR, ICAR, DST-SERB, DBT, ANRF, GSBTM, and GUJCOST, with total funding exceeding ₹2 crore.

STUDENTS' ACHIEVEMENT

Zoology students excel nationally/internationally, qualifying GATE, UGC-CSIR NET, GPSC, UPSC, and gaining entry to top institutions via JAM, JGEEBILS, and other exams. The department promotes mentorship, experiential learning, and research via field studies, ecological surveys, biodiversity documentation, and projects.

NOTABLE ALUMNI

- Prof. V. C. Shah, former VC of The Maharaja Sayajirao University of Baroda and Fellow of national science academies;
- Dr. V. S. Vijayan, an eminent ornithologist and national award recipient;
- Dr. S. Madhavan Nair, former Director of the National Museum of Natural History; and
- Prof. Ramesh K. Goyal, former Vice Chancellor and internationally recognized scientist.
- Lt. Col. Dr. Smita Kadam (Indian Army), Hemant Singh Chauhan (Indian Air Force), and Dr. Vinay Bhargava (Indian Forest Service, Conservator of Forests).

Faculty Administration

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Students' Coordinator: Dr. P. H. Soni

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Sports Coordinator: Dr. Ravinayak Pathlavat

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Heads of the Departments

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Prof. P. Pillai, Department of Zoology (M-8780215089)

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GENERAL RULES GOVERNING THE CONDUCT OF STUDENTS IN THE UNIVERSITY

1. A student must do nothing either inside or outside the University that will interfere with its orderly working and discipline.
2. This comprehensive rule covers most cases that are likely to arise. It forbids:
 - a. Impolite or unseemly behaviour in classroom or University premises during working hours of the College and the Faculty.
 - b. Attempt to persuade other students to abstain themselves from regular classes.
 - c. Damage to or defacement of University furniture, fittings and property.
 - d. Disobedience of notifications or instructions issued by the Principals/Deans/Heads of the Departments and Members of the staff duly authorized.
3. As per UGC regulation, stipulated attendance (Ordinance 183) is required for permitting students to appear for final examination. If unavoidably absent on account of health, urgent private affairs or other reasons, they must be prepared to state the exact reason for absence.
4. Students are expected to behave with courtesy towards the members of the staff, their fellow students and all visitors to the Institution.
5. **Sexual harassment of any student will lead to severe punishments like suspension, rustication from the University / College/ Institution. Disciplinary action will be taken as prescribed under The M. S. University of Baroda rules.**
6. **Ragging is prohibited on MSU Campus, is a criminal offence and liable to severe punishment, including suspension, rustication and imprisonment.**

Maintenance of Stipulated Attendance of Students **(Ordinance 183)**

The following shall be the minimum attendance necessary:

- I. In a semester an overall attendance of at least 75% of the number of lectures delivered and tutorials, seminars etc. arranged in all subjects, provided the total attendance in each of the subjects offered is at least 60%.
- II. In a semester an overall attendance of at least 80% of the days allotted for practical classes and laboratory work in each subject.

COMPULSORY THALESSEMIA BLOOD SCREENING

- ❖ It has been made COMPULSORY for each new student taking admission in the University from academic year 2017-18. Final Eligibility of any student for admission to any course to this University will be granted ONLY after she/ he submits report of the Thalassemia blood screening.
- ❖ Students are encouraged to get the test done either at University Health Centre, Red Cross Society Lab or any Private Pathology Lab and submit a copy of the report at the time of On the Spot Admission.

The information contained in this prospectus is a general guideline and is subject to change from time to time as per University directives.

Prof. V.A. Kalamkar,
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