



GKSM Govt College Tanda Urmar

**DEPARTMENT
OF
ZOOLOGY**

(Department of Bachelor of Science)

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PROGRAM OUTCOMES (POs)

On successful completion of Post Graduate Program, Post Graduating Students will be able to

Knowledge outcomes:

After completing B.Sc. General Program students will be able to:

KO1	Demonstrate and apply the fundamental knowledge of the basic principles of major fields of Zoology.
KO2	Apply knowledge to solve the issues related to animal sciences.
KO3	To know about the timeline of origin and evolution of life.

Skill outcomes:

After completing B.Sc. General Program students will be able to:

SO1	To foster curiosity in the students for Zoology.
SO2	To create awareness amongst students for the basic and applied areas of Zoology.
SO3	To provide an insight into the aspects of animal evolution.
SO4	To inculcate good laboratory practices in students and to train them about proper handling of lab instruments.

Generic outcomes:

After completing B.Sc. General Program students will be able to:

GO01	Demonstrate knowledge and understanding of Zoology and management principles and apply these to one's own work, as a member and leader in a team.
GO02	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
GO03	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.



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Program Specific Outcomes

After successfully completing this course, students will be able to:

PSO1	Understand the nature and basic concepts of biodiversity of chordates, evolution of chordates, biochemistry and physiology in organisms.
PSO2	Perform procedures as per laboratory standards in the areas of biodiversity of chordates, evolution of chordates, biochemistry and physiology in organisms.
PSO3	Understand the applications of Zoology in Agriculture, Medicine and daily life.
PSO4	Gains knowledge about research methodologies, effective communication and problem solving methods.
PSO5	Contributes the knowledge for Nation building.

Course Outcomes

B.Sc. General

Learning outcomes:

1	The student will be able to understand, classify and identify the diversity of animals
2	The student will understand the importance of classification of animals and classify them effectively using the six levels of classification
3	The student knows his role in nature as a protector, preserver and promoter of life, which he has achieved by learning, observing and understanding life



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PAPER-I: BIODIVERSITY (CHORDATES) & EVOLUTION-I (ZOO – 301)

After successfully completing this course, students will be able to:

CO1	To understand the Animal diversity around us.
CO2	To understand the underlying principles of classification of animals.
CO3	To understand the terminology needed in classification.
CO4	To understand the differences and similarities in the various aspects of classification.
CO5	To classify chordates and to be able to understand the possible group of the chordates observed in nature.
CO6	To understand the concept of migration and parental care in chordates.
CO7	To know about the timeline of origin and evolution of life.

PAPER II: BIOCHEMISTRY AND PHYSIOLOGY-I (ZOO 302)

After successfully completing this course, students will be able to:

CO1	Define the basic terms in biochemistry.
CO2	Explain the structure, functions and reactions of the various biomolecules.
CO3	Give examples of each group type of biomolecules.
CO4	Correlate the changes in the levels of these biomolecules with the diseases in human.
CO5	Define the basic terms in physiology.
CO6	Explain the physiological processes in mammals.
CO7	Explain the anatomy of various systems.



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PAPER – I: BIODIVERSITY (CHORDATES) & EVOLUTION- II (ZOO 401)

After successfully completing this course, students will be able to:

CO1	To understand the Animal diversity around us.
CO2	To understand the underlying principles of classification of animals.
CO3	To understand the terminology needed in classification.
CO4	To understand the differences and similarities in the various aspects of classification.
CO5	To classify chordates and to be able to understand the possible group of the chordates observed in nature.
CO6	To understand the concept of micro, macro and mega-evolution in living organisms.
CO7	To understand the biological concept of species.
CO8	To know about the timeline of evolution of man.

PAPER II: BIOCHEMISTRY AND PHYSIOLOGY-II (ZOO 402)

After successfully completing this course, students will be able to:

CO1	Define the basic terms in biochemistry.
CO2	Explain the structure, functions and reactions of the various biomolecules.
CO3	Give examples of each group type of biomolecules.
CO4	Correlate the changes in the levels of these biomolecules with the diseases in human.
CO5	Define the basic terms in physiology.
CO6	Explain the physiological processes in mammals.
CO7	Explain the anatomy of various systems.
CO8	Illustrate the reproductive cycles with hormonal control.
CO9	Diagrammatically representing the working of kidney.
CO10	Justify the various endocrine disorders.



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Course: Practical Zoology

After successfully completing this course, students will be able to:

CO1	First hand knowledge about identification of chordate specimens and study of endoskeleton of vertebrates.
CO2	Students will be able to handle microscopes.
CO3	Gain skill about histological slide preparation, staining and mounting.
CO4	Students gain skill about estimation of blood pressure and hemoglobin.
CO5	Students gain skill about estimation of the presence of amylase in saliva, denaturation by pH and temperature.
CO6	Understand the nature and basic concepts of biodiversity of chordates, evolution of chordates, biochemistry and physiology in organisms.
CO7	Recognize the live forms of vertebrates.
CO8	Analyze and describe zoological concepts, including morphology and anatomy.
CO9	Explain conservation and sustainable use of animals.
CO10	Explain and demonstrate the impact that animals have on humans.
CO11	Students gain skill to analyze the types of blood cells in blood smear.
CO12	Students will be able to identify the presence of starch, glucose, proteins and fats in different food stuffs.
CO13	Students will be able to demonstrate the process of osmosis and diffusion.
CO14	Students will be able to analyze the urine for urea, chloride, glucose and uric acid.
CO15	Students will get an idea of location of endocrine glands in mammals through charts / models/ video clippings.
CO16	Students will be able to trace human evolution through models.
CO17	To acquire practical knowledge about the local vertebrate fauna with the help of a trip to the field