

“Dissemination of Education for Knowledge, Science and Culture”


-Shikshanmaharshi Dr. Bapuji Salunkhe

**Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Zoology
Academic year: 2023-2024**

Syllabus Completion Report (Term I)

- 1. Dr. G. K. Sontakke**
- 2. Dr. T. C. Gaupale**
- 3. Dr. T. C. Patil**
- 4. Dr. S. S. Desai**
- 5. Ms. P.S. Shetfalkar**
- 6. Ms. N. A. Jadhav**
- 7. Ms. A. P. Sutar**
- 8. Ms. P. R. Gaikwad**
- 9. Ms. K. K. Lokhande**




Dr. G. K. Sontakke
HEAD
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DEPARTMENT OF ZOOLOGY

Academic year: 2023-2024

SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Dr. G. K. Sontakke

Class	Subject	Total Units	Completed Units	Remaining Units
B.Sc. I	Public health and hygiene	2	Maintenance of personal hygiene Nutrient deficiency diseases Communicable and contagious diseases, Non-communicable diseases and cure, Diabetes, Obesity	Nil
B. Sc. I	Public health and hygiene & Haematology	Practical I	Public health and hygiene & Haematology	Nil
B. Sc. III	Molecular biology and Biotechniques	2	Introduction to Molecular Biology- Concept of gene, DNA replication in prokaryotes and eukaryotes, damage, RNA splicing, Transcription & Translation in prokaryotes and eukaryotes, Genetic code Biotechniques- Concept of cloning and Cloning vectors, Restriction enzymes, Blotting techniques- Southern, Northern, Western, PCR, DNA Fingerprinting, Methods of DNA Sequencing, Genomic & c-DNA library	Nil



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Academic year: 2023-2024

SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Dr. T. C. Gaupale

Class	Subject	Total Units	Completed Units	Remaining Units
B.Sc. I	Animal Diversity I	1	Phylum Nematelminthes, Phylum Annelida, Phylum Arthropoda Phylum Mollusca, Phylum Echinodermata	Nil
B. Sc. I	Animal Diversity & Cell biology	Practical I	Animal Diversity & Cell biology	Nil
B. Sc. II	Mammalian Physiology and Biochemistry	1	Endocrine Glands : Structure and function of Hypothalamus, Pituitary, Thyroid, pancreas, adrenal gland Structure of Carbohydrate & its metabolism	Nil
B. Sc. III	Animal Biotechnology	2	Genetically Modified Organisms- Cloning techniques, Production of transgenic animals, Knockout mice- Production & applications. Applications of transgenic Animals, Plant –Agrobacterium mediated transformation	Nil

Dr. T. C. Gaupale

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SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Dr. T. C. Patil

Class	Subject	Total Units	Completed Units	Remaining Units
B.Sc. I	Haematology	2	Introduction to haematology and haemopoiesis, Composition and function of blood, Haemoglobin Blood collection, Blood pressure, Anticoagulants used in Haematology, Anaemia, Leukemia	Nil
B. Sc. I	Public health ad hygiene & Haematology	Practical I	Public health ad hygiene & Haematology	Nil
B. Sc. II	Mammalian Physiology and Biochemistry	1	Respiration- Pulmonary Ventilation, Respiratory volumes and capacities, Bohr's effect, Chloride Shift Excretion- Structure of nephron, mechanism of urine formation Cardiovascular system- composition of blood, cardiac cycle, Origin and Conduction of the cardiac impulse	Nil
B. Sc. III	Animal Biotechnology	1	Animal cell culture & its types, Cell Culture techniques & media, Sterilization techniques, rDNA technology, Application of Biotechnology in animal husbandry, Medicine and Agriculture	Nil


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Academic year: 2023-2024

SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Dr. S. S. Desai

Class	Subject	Total Units	Completed Units	Remaining Units
B.Sc. I	Cell biology	1	Cell-Structure and function of Prokaryotic and Eukaryotic cell. Plasma Membrane: Structure and function Plasma Membrane, Ultrastructure and Functions: Mitochondria, Endoplasmic Reticulum, Golgi apparatus, Ribosomes, Nucleus	Nil
B. Sc. I	Animal Diversity & Cell biology	Practical I	Animal Diversity & Cell biology	Nil
B. Sc. III	Developmental biology-II	1	Fundamental processes in development, Morphogens- Concept & properties of morphogen, Regeneration (w.r.t. Lizard), senescence, ageing and concept of apoptosis, Intercellular communication, Applications of developmental biology in medicine and research, Medical implication in developmental biology	Nil


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SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Ms. P. S. Shetfalkar

Class	Subject	Total Units	Completed Units	Remaining Units
B.Sc. I	Animal Diversity	1	Importance and scope in animal diversity, Kingdom Protista, Phylum Porifera, Phylum Cnidaria, Phylum Platyhelminthes	Nil
B. Sc. I	Animal Diversity & Cell biology	Practical I	Animal Diversity & Cell biology	Nil
B. Sc. III	Developmental biology-II	1	Chick Embryology – Structure of sperm and egg Vitellogenesis, Fertilization and cleavage Blastula and its fate map Process of gastrulation, Organizer (Development of eye), Organogenesis, Foetal membranes and significance	Nil


Ms. P. S. Shetfalkar


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SYLLABUS COMPLETION REPORT (TERM-I)

Teacher Name: Miss. N. A. Jadhav

Class	Subject	Total Units	Completed Units	Remaining Units
B. Sc. I	Public health & hygiene and Haematology	Practical I	Public health & hygiene and Haematology	Nil
B. Sc. III	Developmental biology-I	1	An introduction and scope and importance of developmental biology, Overview of male & female reproductive system in mammal, Gametogenesis: Spermatogenesis and oogenesis w.r.t. mammals, Structure of mature egg and sperm in amphibian and human, Fertilization: Types - external (amphibians), internal (mammals) and process of Fertilization, Block to polyspermy- Slow & fast block to polyspermy, Types of egg on the basis of distribution & amount of yolk, Cleavage: Definition, types, planes & patterns and significance	Nil

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SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Ms. A. P. Sutar

Class	Subject	Total Units	Completed Units	Remaining Units
B. Sc. I	Animal Diversity & Cell biology	Practical I	Animal Diversity & Cell biology	Nil
B. Sc. II	Mammalian Physiology and Biochemistry	1	Nerve and Muscle : Structure of a neuron, resting membrane potential Origin of action potential and its propagation, in myelinated and non-myelinated nerve fibers, Neurotransmitter, Synapse-Electrical and chemical synapse, Ultra-structure of skeletal muscle, Molecular and chemical basis of muscle contraction	Nil

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SYLLABUS COMPLETION REPORT (TERM I)

Teacher Name: Ms. P. R. Gaikwad

Class	Subject	Total Units	Completed Units	Remaining Units
B. Sc. I	Animal Diversity & Cell biology	Practical I	Animal Diversity & Cell biology	Nil
B. Sc. II	Mammalian Physiology and Biochemistry	1	Lipid Metabolism -Structure of lipids, Types of lipids, Inhibition and Regulation of enzyme action Transamination, Deamination and Urea Cycle, Enzymes -Introduction, Mechanism of action , Factors affecting enzyme activity Biosynthesis and β oxidation of palmitic acid, Protein metabolism - Structure of amino acids, Types of proteins	Nil
B. Sc. III	Developmental biology-I	1	Early Embryonic Development in Mammals -II Morulation and blastulation, Gastrulation: Definition, fate maps, significance of gastrulation. Morphogenetic cell movements- Epiboly and Emboly (types of embolic movements). Fate of germ layers, Neural tube formation, Implantation of embryo in human, Extra embryonic membrane Placentation in mammals : definition, types and significance, classification on the basis of morphology and functions of placenta Classification of placenta on the basis of histology	Nil


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Teacher Name: Miss. K. K. Lokhande

Class	Subject	Total Units	Completed Units	Remaining Units
B.Sc. I	Cell biology	1	Cell cycle and division: Overview of cell cycle, Phases and significance of mitosis and meiosis Cytoskeleton: Structure and organization of microtubules, microfilaments and intermediate filaments	Nil
B. Sc. I	Animal Diversity & Cell biology	Practical I	Animal Diversity & Cell biology	Nil
B. Sc. II	Mammalian Physiology and Biochemistry	1	Digestion: Brief account of alimentary canal and digestive glands, Physiology of digestion in the alimentary canal; Absorption of carbohydrates, proteins, lipids	Nil
B. Sc. III	Molecular biology & Biotechniques	1	Concept of cloning and cloning vectors: Characteristics and types (plasmid, cosmid, phagemid, lambda, bacteriophage, artificial chromosome)	Nil

Miss K. K. Lokhande

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