

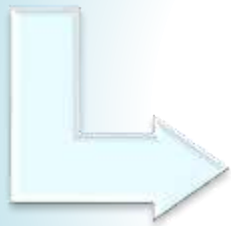


Maratha Vidya Prasarak Samaj's  
**Karmaveer Shantarambapu Kondaji Wavare**  
**Arts, Science and Commerce College, CIDCO, Nashik**  
**Uttamnagar, Nashik- 422 008 (Maharashtra)**

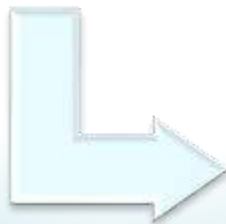
Affiliated to Savitribai Phule Pune University Id. No. PU/NS/ASC/047/1993  
AISHE C-42086 NAAC Re-accredited 'A' Grade (III Cycle 2017-22, CGPA 3.20)  
Best College Award of Savitribai Phule Pune University Pune in 2009-10 and 2021-22

**Programme  
Outcomes (PO's)**

Internal Quality Assurance Cell



**Programme  
Specific Outcomes  
(PSO's)**



**Course Outcomes  
(CO's)**

**Syllabus: 2013 Pattern**





**Maratha Vidya Prasarak Samaj's**  
**KARMAVEER SHANTARAMBAPU KONDAJI WAVARE**  
**ARTS, SCIENCE AND COMMERCE COLLEGE, CIDCO**

**Uttamnagar, Nashik- 422 008 (Maharashtra)**

Principal

**Prof. (Dr) S. K. Kushare**

M.Sc., Ph. D.

Affiliated to Savitribai Phule Pune University

Id. No. PU/NS/ASC/047/1993

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Best College Award of Savitribai Phule Pune University Pune in 2009-10 and 2021-22

Programme Outcome (PO's), Programme Specific Outcome (PSO's), Course Outcome (CO's)

**Department: Zoology**

Syllabus: 2013 Pattern

Program and Courses

Sr. No.	Name of the Programme	Year of introduction of programme	Duration of introduction of Programme
1	B.Sc. Zoology	1992-1993	20 Years

Programme Specific Outcome (B.Sc Zoology)

Sr. No.	Programme Specific Outcome (B.Sc Zoology)
PSO 1	Understand the basic knowledge about cell biology, genetics, taxonomy, physiology, Biochemistry, ecology and applied Zoology
PSO 2	Get knowledge about animals and their ecosystems
PSO 3	Perform systems according to lab guidelines in the space of Taxonomy, Physiology, Ecology, Cell science, Genetics, Applied Zoology, Clinical science, devices and strategies of Zoology, Toxicology, Sericulture, Biochemistry, Fish science, Animal biotechnology, Immunology and exploration procedure
PSO 4	Students can applied his Knowledge Zoology in Applied Zoology
PSO 5	Student will be able to recognize the relationship between structure and function at all levels of biological organization (e.g., molecules, cells, organs, organisms, populations, and species) for the major groups of animals.
PSO 6	Student will be able to demonstrate the ability to read, understand, and critically review scientific information.

Course Outcome (B.Sc Zoology)


Class	Subject code	Title	Cos: After successful completion of this course, student will be able to
F.Y.B.S c. Sem I	ZO-111	Animal diversity I	CO1: To understand the Animal diversity around us.
			CO2: To understand the underlying principles of classification of animals.
			CO3: To classify invertebrates and to be able to understand the possible group of the invertebrate observed in nature.
			CO1: To understand the Animal diversity around us.
	ZO-112	Animal Ecology	CO1: Student will be able to identify and critically evaluate effects of population on ecosystem and Biosphere
			CO2: To understand importance of natural resource and aware about conservation of nature.
			CO3: The student understands the local lifestyle and problems of the community.
			CO4: Students can link food chains and the complexity of food networks and link them into human life for the improvement and non-utilization of biological and abiotic components.
	ZO-113	Practical Zoology -I	CO1: Recognize the live forms of vertebrates and invertebrates.
			CO2: Analyze and describe zoological concepts, including morphology and anatomy.
			CO3: Explain conservation and sustainable use of animals;
			CO4: Practical knowledge about Ecosystem
F.Y.B.S c. Sem II	ZO-121	Animal diversity-II	CO1: To understand the Animal diversity around us.
			CO2: To understand the underlying principles of classification of animals.
			CO3: To classify invertebrates and to be able to understand the possible group of the invertebrate observed in nature.
	ZO – 122	Cell Biology	CO1: understand the importance of cell as a structural and functional unit of life.
			CO2: The student understands the difference between the prokaryotic and eukaryotic cell.
			CO3: get knowledge about the cellular mechanisms and its functioning
	ZO-123	Practical Zoology -II	CO1: Recognize the live forms of vertebrates and invertebrates.
			CO2: Analyze and describe zoological concepts, including morphology and anatomy.
			CO3: Explain conservation and sustainable use of animals;
			CO4: Practical knowledge about Ecosystem

Class	Subject code	Title	Cos: After successful completion of this course, student will be able to
S.Y.B.S c Sem I.	ZO-211	Animal Systematics and Diversity – III	CO1- Knowledge of classification of Non-chordates along with studies on various physiological functions
			CO2- Knowledge of classification of chordates along with studies on various physiological functions and comparative anatomy of organs of chordate with example.
	ZO 212	Applied Zoology I	CO2-Understands rearing of fish, sericulture, pearl culture along with crop pest management techniques so that he can start small scale livestock industry.
			CO2-Students gain knowledge about various disease related vectors and their impact on human
			CO3-Understands concepts of apiculture, poultry, dairy along with tissue and cell culture techniques
	ZO 213	Practical course	CO1-Basic knowledge about identification of non-chordate and chordate specimens (fresh and preserved) along with larval forms and study of endoskeleton of vertebrates
			CO2: Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied Zoology
			CO3: Analyze the relationships among animals, plants and microbes
			CO4: Students will be able to explicate the ecological interconnectedness of life on earth by Tracing energy and nutrient flows through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems
	S.Y.B.S c Sem II.	ZO 221	Animal Systematics and Diversity-IV
CO2- Knowledge of classification of chordates along with studies on various physiological functions and comparative anatomy of organs of chordate with example.			
ZO 222		Applied Zoology-II	CO1-Understands rearing of fish, sericulture, pearl culture along with crop pest management techniques so that he can start small scale livestock industry.
			CO2-Students gain knowledge about various disease related vectors and their impact on human
			CO3-Understands concepts of apiculture, poultry, dairy along with tissue and cell culture techniques
ZO 223		Practical course	CO1-Basic knowledge about identification of non-chordate and chordate specimens (fresh and preserved) along with larval forms and study of endoskeleton of vertebrates

Class	Subject code	Title	Cos: After successful completion of this course, student will be able to
			CO2: Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied Zoology
			CO3: Analyze the relationships among animals, plants and microbes
			CO4: Students will be able to explicate the ecological interconnectedness of life on earth by Tracing energy and nutrient flows through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.
T.Y.B. Sc Sem I	ZO 331	Animal Systematics and Diversity V	CO1- Knowledge of classification of protochordates and chordates along with studies on various physiological functions and interactions of chordate organisms with examples
			CO2- Imparts conceptual knowledge of vertebrate adaptations in relation to their environment
			CO3- Understanding of general taxonomic rules on animal classification
	ZO 332	Mammalian Histology	CO1: Understand the various types of tissues.
			CO2: study the histological modifications in various organs.
			CO3: get knowledge about the location, structure and functions of various organs.
	ZO 333	Biological Chemistry	CO1: Define the basic terms in biochemistry.
			CO2: get the knowledge about structure, functions and reactions of the various biomolecules.
			CO3: Correlate the changes in the levels of these biomolecules with the diseases in human
ZO 334	Environmental Biology and Toxicology	CO1: An overview of evolutionary ecology and environmental concepts	
		CO2: understand nature of ecosystem, production, food webs, energy flow, biogeochemical cycles, resilience of ecosystem and ecosystem management.	
		CO3: Understand the biosphere, biomes and impact of climate on biomes.	
		CO4: assessment of biodiversity conservation, Sustainable development, natural resource management in changing environment.	
	ZO 335	Parasitology	CO1: List common ectoparasites and endoparasites.
			CO2: Explain animal associations and their types.
CO3: Discuss the life cycle and importance of major parasites			

Class	Subject code	Title	Cos: After successful completion of this course, student will be able to
			CO4: knowledge about life cycles of animal and zoonotic parasites
			CO5: Justify the control measures of arthropod vectors.
			CO6: Convince the importance of hygiene with respect to epidemic diseases.
	ZO 336	Cell Biology	CO1: Describe the composition, structure and functions of the plasma membrane.
			CO2: Differentiate between prokaryotes and eukaryotes.
T.Y.B. Sc Sem II	ZO 341	Biological Techniques	CO1: Students will be able to demonstrate proficiency in the experimental techniques
			CO2: separation techniques of mixed solutions.
			CO3: Explain the principle of separation techniques.
			CO4: Explain the procedure of preparing permanent histological slides.
			CO5: Illustrate the working of microscopes.
	ZO 342	Mammalian Physiology and Endocrinology	CO1: understand the physiological processes in mammals
			CO2: Illustrate the reproductive cycles with hormonal control.
			CO3: understand the working of kidney.
			CO4: Get knowledge about the endocrine disorders
	ZO 343	Genetics and Molecular Biology	CO1: Define the basic terms in genetics.
			CO2: Discuss the linkage groups and gene frequency.
			CO3: Explain the concept of mutation.
			CO4: Explain DNA structure.
			CO5: Paraphrase the Central dogma of molecular biology.
			CO6: Illustrate the mechanism of replication, transcription and translation.
	ZO 344	Organic Evolution	CO1: Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped animal morphology, physiology, life history, and behavior.
			CO2: Students will be able to identify the major groups of organisms with an emphasis on animals and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of animals that differentiate them from other forms of life.

Class	Subject code	Title	Cos: After successful completion of this course, student will be able to
	ZO 345	General Embryology	<p>CO1: Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.</p> <p>CO2: Describe the key events in early and systematic embryological development.</p> <p>CO3: Explain the theories of preformation, and concepts like growth, differentiation and reproduction.</p> <p>CO4: Explain the principles and process of fertilization and cleavage.</p> <p>CO5: Elucidation of early embryonic development of invertebrates and vertebrates.</p>
	ZO 346	Medical Entomology	<p>CO1: Outline the branches of entomology.</p> <p>CO2: Define medical entomology.</p> <p>CO3: Explain the social organization of insects with examples.</p> <p>CO4: Illustrate the role of household insects in relation to human health.</p> <p>CO5: Classify major medically important insects.</p>
	ZO 347, 348, 349	Practical Paper I, II, III	<p>CO1-First-hand knowledge about identification of non-chordate and chordate specimens (fresh and preserved) along with larval forms and study of endoskeleton of vertebrates</p> <p>CO2-Students are able to handle microscopes, work with camera lucida and micrometers</p> <p>CO3-Identification of zooplanktons and phytoplanktons</p> <p>CO4-Gain skill about histological slide preparation, staining and mounting</p> <p>CO5-Students gain skill about determination of pH and quantitative analysis of blood cells</p> <p>CO6-Students are able to parasites from rectal and fecal contents of animals</p>

  
HoD ,Zoology

  
IQAC Coordinator



  
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Outcomes (PO's)**

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**Programme  
Specific Outcomes  
(PSO's)**



**Course Outcomes  
(CO's)**

**Syllabus: 2019 Pattern**







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Programme Outcome (PO's), Programme Specific Outcome (PSO's), Course Outcome (CO's)

**Department: Zoology**

Syllabus: 2019 Pattern

**Programme Specific Outcome (B.Sc Zoology)**

Program and Courses

Sr. No.	Name of the Programme	Year of introduction of programme	Duration of introduction of Programme
1	B.Sc. Zoology	1992-1993	20 Years

Sr. No.	Programme Specific Outcome (B.Sc Zoology)
PSO 1	Understand the basic knowledge about cell biology, genetics, taxonomy, physiology, Biochemistry, ecology and applied Zoology
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PSO 3	Perform systems according to lab guidelines in the space of Taxonomy, Physiology, Ecology, Cell science, Genetics, Applied Zoology, Clinical science, devices and strategies of Zoology, Toxicology, Sericulture, Biochemistry, Fish science, Animal biotechnology, Immunology and exploration procedure
PSO 4	Students can applied his Knowledge Zoology in Applied Zoology
PSO 5	Student will be able to recognize the relationship between structure and function at all levels of biological organization (e.g., molecules, cells, organs, organisms, populations, and species) for the major groups of animals
PSO 6	Student will be able to demonstrate the ability to read, understand, and critically review scientific information.

**Course Outcome (B.Sc Zoology)**

Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
F.Y.B .Sc Sem- I	ZO-111	Animal diversity I	CO 1: To understand the Animal diversity around us.
			CO 2: To understand the underlying principles of classification of animals
			CO 3: To classify invertebrates and to be able to understand the possible group of the invertebrate observed in nature.
	ZO-112	Animal Ecology	CO 1: Student will be able to identify and critically evaluate effects of population on ecosystem and Biosphere
			CO 2: To understand importance of natural resource and aware about conservation of nature.
			CO 3: The student understands the local lifestyle and problems of the community.
			CO 4: Students can link food chains and the complexity of food networks and link them into human life for the improvement and non-utilization of biological and abiotic components.
	ZO – 113	Practical Zoology -I	CO 1: Recognize the live forms of vertebrates and invertebrates.
			CO 2: Analyze and describe zoological concepts, including morphology and anatomy.
CO 3: Explain conservation and sustainable use of animals;			
CO 4: Practical knowledge about Ecosystem			
F.Y.B .Sc Sem- II	ZO-121	Animal diversity I	CO 1: To understand the Animal diversity around us.
			CO 2: To understand the underlying principles of classification of animals
			CO 3: To classify invertebrates and to be able to understand the possible group of the invertebrate observed in nature.
	ZO – 122	Cell Biology	CO 1: understand the importance of cell as a structural and functional unit of life.
			CO 2: The student understands the difference between the prokaryotic and eukaryotic cell.

Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
			CO 3: get knowledge about the cellular mechanisms and its functioning
	ZO – 123	Practical Zoology -II	CO 1: Recognize the live forms of vertebrates and invertebrates. CO 2: Analyze and describe zoological concepts, including morphology and anatomy. CO 3: Explain conservation and sustainable use of animals; CO 4: Practical knowledge about Ecosystem
S.Y.B.Sc Sem-I.	ZO 211	Animal Systematics and Diversity –III	CO 1: Knowledge of classification of Non-chordates along with studies on various physiological functions
			CO 2: Knowledge of classification of chordates along with studies on various physiological functions and comparative anatomy of organs of chordate with example.
	ZO 212	Applied Zoology I	CO 1: Understands rearing of fish, sericulture, pearl culture along with crop pest management techniques so that he can start small scale livestock industry.
			CO 2: Students gain knowledge about various disease related vectors and their impact on human
			CO 3: Understands concepts of apiculture, poultry, dairy along with tissue and cell culture techniques
	ZO 213	Practical Zoology -I	CO 1: Basic knowledge about identification of non-chordate and chordate specimens (fresh and preserved) along with larval forms and study of endoskeleton of vertebrates
			CO 2: Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied Zoology
			CO 3: Analyze the relationships among animals, plants and microbes
			CO 4: Students will be able to explicate the ecological inter connected ness of life on earth by Tracing energy and nutrient flows through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems.
S.Y.B.Sc Sem II.	ZO 221	Animal Systematics and Diversity – IV	CO 1: Knowledge of classification of Non-chordates along with studies on various physiological functions
			CO 2: Knowledge of classification of chordates along with studies on various physiological functions and comparative anatomy of organs of chordate with example.
	ZO	Applied	CO 1: Understands rearing of fish, sericulture,

Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
	222	Zoology I	pearl culture along with crop pest management techniques so that he can start small scale livestock industry.
			CO 2: Students gain knowledge about various disease related vectors and their impact on human
			CO 3: Understands concepts of apiculture, poultry, dairy along with tissue and cell culture techniques
	ZO 223	Practical Zoology -II	CO 1: Basic knowledge about identification of non-chordate and chordate specimens (fresh and preserved) along with larval forms and study of endoskeleton of vertebrates
T.Y.B.Sc Sem-I	ZO 351	Pest Management	CO 1: Students will be able to understand pest management
			CO 2: Learns the economic, ecological, and sociological benefits of IPM.
			CO 3: Students can distinguish positive and negative impacts of pesticide use
			CO 4: Understand problems resulting from misuse, overuse, and abuse of chemical pesticides.
			CO 5: Students will be able to understand pesticide resistance and how it develops.
			CO6. Students will Identify ecological and biological characteristics important in development of pest populations.
			CO 6: Students will Identify 10 tactics commonly used in IPM and be able to distinguish them.
			CO 7: Understand society's role in IPM decisions.
			CO 8: Describe different groups of pests and compare them to weeds and plant pathogens.
			CO 9: Students will be able to analyse and compare management tactics to determine the best approach to reducing pest populations, weeds, and disease presence.
CO 10: Locate appropriate, scientifically valid sources of information on specific tactics to			

Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
			manage insect pests, weeds, and diseases.
			CO 11: Know and how to develop an IPM program
	ZO 352	Histology	CO 1: The students will be able to understand, classify and identify the different types of tissue.
			CO 2: The students will understand the complexity of various tissues in an organ.
			CO 3: The students will be able to learn structure & functions of various tissues.
			CO 4: The students will understand the various diseases related to organs.
			CO 5: The student will be able to know the role of glands in mammals.
	ZO 353	Biological Chemistry	CO 1: Learners shall be able to understand basic concepts and significance of biochemistry
			CO 2: The students will learn about the pH and Buffers.
			CO 3: The students will learn about the chemical structures of carbohydrate, and their biological and Clinical significance.
			CO 4: The students will be able to understand, interpret structure and importance of proteins, carbohydrates and lipids
			CO 5: Learners will be able to comprehend variations in enzyme activity and kinetics.
	ZO 354	Genetics	CO 1: The students will be able to understand basic terms in genetics.
			CO 2: The students will be able to understand Discuss the linkage groups and gene frequency.
			CO 3: The students will be able to learn about the concept of mutation.
			CO 4: The students will be able to understand the types of sex determination.
			CO 5: The students will be able to learn about the human population genetics.
			CO 6: The students will be able to understand the sex linked inheritance in human.
			CO 7: The students will be able to learn about the applications of genetics.
	ZO 355	Developmental Biology	CO 1: Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.

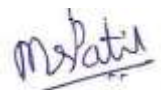
Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
			CO 2: Describe the key events in early and systematic embryological development.
			CO 3: Explain the theories of preformation, and concepts like growth, differentiation and reproduction.
			CO 4: Explain the principles and process of fertilization and cleavage.
			CO 5: Elucidation of early embryonic development of invertebrates and vertebrates.
			CO 6:
	ZO 356	Parasitology	CO 1: The students will be able to learn about basics and scope of parasitology.
			CO 2: The students will be able to learn the types of host and parasite with examples.
			CO 3: The students will be able to learn about the morphology, life cycle, pathogenicity and treatment of common parasites (Protists and Platyhelminthes).
			CO 4: The students will be able to learn about host -parasite relationships and their effects on host body.
			CO 5: The students will be able to learn about the arthropod parasites and their role as vector
	ZO 3510	Aquarium Management	CO 1 The students will be able to understand the Aquarium fish keeping.
			CO 2: The students will able to understand the biology of aquarium fishes
			CO 3: The students will be able to understand feeding requirements and food ingredients of aquarium fishes.
			CO 4: The students will be able to understand fish transportation techniques.
			CO 5: The students will be able to understand the maintenance of aquarium and physico-chemical parameters of water for fish culture
			CO 6: The students will be able to understand fish preservation and fish breeding techniques.
	ZO – 3511	Poultry Management	CO 1: The students will be able to understand the Poultry farming practices.
			CO 2: The students will able to understand the poultry breeding techniques.
			CO 3: The students will be able to understand poultry rearing techniques.
			CO 4: The students will be able to understand feeding requirement and food ingredients.
			CO 5: The students will be able to understand the poultry disease and their pathogens.

Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
			CO 6: The students will be able to understand market value of poultry products
T.Y.B.Sc Sem III	ZO 357	Zoology Practical Paper I	CO 1: Students will able to understand various pests and their management
			CO 2: Students are able to handle microscopes, work with camera lucida and micrometers
			CO 3: Students will able to prepare acid, alkali solutions and standardization.
			CO 4: Students will gain skill about estimation and isolation of biochemicals
	ZO 358	Zoology Practical Paper II	CO 1: Students will able to find Mendelian ratios from given hypothetical data.
			CO 2: Gain skill about histological slide preparation, staining and mounting
	ZO 359	Zoology Practical Paper III	CO 1: Students gain skill about determination of pH and quantitative analysis of blood cells
			CO 2: Students are able to find parasites from rectal and fecal contents of animals
			CO 3: Students are able to collect parasite and pest specimen
T.Y.B.Sc Sem II	ZO 361	Medical & Forensic Zoology	CO 1: The students will be able to understand the basics principles of Medical and Forensic Zoology.
			CO 2: The students will able to understand scientific methods in crime detection.
			CO 3: The students will be able to understand the advancements in the field of Medical and Forensic Zoology.
			CO 4: The students will be able to understand modern tools, techniques and skills in forensic investigations.
			CO 5: The students will be able to describe the fundamental principles and functions of forensic science and its significance to human society.
	ZO 362	Animal Physiology	CO 1: The various physiological organ-systems and their importance to the integrative functions of the human body.
			CO 2: Understand Concept of energy requirements
			CO 3: Various aspects of Digestive physiology.
			CO 4: Circulatory system with medical conditions
			CO 5: Understand Respiratory mechanism and gases transport
			CO 6: Eliminations of waste materials from the body.
	ZO 363	Molecular Biology	CO 1: Learner shall get an insight into molecular mechanisms of various biological processes in cells and organisms

Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
			CO 2: Learner shall get an insight into the Structure of DNA and RNA, DNA and RNA as genetic material
			CO 3: The course shall prepare learner to get insight into the Central Dogma of Molecular Biology
			CO 4: Learner shall also understand the concept of gene regulation
			CO 5: Learner shall get an insight into the DNA Damage and Repair
	ZO 364	Entomology	CO 1: Understand basic concepts in Entomology and its scope.
			CO 2: Learn morphology and anatomy of Insects.
			CO 3: Understand the concept of social organization in Insects.
			CO 4: Understand the development process of Insects.
			CO 5: Will be able to design and implement pest controlling methods against pests
			CO 6: Identify disease causing insect vectors.
	ZO 365	Techniques in Biology	CO 1: Understand handling and basic principles of microscope.
			CO 2: Understand tissue fixation and processing through microtomy.
			CO 3: Learn haematological as well as immunological techniques.
			CO 4: Understand PCR and DNA barcoding.
			CO 5: Understand laboratory techniques and handling of instruments.
	ZO 366	Evolutionary Biology	CO 1: Students will be able to learn most of the essential aspects of Evolutionary Biology in detail which will help them in acquiring better understanding regarding the subject.
			CO 2: Explain important processes, principles and concepts and critically evaluate theories and empirical research within evolutionary biology
			CO 3: Apply evolutionary theory and concepts to address empirical and theoretical questions in evolutionary biology.
			CO 4: Independently investigate evolutionary questions using literature and analyses of empirical data.
			CO 5: Communicate the principles, theories, problems and research results associated with questions that lie within the evolutionary framework to students.
	ZO 3610	Environmental Impact	CO 1: Learn about environment and sustainable development




Class	Subject code	Title	Cos:After successful completion of This course, student will be able to
		Assessment	CO 2: Understand types and effects of pollution. CO 3: Understand environmental Protection acts. CO 4: Understand environmental Impact Assessment.
	ZO 3611	Project	CO 1: Students will understand insect morphology and anatomy. CO2: Students will understand fossils, evolutionary stages of human.
T.Y.B.Sc Sem IV	ZO 367	Zoology Practical Paper I	CO 1: Students will able to carry out urine analysis.
			CO 2: Students are able to examine hair morphology and determine the species to which the hair belongs
			CO 3: Students will able to prepare acid, alkali solutions and standardization.
			CO 4: Students will gain skill about estimation and isolation of biochemicals
	ZO 368	Zoology Practical Paper II	CO 1: Students will gain skill about estimation of haemoglobin, blood glucose level, detection of blood groups.
			CO 2: Students will able to prepare DNA paper model, estimation of DNA.
	ZO 369	Zoology Practical Paper III	CO 1: Students will understand insect morphology and anatomy
			CO 2: Students are able to find parasites from rectal and fecal contents of animals
			CO 3: Students gain skill about various biological techniques.
CO 4: Students will understand fossils, evolutionary stages of human.			

  
HoD, Zoology

  
IQAC Coordinator



  
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