

Km. Mayawati Govt. Girls P.G. College, Badalpur, G.B. Nagar

Dept of Zoology:

Assignments: M.Sc.-IInd Semester 2024-26

Instructions for assignments

- Mark of Each Assignment: 5 (Deduction of Marks: 1 mark deducted for Late Submission and 1 for late personation.), Prsenation:5
- Upload your assignments and project before due date on google classroom <https://classroom.google.com/c/NzAzMDc0MTIwNTY4?cjc=zq4idlX> (Class code- zq4idlX)
- Presentation mode (online/offline) will be update before presentation date depending upon situations.
- Submit your project upto 30-04-2025 to Dr. Neetu Singh
- The teacher will revert your evaluated assignments and internals by email, you can check and raise your point of view (if any) within one week, after that marks will be uploaded.
- Tentative date of internals: March IInd week
- All student presentations were recorded online and uploaded on Zoology Department YouTube account. Make a video of your assignments and upload it on Zoology Department YouTube account with the help of Miss. Sumbul Zehra, Miss Jyoti Sharma and Miss Himanshi

| Class Roll Number | Name of Student | B050801T : Environmental Biology & Wildlife Biology | | | B050802T : Animal Diversity- Chordata | | | B050803T : Animal Physiology | | | B050804T : Animal Behavior | | |
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| | | Ms. Neetu Singh and Miss. Himanshi | | | Ms. Abhishek Jaiswal and Miss. Shelly Khari | | | Prof., Dinesh C. Sharma and Miss. Sumbul Zehra | | | Prof., Dinesh C. Sharma and Miss. Jyoti Sharma | | |
| | | Assignment & Presentation | | | Assignment & Presentation | | | Assignment & Presentation | | | Assignment & Presentation | | |
| | | Topic of assignment | Submission Last date | Presentation Date | Topic of assignment | Submission Last date | Presentation Date | Topic of assignment | Submission Last date | Presentation Date | Topic of assignment | Submission Last date | Presentation Date |
| 1 | AISHWARYA KASHYAP | Role of Remote Sensing in Environmental Monitoring and Management in India | 1 Mar 25 | 10 Mar 24 | Evolutionary Significance of Protochordates in Chordate Phylogeny | 8 Mar 25 | 17 Mar 24 | The Gut Microbiome and Its Role in Digestion: Recent Research and Implications | 22 Mar 25 | 24 Mar 24 | Impact of Climate Change on Animal Behaviour: How changing temperatures affect migration, foraging, and mating behavior. | 29 Mar 25 | 31 Mar 24 |
| 2 | ANCHAL | Abiotic and Biotic Interactions: Their Influence on Ecosystem Stability | 1 Mar 25 | 10 Mar 24 | Comparative Analysis of Larvacea, Thaliacea, and Cephalochordates | 8 Mar 25 | 17 Mar 24 | Impact of Ultra-Processed Foods on BMR and Metabolic Health | 22 Mar 25 | 24 Mar 24 | AI and Machine Learning in Animal Behaviour Studies: Recent advancements in tracking and analyzing animal behavior. | 29 Mar 25 | 31 Mar 24 |
| 3 | ANJURANI | Concept of Habitat and Ecological Niche: Comparative Analysis Across Ecosystems | 1 Mar 25 | 10 Mar 24 | Adaptive Features and Affinities of Cephalochordates | 8 Mar 25 | 17 Mar 24 | Long COVID and Its Effect on the Respiratory System: Mechanisms and Treatments | 22 Mar 25 | 24 Mar 24 | Behavioural Adaptations in Urban Wildlife: How animals modify their behavior to survive in cities. | 29 Mar 25 | 31 Mar 24 |
| 4 | DEEPA BHATI | Application of GIS and Remote Sensing in Biodiversity Conservation | 1 Mar 25 | 10 Mar 24 | Theories on the Origin of Vertebrates: A Comparative Study | 8 Mar 25 | 17 Mar 24 | Microplastics in the Digestive System: Current Research on Absorption and Toxicity | 22 Mar 25 | 24 Mar 24 | The Effect of Habitat Destruction on Stereotyped Behaviours in Animals: Examining stress-induced changes in wild species. | 29 Mar 25 | 31 Mar 24 |

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| 5 | IQRA SAIJI | Impact of Human Activities on Physical Environment: A Case Study Approach | 1 Mar 25 | 10 Mar 24 | Fossil Evidence Supporting the Evolution of Vertebrates | 8 Mar 25 | 17 Mar 24 | Comparative Analysis of Oxygen Transport Mechanisms in Terrestrial and Aquatic Animals | 22 Mar 25 | 24 Mar 24 | Conflict Behaviour in Captive Animals: A study on stress-induced aggression and stereotypic behaviors in zoos and laboratories. | 29 Mar 25 | 31 Mar 24 |
| 6 | IRAM SAIJI | Metapopulation Dynamics: Concept, Significance, and Applications | 1 Mar 25 | 10 Mar 24 | Major Evolutionary Trends in Vertebrates: From Aquatic to Terrestrial Life | 8 Mar 25 | 17 Mar 24 | Artificial Hearts and Advanced Cardiac Assist Devices: A Boon for Heart Failure Patients | 22 Mar 25 | 24 Mar 24 | Neural Mechanisms of Learning and Memory in Animals: Insights from recent research on brain plasticity. | 29 Mar 25 | 31 Mar 24 |
| 7 | KM KAJAL | Age-Structured Populations and Their Role in Ecosystem Sustainability | 1 Mar 25 | 10 Mar 24 | Comparative Account of the Integumentary System in Vertebrates | 8 Mar 25 | 17 Mar 24 | Blood Clotting Disorders Post-COVID Vaccination: Mechanisms and Treatment Approaches | 22 Mar 25 | 24 Mar 24 | Communication in Marine Mammals: How whales and dolphins adapt to increasing underwater noise pollution. | 29 Mar 25 | 31 Mar 24 |
| 8 | LAKSHMI BHATI | Community Structure and Diversity Indices: Methods and Applications | 1 Mar 25 | 10 Mar 24 | Evolution of Endoskeletal System: Adaptations in Different Classes of Vertebrates | 8 Mar 25 | 17 Mar 24 | The Role of Epigenetics in Blood Pressure Regulation and Cardiovascular Diseases | 22 Mar 25 | 24 Mar 24 | Role of Pheromones in Social Insects: Chemical communication in bees and ants and its importance in colony survival. | 29 Mar 25 | 31 Mar 24 |
| 9 | NEHA BHATI | Edges and Ecotones: Their Role in Biodiversity and Ecosystem Functioning | 1 Mar 25 | 10 Mar 24 | Dermal and Epidermal Structures in Vertebrates: Functional and Evolutionary Perspectives | 8 Mar 25 | 17 Mar 24 | CRISPR and Gene Therapy in Treating Hemophilia and Other Blood Disorders | 22 Mar 25 | 24 Mar 24 | Impact of Artificial Light on Nocturnal Animal Communication: A study on fireflies and other bioluminescent species. | 29 Mar 25 | 31 Mar 24 |
| 10 | NIDHI CHOUDHARY | Population Dispersal and Interdemic Extinction: Causes and Consequences | 1 Mar 25 | 10 Mar 24 | Evolutionary Significance of Ostracoderms and Coelacanthiformes | 8 Mar 25 | 17 Mar 24 | AI in ECG Interpretation: How Machine Learning is Revolutionizing Cardiovascular Diagnosis | 22 Mar 25 | 24 Mar 24 | Comparative Analysis of Problem-Solving Skills in Primates and Birds: Insights from recent studies on tool use. | 29 Mar 25 | 31 Mar 24 |
| 11 | PRACHI CHAUDHARY | Energy Flow and Ecological Energetics in Different Ecosystems | 1 Mar 25 | 10 Mar 24 | Adaptive Radiation in Fishes: A Study of Morphological and Behavioral Adaptations | 8 Mar 25 | 17 Mar 24 | Impact of Chronic Kidney Disease on Cardiovascular and Nervous System: A Physiological Perspective | 22 Mar 25 | 24 Mar 24 | The Role of Hormones in Animal Parental Care: A case study on oxytocin and prolactin in mammals. | 29 Mar 25 | 31 Mar 24 |
| 12 | PRIYA BHATT | Comparative Study of Indian Terrestrial and Aquatic Ecosystems | 1 Mar 25 | 10 Mar 24 | Fish Locomotion: Mechanisms and Evolutionary Adaptations | 8 Mar 25 | 17 Mar 24 | Artificial Kidneys and Bioengineered Organs: The Future of Renal Replacement Therapy | 22 Mar 25 | 24 Mar 24 | Neuroendocrine Mechanisms of Aggression in Territorial Animals: How testosterone influences dominance behavior. | 29 Mar 25 | 31 Mar 24 |
| 13 | RAKHI | Ecological Successions: Mechanisms and Changes in Different Biomes | 1 Mar 25 | 10 Mar 24 | Parental Care in Amphibians: Strategies and Evolutionary Significance | 8 Mar 25 | 17 Mar 24 | Neurotoxicity of Air Pollution: A Growing Concern for Cognitive Decline | 22 Mar 25 | 24 Mar 24 | The Effect of Environmental Pollution on Pheromone Communication in Insects: Disruptions caused by pesticides and industrial waste. | 29 Mar 25 | 31 Mar 24 |
| 14 | RIVA NAGAR | Concept of Climax and Stability in Ecosystem Development | 1 Mar 25 | 10 Mar 24 | Neoteny in Amphibians: Causes, Mechanisms, and Evolutionary Importance | 8 Mar 25 | 17 Mar 24 | Alzheimer's Disease and the Gut-Brain Axis: Recent Research Updates | 22 Mar 25 | 24 Mar 24 | Neurobiology of Fear Responses in Prey Animals: A review of how animals detect and escape predators. | 29 Mar 25 | 31 Mar 24 |

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| 15 | SAKSHI | Impact of Climate Change on Indian Ecosystems: A Case Study | 1 Mar 25 | 10 Mar 24 | Adaptations of Amphibians to Dual Life: Structural and Functional Aspects | 8 Mar 25 | 17 Mar 24 | The Use of Brain-Computer Interfaces (BCI) in Restoring Mobility in Paralysis Patients | 22 Mar 25 | 24 Mar 24 | Impact of Endocrine Disruptors on Animal Behaviour: Recent concerns about plastic pollution and hormonal imbalances in aquatic species. | 29 Mar 25 | 31 Mar 24 |
| 16 | SANJANA GARG | Biogeographical Zones of India: Distribution and Characteristics | 1 Mar 25 | 10 Mar 24 | Adaptive Radiation in Reptiles: Evolution of Diverse Body Plans | 8 Mar 25 | 17 Mar 24 | Rising Cases of Polycystic Ovary Syndrome (PCOS): Causes, Diagnosis, and Treatment | 22 Mar 25 | 24 Mar 24 | Social Structures in Highly Intelligent Animals: Comparative analysis of dolphins, elephants, and primates. | 29 Mar 25 | 31 Mar 24 |
| 17 | SHIVANGI BHATI | Biodiversity Loss: Major Drivers and Mitigation Strategies | 1 Mar 25 | 10 Mar 24 | Comparative Anatomy of Skull in Reptiles: Evolutionary Trends and Functional Adaptations | 8 Mar 25 | 17 Mar 24 | Impact of Climate Change on Reproductive Health and Fertility Rates | 22 Mar 25 | 24 Mar 24 | Group Living and Disease Transmission in Animals: How social animals manage infections and pandemics. | 29 Mar 25 | 31 Mar 24 |
| 18 | SHIVANI BHATI | Project Tiger and Biosphere Reserves: Successes and Challenges in India | 1 Mar 25 | 10 Mar 24 | Chelonia (Turtles & Tortoises): Evolution, Adaptations, and Conservation Challenges | 8 Mar 25 | 17 Mar 24 | Advancements in Male Contraceptive Methods: A Breakthrough in Reproductive Physiology | 22 Mar 25 | 24 Mar 24 | Kin Selection and Altruism in Vampire Bats: Recent studies on food sharing and social bonding. | 29 Mar 25 | 31 Mar 24 |
| 19 | SHWETA NAGAR | Environmental Impact Assessment (EIA) and Its Role in Sustainable Development | 1 Mar 25 | 10 Mar 24 | Flight Adaptation in Birds: Morphological, Anatomical, and Physiological Modifications | 8 Mar 25 | 17 Mar 24 | Endocrine Disruptors in Everyday Products: Their Role in Hormonal Imbalances and Diseases | 22 Mar 25 | 24 Mar 24 | Social Dominance and Leadership in Animal Groups: Lessons from wolf packs, elephant herds, and primate troops. | 29 Mar 25 | 31 Mar 24 |
| 20 | TANISHA KAPASIYA | Environmental Auditing (EA) and Management Plans (EMP): Case Studies from India | 1 Mar 25 | 10 Mar 24 | Bird Migration: Patterns, Mechanisms, and Evolutionary Significance | 8 Mar 25 | 17 Mar 24 | Heatwaves and Their Impact on Human Thermoregulation: Adaptation Strategies | 22 Mar 25 | 24 Mar 24 | Effects of Noise Pollution on Bird Song and Communication: How urban noise influences mating calls and territorial signals. | 29 Mar 25 | 31 Mar 24 |
| 21 | TANU BHATI | Global Environmental Change and Its Impact on Biodiversity and Human Health | 1 Mar 25 | 10 Mar 24 | Territorial Behavior in Birds: Causes, Benefits, and Ecological Implications | 8 Mar 25 | 17 Mar 24 | mRNA Vaccine Technology and Its Future in Immunotherapy Beyond COVID-19 | 22 Mar 25 | 24 Mar 24 | Impact of Climate Change on Bird Migration Patterns: Analyzing shifts in migratory routes and breeding seasons. | 29 Mar 25 | 31 Mar 24 |

Prof. (Dr.) Anita Rani Rathore
Principal

Prof. (Dr.) Dinesh C. Sharma
HOD-Zoology