

Vidya Vikas Mandal Pathrud's  
**SHANKARRAO PATIL MAHAVIDYALAYA, BHOOM.**

Department of Zoology

Course Outcome

First Year

Paper No. 101 Protozoa to Annelida	
CO 1	To understand the life cycle and classification of Animal.
CO 2	To study the development and control measures.
CO 3	To study and understand the whole cell organelles with their structure and functions.
CO 4	The scope of cell biology because cell is the basic unit of life.
CO 5	To understand the life cycle and classification of Animal.

Paper No. 102 Cell Biology	
CO 1	To study functions of various cells
CO 2	Describe the components, types of cells and its organelles.
CO 3	Diverse role of cell system in energy generation and tissue organization.
CO 4	Familiarize the coordination between different organelles and its role in cell function.
CO 5	Learners will understand the cellular components underlying mitotic cell division.

Paper No. 201 Arthropoda to Echinodermata and Protochordata	
CO 1	Demonstrate solve and understand of major concept in all discipline of Zoology.
CO 2	To know the characters and development of the animals to the students.
CO 3	To use modern zoological tools, models and charts equipment.
CO 4	To understand classification and need of classification
CO 5	To understand general organization of Arthropoda to Echinodermata

Paper No. 202 Genetics I	
CO 1	Explain role of genetics in evolution.
CO 2	Describe Mendelian work and its laws of Genetics.
CO 3	Explain types and Structure of Chromosomes
CO 4	Understand Mutation and different types of gene and Chromosomal mutations
CO 5	Describe various theories of sex determination.





## Second Year

### Paper No. 301 Vertebrate Zoology

<b>CO 1</b>	Understand general organization of Vertebrates
<b>CO 2</b>	To understand the study of the life cycle and development of animals.
<b>CO 3</b>	To study General Character and Embryological and placenta of mammals.
<b>CO 4</b>	Describe adaptation and migration in birds
<b>CO 5</b>	Describe general features and classification of mammals up to order and explain origin of mammals.

### Paper No. 302 Genetics - II

<b>CO 1</b>	To understand the role of genes in the control and expression of characters.
<b>CO 2</b>	Biomolecule DNA and its function.
<b>CO 3</b>	To accurately diagram and describe the processes of replication, transcription, translation, as
<b>CO 4</b>	Well as predict the outcomes of these processes.
<b>CO 5</b>	Study of genetic variation within populations in population genetics.

### Paper No. 401 Animal Physiology

<b>CO 1</b>	Fundamental processes and mechanisms that provide and control the various functions of the body.
<b>CO 2</b>	To understand metabolic process of human body
<b>CO 3</b>	Students will be able to integrate the regulation of organ system and functions.
<b>CO 4</b>	To learn the mechanisms that operates in living organisms ranging from the cellular to the
<b>CO 5</b>	Training the students with all the required knowledge and skills in regards to life regulating Process.

### Paper No. 402 Biochemistry and Endocrinology

<b>CO 1</b>	To understand digestion and absorption of protein, carbohydrate & lipids.
<b>CO 2</b>	To understand fat bodies, structure, physiology biochemistry, function of fatty acid
<b>CO 3</b>	To study Structure and function of various endocrine glands
<b>CO 4</b>	To understand disease caused due to imbalance of hormones
<b>CO 5</b>	To study the control and co-ordination of endocrine system





## Third Year

### Paper No. 501 Ecology

<b>CO 1</b>	Discerning the knowledge of Ecological systems at different spatial and temporal level
<b>CO 2</b>	Perceiving the types of abiotic and biotic factors, its effect on the distribution, dispersal, and behavior of organisms.
<b>CO 3</b>	Develop deeper understanding of food chains and food webs, ecological pyramids.
<b>CO 4</b>	Describe the ecological successions and various ecosystems.
<b>CO 5</b>	To measure the population in ecology using various criteria

### Paper No 502 Parasitic Protozoa and Helminthes I

<b>CO 1</b>	Introducing parasitology by studying types of parasites and host parasite relationship
<b>CO 2</b>	Describe and study Classification of Protozoan parasites
<b>CO 3</b>	Understanding structure life cycle of Protozoan parasites
<b>CO 4</b>	Understanding pathogenicity and control measures of different parasitic protozoans
<b>CO 5</b>	To study control measures of protozoan parasites

### Paper No. 601 Evolution

<b>CO 1</b>	Understand the evidences of evolution through different theories.
<b>CO 2</b>	Role of genetics in evolution, Hardy-Weinberg law its application.
<b>CO 3</b>	Awareness of environment, natural elemental forces in evolution.
<b>CO 4</b>	Through knowledge of the process of speciation.
<b>CO 5</b>	Role of heredity and variation in evolution

### Paper No 602 Parasitic Protozoa and Helminthes I

<b>CO 1</b>	Describe and study Classification of helminth parasite
<b>CO 2</b>	Observing microscopic structures of various Helminthe parasite
<b>CO 3</b>	Learning techniques of collection preservation staining and identification of trematode parasite
<b>CO 4</b>	Learning techniques of collection preservation staining and identification of cestode parasite
<b>CO 5</b>	Learning techniques of collection preservation staining and identification of nematode parasite





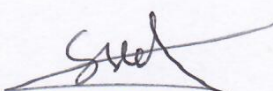
## Programme Outcomes

<b>PO 1</b>	Solve the problem and also think methodically independently and draw a logical conclusion.
<b>PO 2</b>	Demonstrate, solve and an understanding of major concepts in all disciplines of major Concepts in all disciplines of zoology.
<b>PO 3</b>	Understand origin and history of life
<b>PO 4</b>	Understand the evolution, history of phylum.
<b>PO 5</b>	Create an awareness of the impact of Zoology on the environment, society and development Outside the scientific community
<b>PO 6</b>	To study and understand the classification of whole phyla includes in non-chordates with the Help of charts, models and pictures.
<b>PO 7</b>	To study and understand the classification of whole phyla includes in chordates with the Help of charts, models and pictures.
<b>PO 8</b>	To inculcate the scientific temperament in the students and outside the scientific community.
<b>PO 9</b>	Use modern techniques, decent equipment and zoology software's.
<b>PO 10</b>	To study Control measures and pathogenicity of newly emerging disease
<b>PO 11</b>	To study the genetics and understand the genetical problems with there effects on human body
<b>PO 12</b>	Make students able to aware people against superstition and build scientific approach in society

## Programme Specific Outcomes

<b>PSO 1</b>	Given the knowledge of zoology through theory and practical.
<b>PSO 2</b>	Use modern Zoological tools, models, charts, and Equipment.
<b>PSO 3</b>	To understand good laboratory practical and safety
<b>PSO 4</b>	To develop research-oriented skills.



  
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