



Yashwantrao Chavan College of Science, Karad.

Department of Zoology



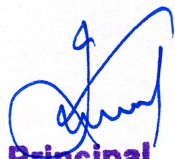
B. Sc. III

Course Outcomes (COs)

Name of program	Paper Nos.	Course code	Course Name	Course Outcome
B.Sc. III Zoology Course Outcomes	X	DSE-F29	Molecular Cell Biology and Animal Biotechnology	Explain DNA and RNA structures, replication processes, and DNA repair mechanisms.
				Comprehend the regulation of gene expression and the operon concept.
				Analyze the genetic code, including its properties and codon assignment.
				Explore protein synthesis, covering transcription and translation in prokaryotes and eukaryotes.
				Explain molecular techniques in gene manipulation, including restriction enzymes, cloning vectors, gene cloning, and DNA sequencing.
	XI	DSE-F30	Biotechniques and Biostatistics	Assess the production of cloned and transgenic animals and their applications.
				Understand the principles and applications of animal cell culture and stem cells.
				Apply biostatistics concepts such as classification, frequency distribution, and measures of central tendency.
				Analyze biological data, including graphical representation and correlation.
	XII	DSE-F31	Aquatic Biology	Explore different aquatic biomes and ecosystems.
				Evaluate the physico-chemical characteristics of lakes and streams.
				Analyze the adaptations of aquatic organisms to their environments.
				Explain causes, effects, and management of freshwater pollution.
	XIII	DSE-E30	Developmental Biology	Examine gametogenesis, types of eggs, and fertilization processes.
				Understand early development in frogs (cleavage, gastrulation, and metamorphosis).
				Explore chick embryology, covering fertilization, organogenesis, and foetal membranes.

			Explain late embryonic development (implantation and placenta formation).
XIV	DSE-E32	Immunology	<p>Gain an overview of the immune system, including innate and adaptive immunity.</p> <p>Describe hematopoiesis and the cells and organs of the immune system.</p> <p>Examine antigens and B and T cell epitopes.</p> <p>Understand immunoglobulins, antigen-antibody interactions, and the use of hybridoma technology.</p>
XV	DSE-E31	Applied Zoology	<p>Learn about apiculture, bee types, beekeeping, and the medicinal value of honey.</p> <p>Explore animal husbandry, including cattle breeds, artificial insemination, and estrus synchronization.</p> <p>Understand pearl culture, the process of pearl formation, and oyster maintenance.</p> <p>Study freshwater prawn culture, including species and farm construction.</p> <p>Examine fish technology, genetic improvements, and goat farming.</p>
XVI	DSE- E32	Animal Physiology	<p>Explain the physiology of digestion and nutrient absorption.</p> <p>Describe the respiratory system and gas exchange mechanisms.</p> <p>Understand blood composition, heart structure, and cardiac function.</p> <p>Describe muscle types, structure, and contraction mechanisms.</p> <p>Understand nerve structure, impulse conduction, and synaptic transmission.</p>




Principal
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