



ZOOHUNT

VOLUME – XII | ISSUE 1

2025-2026

ISSUE – 1

DEPARTMENT OF ZOOLOGY

zoology -

Zoology is both descriptive and analytical. It can be approached either as a basic science or as an applied science. A worker in basic zoology is interested in knowledge of animals for its own sake without consideration of the direct application of the information gained. In contrast, workers in applied zoology are interested in information that will directly benefit humans and animals (medicine, for example).

HOD'S DESK

Dear Readers,

It gives me immense pleasure to present the latest edition of the Department of Zoology Newsletter. This newsletter reflects the enthusiasm, achievements, and creative efforts of our students and faculty members throughout the academic session.

The Department of Zoology continues to promote scientific learning, innovation, environmental awareness, and holistic development through various academic and co-curricular activities. This publication highlights our collective journey, accomplishments, and memorable experiences.

I sincerely appreciate the dedicated efforts of the editorial team, faculty members, and students whose hard work made this newsletter possible. I hope this edition inspires every reader to continue learning, exploring, and achieving excellence.

Wishing all our students a bright and successful future.

Regards, Dr. Priyanka Sinha



Mary E.
Brunkow

Fred
Ramsdell

Shimon
Sakaguchi

Nobel Prize 2025 in Physiology or Medicine: Discoveries on Peripheral Immune Tolerance

The 2025 Nobel Prize in Physiology or Medicine has been awarded to Mary E. Brunkow, Fred Ramsdell, and Shimon Sakaguchi for their groundbreaking work on peripheral immune tolerance, which prevents the immune system from attacking the body's own organs.

HIGHLIGHTS

- Scope and Job Opportunities
- Discoveries and Innovation
- Departmental Activities
- Student's Corner
- Student's Achievement

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CAREER OPPORTUNITIES IN ZOOLOGY



Explore the fascinating world of animals and build a successful career in science, research, conservation and beyond.

MAJOR CAREER OPTIONS

1. RESEARCH SCIENTIST



Work in animal biology, genetics, ecology, physiology and biodiversity research in universities, institutes and research labs.

2. WILDLIFE BIOLOGIST & CONSERVATIONIST



Protect wildlife and their habitats. Work in national parks, wildlife sanctuaries, NGOs and conservation projects.

3. MARINE BIOLOGIST



Study marine organisms, coral reefs, oceans and aquatic ecosystems. Work with research institutes and marine organizations.

4. ENVIRONMENTAL CONSULTANT



Advise industries and organizations on environmental impact, sustainability and conservation strategies.

5. TEACHING & ACADEMICS



Become a school teacher, college lecturer or professor. Involve in teaching and guiding future generations.

6. BIOTECHNOLOGY & PHARMACEUTICAL INDUSTRY



Opportunities in laboratories, diagnostics, microbiology, vaccine development and pharmaceutical companies.

7. ZOO & AQUARIUM MANAGEMENT



Care for animals and manage their health, breeding, diet and habitats in zoos, aquariums and wildlife parks.

8. FORENSIC & CLINICAL LABORATORIES



Work in pathology labs, wildlife forensics, diagnostic centers and research laboratories.

9. GOVERNMENT SERVICES



Work in Forest Department, Fisheries, Agriculture, Pollution Control Board, Public Service Commissions and more.

10. SCIENCE COMMUNICATION & WILDLIFE PHOTOGRAPHY



Build careers in nature journalism, documentary making, wildlife photography and science communication.

HIGHER EDUCATION OPPORTUNITIES

- MSc Zoology
- Biotechnology
- Environmental Science
- Wildlife Science
- Marine Biology
- PhD & Research Programs



SKILLS YOU WILL DEVELOP

- ✓ Observation & Analytical Skills
- ✓ Research & Data Analysis
- ✓ Laboratory Techniques
- ✓ Field Work & Survey Skills
- ✓ Problem Solving
- ✓ Communication Skills



WHY CHOOSE ZOOLOGY?

- ✓ Work with animals and nature
- ✓ Contribute to biodiversity conservation
- ✓ Wide range of career options
- ✓ Opportunities in India and abroad
- ✓ A perfect blend of science and compassion



Zoology is not just about studying animals, it's about understanding life, protecting nature and creating a better future for all living beings.

WHERE CAN YOU WORK?



Research Institutes



Universities & Colleges



NGOs & Conservation Organizations



Industries & Pharma Companies



Government Departments



Zoos & Aquariums

“Turn your passion for animals into a meaningful and rewarding career.”

ZOOLOGY INNOVATIONS OF 2025

NEW DISCOVERIES. SMARTER SOLUTIONS. STRONGER FUTURE FOR WILDLIFE.

1 AI WILDLIFE TRANSLATION

AI models are translating animal sounds and behaviors, helping us understand species like never before.

EXAMPLE:

AI decoding sperm whale clicks to identify social patterns and emotions.



2 CRISPR 2.0 FOR BIODIVERSITY

Next-gen gene-editing is now being used to rescue critically endangered species from extinction.

EXAMPLE:

Gene-edited immune cells help save the northern white rhinoceros.



3 WILDLIFE REWILDING 2.0

Advanced ecological modeling and drone technology are accelerating habitat restoration success.

EXAMPLE:

AI-powered drones plant native species seeds in degraded ecosystems.



2025
A YEAR OF
BREAKTHROUGHS
FOR ANIMALS



4 ANIMAL HEALTH REVOLUTION

Breakthroughs in vaccines, microbiome science, and wearable biosensors are transforming animal healthcare in zoos and in the wild.

EXAMPLE:

Universal vaccine platform shows promise against multiple wildlife diseases.



5 MARINE LIFE PROTECTION TECH

Smart sensors, AI, and robotics are protecting ocean life from threats like pollution, illegal fishing, and climate change.

EXAMPLE:

Autonomous robots clean oceans nets and monitor marine species in real time.



6 DE-EXTINCTION BREAKTHROUGHS

Scientists are closer than ever to bringing back lost species through ancient DNA and cloning advancements.

EXAMPLE:

Woolly mammoth cells successfully edited and implanted in surrogate elephant.



7 CITIZEN SCIENCE GOES GLOBAL

Millions of people worldwide are using apps and tools to track, protect, and study wildlife.

EXAMPLE:

New app "BioTrack" fits 50M users contribute to real-time wildlife conservation.



8 ETHICAL AI & ROBOTICS IN ZOOS

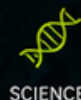
AI and robotics are improving animal welfare, enrichment, and care in zoological parks.

EXAMPLE:

AI-powered enrichment robots adapt to animal behavior and needs in real time.



TOGETHER, WE CAN BUILD
A SUSTAINABLE FUTURE
FOR ALL SPECIES.



SCIENCE



TECHNOLOGY



CONSERVATION



COLLABORATION



COMPASSION



FOR OUR PLANET,
FOR OUR FUTURE,
FOR ALL LIFE.

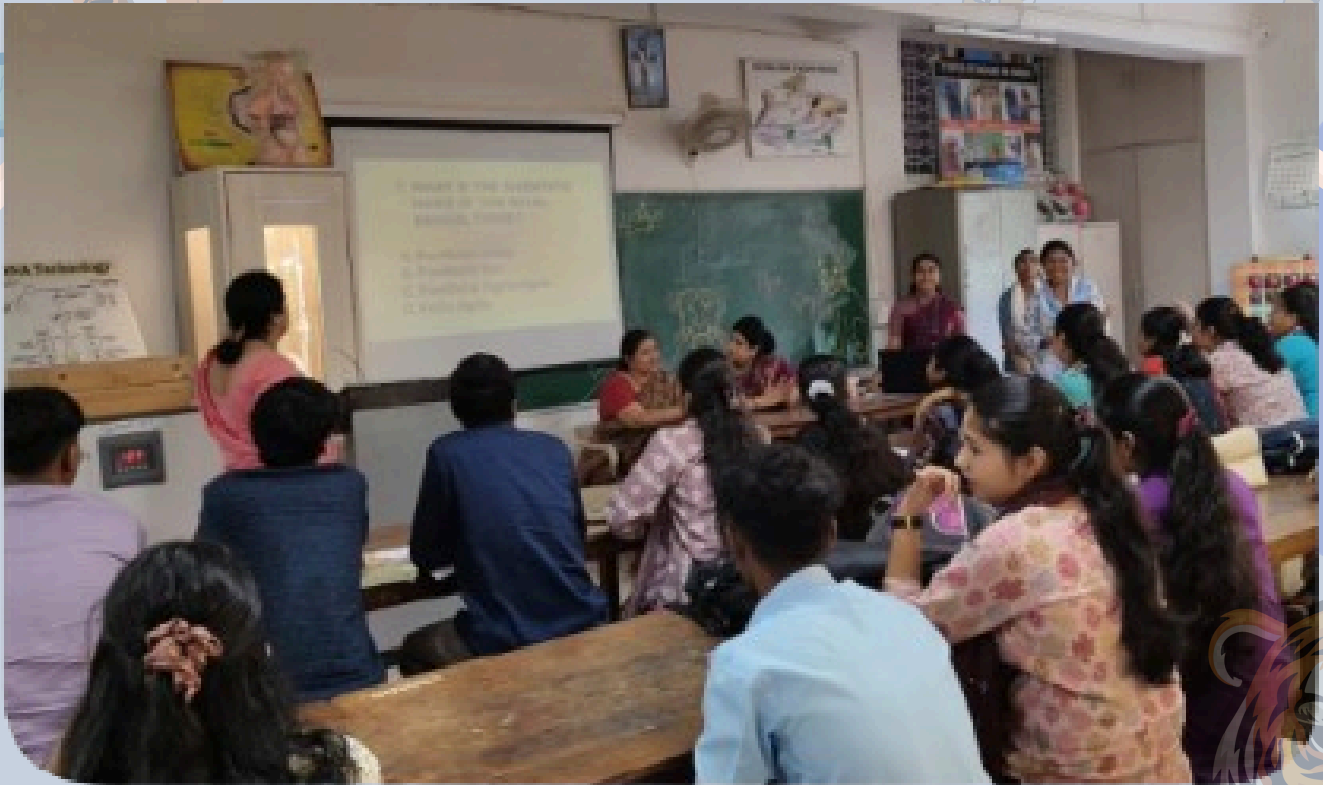
DEPARTMENTAL ACTIVITIES

JULY MONTH

International Tiger Day

29th July 2025

Department organize International Tiger Day on 29 July 2025. A quiz competition based on tigers and wildlife was organized, in which 36 students actively participated.



DEPARTMENTAL ACTIVITIES

NOVEMBER MONTH.

Certificate Course - Museum Keeping

8th November - 29th November 2025

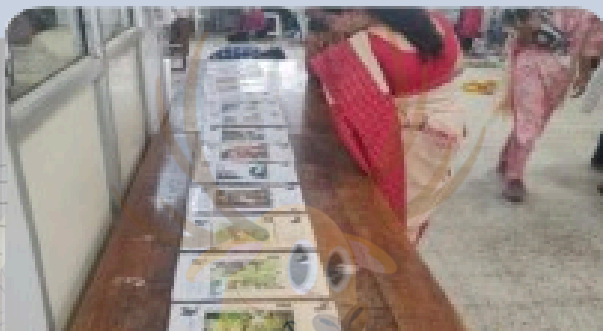
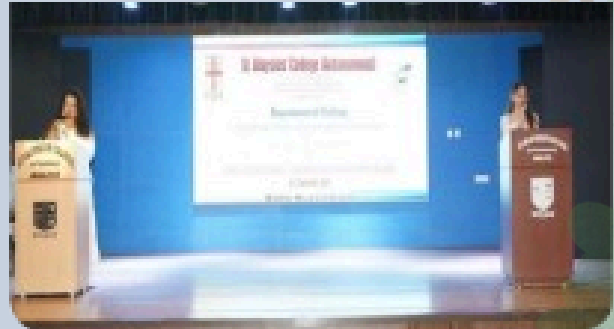
The department organized a 15-day Certificate Course in Museum Keeping from 8 to 29 November 2025. The course provided students with essential training in specimen collection, preservation, labeling, and display techniques, thereby enhancing their academic and research capabilities.



DEPARTMENTAL ACTIVITIES

Wildlife Week Celebration - Zoo -Carnival 2025

In collaboration with the Zoological Survey of India, the department celebrated Wildlife Week 2025 through a variety of engaging activities, including Photography, Rangoli, T-Shirt Painting, Quiz, and Documentary Screening. The event concluded with an Investiture Ceremony and an expert seminar on wildlife conservation, motivating students to actively participate in environmental protection initiatives.



DEPARTMENTAL ACTIVITIES

Vermicompostion

The department also demonstrated its commitment to sustainability by successfully producing organic vermicompost through the dedicated efforts of faculty and students.

This initiative promoted eco-friendly practices and reinforced environmental responsibility.



DECEMBER MONTH

World AIDS Day

5th December 2025

On 5 December 2025, the department observed World AIDS Day by organizing an awareness programme comprising a Human Chain activity and an Extempore Competition. The programme aimed to spread awareness about HIV/AIDS and to promote social responsibility among students.



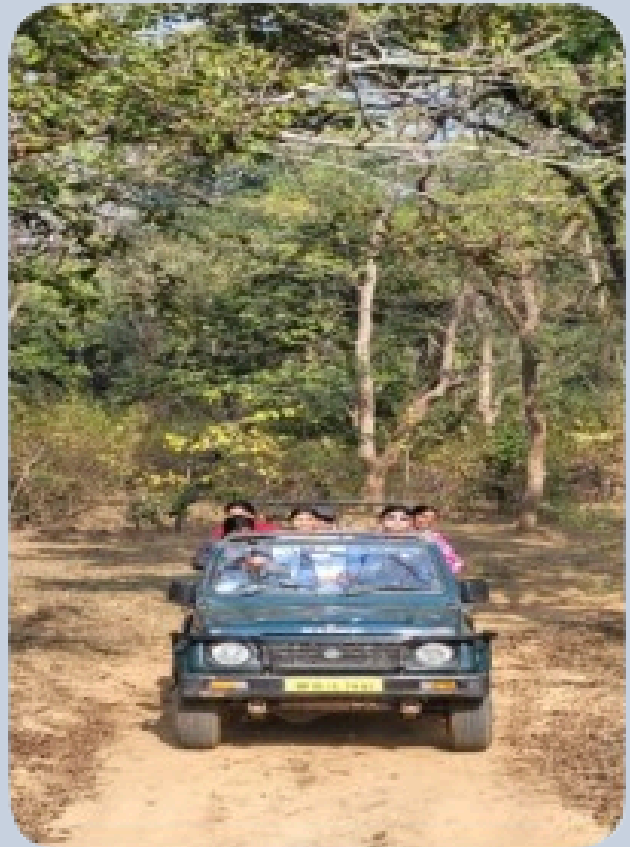
DEPARTMENTAL ACTIVITIES

JANUARY MONTH.....

30 and 31 January 2026

“Laboratory to Land” Educational tour

6. Under the “Laboratory to Land” initiative, a two-day educational tour was organized on 30 and 31 January 2026 for B.Sc. and M.Sc. students. The tour provided valuable field exposure to biodiversity, ecological interactions, wildlife conservation, and habitat management, thereby bridging the gap between theoretical learning and practical experience.



DEPARTMENTAL ACTIVITIES

FEBRUARY MONTH.

National Science Day - February

20 and 21 February 2026

On the occasion of National Science Day, sponsored by MPCST, Bhopal, the department organized a two-day workshop on “Modern Techniques in Molecular Biology” on 20 and 21 February 2026. The programme included expert lectures on molecular cell biology, cytogenetics, and cytotoxicity, along with hands-on training sessions for undergraduate and postgraduate students, significantly enhancing their conceptual and practical understanding.



DEPARTMENTAL ACTIVITIES

FEBRUARY MONTH.

“Women in Science: Catalysing Viksit Bharat.”

28th February 2026

On 28 February 2026, the department organized a Reel Making Competition on the theme “Women in Science: Catalysing Viksit Bharat.” The competition encouraged students to creatively highlight the contributions of women scientists and their role in national development.

Women in Science
Catalysing Viksit Bharat

they are leading

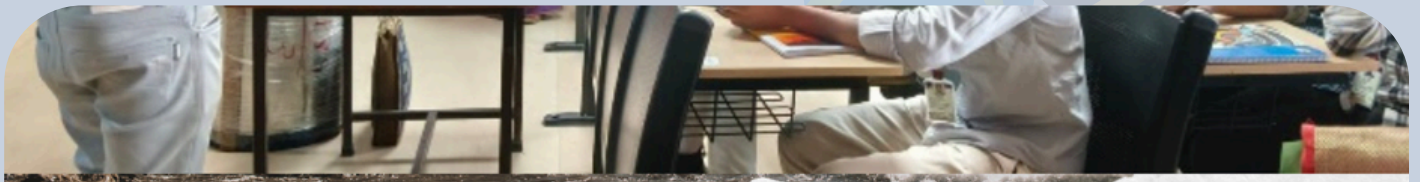
DEPARTMENTAL ACTIVITIES

MARCH MONTH

11th March 2026

Workshop on Beekeeping

Finally, on 11 March 2026, the Department of Zoology, in collaboration with the Design Innovation Centre (DIC), organized a Workshop on Beekeeping. The workshop provided practical exposure to apiculture, including bee management, honey production, processing, and marketing, while also emphasizing its potential as a sustainable entrepreneurial venture.



DEPARTMENTAL ACTIVITIES

JANUARY - FEBRUARY MONTH.....

16 January to 10 February

Microtomy and Advanced Techniques

Further enhancing laboratory skills, the department conducted a 15-day Certificate Course in Microtomy and Advanced Techniques from 16 January to 10 February 2026. The course trained students in the preparation of permanent tissue slides using microtome techniques, strengthening their technical competencies.



NEWSLETTER | @DEPT.OF.ZOOLOGY

INTERNSHIP



DISSERTATION TOPIC

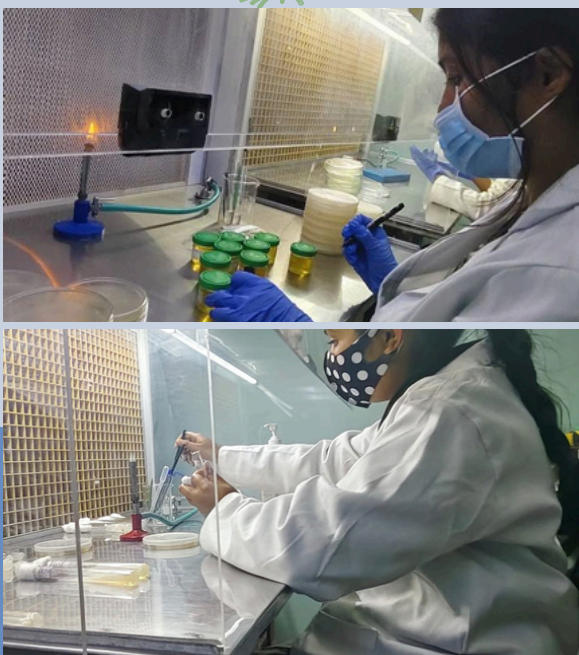
MICROBIOLOGICAL INVESTIGATION OF COW URINE :

ISOLATION AND IDENTIFICATION OF NATIVE MICROORGANISMS

This study highlights the importance of proper hygienic practices in animal management and sample handling. It also demonstrates that routine microbiological analysis of animal samples can be useful for monitoring health status and detecting possible infections.

EVALUATION ON ANTIFUNGAL ACTIVITY OF SOME MEDICINAL PLANTS AGAINST FUNGAL PATHOGENS"

the study highlights that medicinal plants are effective sources of natural antifungal compounds. These plant extracts, especially coriander and tulsi, have significant potential for the development of eco-friendly and cost-effective antifungal therapies. Thus, the use of plant-based antifungal agents can be considered a promising alternative to synthetic drugs for controlling fungal infections.

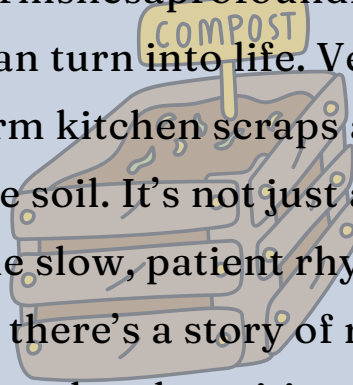


STUDENT'S CORNER

VERMICOMPOSTING

Vermicomposting: Nature's Gentle Alchemy

In the quiet work of earthworms lies a profound lesson—that even waste, with a little time and care, can turn into life. Vermicomposting is the art of letting earthworms transform kitchen scraps and organic waste into rich, dark compost—a gift for the soil. It's not just a way to reduce waste, but a way to reconnect with the slow, patient rhythms of nature. In every handful of vermicompost, there's a story of renewal—a reminder that nothing is truly wasted, only waiting to be transformed.



STUDENT'S ACHIEVEMENTS



Ms. Sunabhi Shah

Gold Medalist and Topper of
B.Sc. 3rd year Bioscience and
Overall topper of B.Sc.
(Session : 2023-2024)



Ms. Shristi Mishra

Gold Medalist and
Topper of B.Sc. 3rd
year Bioscience.
(Session : 2024-2025)



Ms. Sana Findose

Gold Medalist M.Sc.
Final year (Session:
2024-2025)



Ms. Anjali Kushwaha

Topper and certificate
holder of M.Sc.
Previous (Session:
2024-25)



Ms. Bhavana Kumari

Best Cadet NCC
Award on
Independence Day
2025



Department of Zoology

Faculty members with Gold Medalist and certificate holders of (UG and PG) Session: 2024-2025.