

“ज्ञान विज्ञान आणि सुसंस्कार यासाठी शिक्षणप्रसार” शिक्षणमहर्षी डॉ. बापूजी साळुंखे.

Shri Swami Vivekanand Shikshan Sanstha's

LAL BAHADDUR SHASTRI COLLEGE OF ARTS, SCIENCE AND COMMERCE,

SATARA

P. G. Department of Zoology

Course Outcomes:

Sr. No.	Class	Course code	Title of the paper	Objectives
1.	B.Sc. I	DSC-15 A	Animal diversity-I	Students will be able to understand classify & identify the Diversity Animals.
		DSC-16A	Cell Biology and Evolutionary Biology	To have the knowledge about internal structure of Cell its function. To describes the structure and functions of cell organelle. To Study the evolutionary changes during different periods of
		DSC-15B	Animal Diversity and Insect Vectors	Describe general taxonomic rules on animal classification. 2. Impart knowledge of non-beneficial insects. 3. Interaction of insect vectors with humans and spread of diseases. 4. Maintaining control of vector and vector borne diseases.
		DSC-16 B	Genetics	To understands the various concepts of Mendelian Genetics & its importance. To impart knowledge of Mutation as well as about sex determination
2.	B.Sc.II	DSC-C 15	Animal Diversity – II(NEP 2020)	1.To write the general characteristics, classification of Chordates up to orders. 2. Impart conceptual knowledge of vertebrates, their adaptations and associations in relation to their environment.
		DSC-C 16	Biochemistry	1. To study Macromolecules. To understands the biological functions of various molecules and its pathway.
		DSC-C 17	Reproductive Biology	Gain knowledge about female and male reproductive physiology.
		DSC-D 18	Applied Zoology-I	To study morphology and behavior pattern of insects and host parasite relationship. To Know about small scale industries related to applied zoology as well as to developed entrepreneurship among students.
3	B.Sc. III	DSE-E29	Comparative Anatomy of	1. The detail study as well as comparison of anatomy of different vertebrates;



			Vertebrates	integumentary,circulatory,digestive, respiratory.urinogenital and nervous systems; sense organs in vertebrate.
		DSE-F29	Molecular –Cell Biology and Animal Biotechnology	Gain knowledge about molecular biology and different molecular techniques in gene manipulation.
		DSE-F30	Biotechniques and Biostatistics	Gain the knowledge of Biostatistics and its uses in Research.
		DSE-F31	Aquatic Biology	To study properties of fresh water, Marine and eusteurine water pollutions and its managements.to gain knowledge og glands.
		DSE-E30	Developmental Biology of Vertebrates	To describe the history and different stages of embryonic development.
		DSE-E32	Immunology	To gather a knowledge regarding immunity and cell and organs of immune system
		DSE-E31	Applied Zoology-II	To study rearing and harvesting of different animals and also having knowledge regarding small scale side-business related to applied zoology.
		DSE-F32	Insect Vectors and Histology	To study different disease vectors, life cycle of vectors and control of those disease spreading vectors.
4.	M.Sc. I	CC-101	Biosystematics and Biodiversity	To understand important concepts of biosystematics, biodiversity.
		CC-102	Applied Entomology	1. students would attaining knowledge on nutritional value of insects, types of insects that can be used in nutrition, revenue earning options . 2. Recognize various types of insect pests. 3. Work in sericulture, Apiculture and Lac culture.
		CC-103	Molecular Cell Biology	Students able to understand the basis of cell-cell junctions, membrane transport, protein sorting, vesicular trafficking, cytoskeleton elements and their role in cell structure and function.
		CC-104	Ecology and Environmental Pollution	To understand different types of pollution and its impact on the ecosystem and human. Judicious exploitation of available natural resources.
		CC-201	Physiological Chemistry	1. Understand the metabolism of carbohydrates, amino acids, nucleic acids, lipids and understand the metabolic disorders. 2. To understand chemistry behind the different biological processes and the synthesis of biologically active molecules.
		CC-202	Bioinstrumentation and Biosystematics	1. Students able to understand probability principles and biological applications. 2. Apply various statistical methods in research.



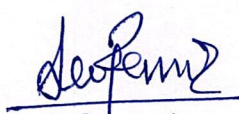
		CC-203	Anatomy and Physiology	<ol style="list-style-type: none"> 1. Students able to define the basic concept, morphological parts of the body and explain about normal ECG regulation. 2. Define the blood and its content and also gives idea about different blood groups 3. focus and relate the detailed mechanism of vitamins and its regulations.
		CC-204	Biology of Parasites	<ol style="list-style-type: none"> 1. Students would acquiring knowledge of animal association and inter-relationship between host and parasite responses. 2. Students would be attaining knowledge on arthropod vectors of medical and veterinary importance and their control.
		SEC 1		<ol style="list-style-type: none"> 1. To inculcate awareness of information security among students. 2. Develop and understanding of online transaction and email security.
		CCPR-205	Practical I	<ol style="list-style-type: none"> 1. Enable students to identify and classify animals based using identification key for correct identification of animal 2. Students will be able to identify animals in their natural habitat. 3. Students will be able to analyse quality of water sample by various parameters. 4. Students will be able to demonstrate cell organelle with organelle specific histochemical techniques. 5. Enable student to understand biology of economically important animals. 6. Enable students to identify pest of stored grains, veterinary animals and human importance for their proper management.
			Practical II	<ol style="list-style-type: none"> 1. Enable students to estimate biomolecules such as carbohydrates, Lipids, Proteins and Nucleic acid from biological material. 2. Students will be able to collect, preserve and identify various parasites. 3. Enable students to understand life cycle of various parasites. 4. Students will be able to process data with descriptive statistical method. 5. Students will be able to understand physiological processes with their practical knowledge 6. Students will be able to determine physiologically important component and

				understand their significance.
5.	M.Sc. II	CC-301	Genetics	<ol style="list-style-type: none"> 1. Understand variation in alleles, genotypes within the gene pool and understand the mechanism of DNA repair. 2. Understand the aneuploidy causes consequences of aneuploidy 3. Understand horizontal gene transfer in bacteria and their evolution. 4. Understand how bacteria acquire resistance against antibiotics and bacteriophages. 5. Understand the molecular mechanism and types of mutations. 6. Understand the mechanism of DNA repair. 7. Understand the significance and ethical aspects of Genetic counseling.
		CBE-302	Enzymology	<ol style="list-style-type: none"> 1. Students understand enzyme kinetics, industrial application and impart knowledge of enzyme classification, nomenclature. 2. To understand the fundamentals concepts of enzyme classification and nomenclature and role of the cofactors for enzyme activation 3. To gain profound knowledge to know the purification, identification and their structure of enzymes.
		CCS-303	Animal physiology	<ol style="list-style-type: none"> 1. Students will able to understand details of muscle physiology and explain different steps in animal development. 2. Describe various aspects of neuromuscular physiology. 3. Understand various techniques used in reproductive biology. 4. Know various techniques used in reproductive biology.
		CCS-304	Applied physiology	Students will able to understand effect of different parameters in the work environment.
		CC-401	Animal cell culture	Able to understand basic requirement for animal cell culture laboratory setup, aseptic conditions and carry out animal cell culture.
		CBE-402	Toxicology	Students give information about food toxicants and its health effects.
		CCS-403	Physiology of Health	Enables students to understand basics of physiology and understand respiratory, excretory, circulatory, reproductive mechanisms.
		CCS-404	Clinical Physiology	Students will able to explain regulations in endocrine physiology.
		CCPR-	Practical III	1. Enable students to demonstrate histological



		405		<p>structures of reproductive parts.</p> <p>2. Students will be able to evaluate vitality of reproductive cells.</p> <p>3. Students will be able to estimate ions and other biochemical compounds of physiological importance.</p> <p>4. Students will be able to demonstrate various aspects of ergonomics</p>
		CCPR-406	Practical IV	<p>1. Students will acquire practical skills in animal cell culture and its maintenance.</p> <p>2. Enable students to exhibit various applications of cell culture techniques in research and analysis.</p> <p>3. Students will be able to culture embryo.</p> <p>4. Students will be able to analyze the toxicity of various compounds based on toxicity test studies.</p> <p>5. Student will be able to determine the presence of various toxic compounds in water and biological samples</p>




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