COURSE OUTCOMES

B.Sc. – I

PAPER– I

PROTOZOA TO ANNELIDA

CO.1. Introduction about animal kingdom, Protozoa, Parazoa, Metazoa and Major Phyla

CO.2. General Characters, Structure, Life cycle, Pathogenecity, Control, Prevention and treatment of Protozoan Parasites

CO.3. Genetal Characters, Morphology, Different types of cells and canal system in sycon.

CO.4. General Characters, Morphology of obelia colony, development of hydra, polymorphism in coelenterates

CO.5. General Characters of helminthes and different helminthetic parasitic diseases, life cycle, pathogenecity and control measures

CO.6. General Characters of Annelida, Morphology, Digestive, Excretory and Reproductive systems of Leech.

PAPER – II

CELL BIOLOGY

CO.1. General structure of the cell, Structure of Prokaryotic and Eukaryotic cell, cell cycle, Mitosis, Meiosis

CO.2. To understand Structure and Function of various cell organelles and Cytology and Types of Cancer

CO.3. To study the different types of Microsopes and Microtechniques in methods in cell biology

PAPER – IV

ARTHROPODA TO ECHINODERMATA AND PROTOCHORDATA

CO.1. General characters of Arthropoda, Structure, Digestive, Nervous, Reproductive, Respiratory systems of Prawn and Cockroach

CO.2. General characters of Mollusca, External characters, Respiratory, Circulatory, Nervous and Reproductive systems of Pila.

CO.3. General characters of Echinodermata, Morphology , water vascular system, Reproductive system of Asterias.

CO.4. General characters and classification of Protochordata

PAPER – V

GENETICS – I

CO.1. To Understand various elements of heredity and variation and Mendel's laws of heredity

CO.2. To provide knowledge about gene interaction, Epistasis, Supplimentary and complementary gene.

CO.3. To understand about Multiple allels like Coat colours in rabbit and blood group in Man

CO.4. To understand about cytoplasmic inheritance in snail, Male sterility, CO2 sensitivity in Drosophila and kappa particles in paramecia

CO.5. Knowledge about sex determination in man and Drosophila, Chromosomal theory, Geneic balance theory, Triploid intersexes, Gynandromorph in drosophila, sex linked inheritance

CO.6. Knowledge about Mutation, Gene mutation, Chromosomal aberration, Spontaneous and induced mutation.

Three Theory Periods per paper per week per semester

Three Practical Periods perweek per batch

B.Sc. II

PAPER – VII

VERTEBRATE ZOOLOGY

CO.1. Introduction about out line classification,m general characters and affinities of cyclostomata

CO.2. understand out line classification and general characters of Pisces and the example scoliodon studied with External characters, Digestive system, Respiratory system, Blood vascular system and Nervous system

CO.3. Outline classification and general characters of Amphibia, Development of Frog- Fertilization, cleavage, Blastula, Gastrulation and formation of germinal layers

CO.4. Outline classification and general characters of Reptilia with example Calotes- External features, Respiratory system and Blood vascular system, Poisonous and Non-poisonous snakes

CO.5. Outline classification and general characters of Aves, Columba livia- External features, Respiratory system, Embryology of chick, Flight adaptation in Birds, Migration in Birds

CO.6. Outline classification and general characters of Mammalia, External Features, Blood vascular system of Ratus-ratus, Urino-genital system and adaptive radiation in mammals, Placentation in Mammals.

GENETICS – II

CO.1. Knowledge about gene and its expression, Definition, concept and function of gene, Transcription, Translation and Genetic code

CO.2. To understand population genetics, gene pool, gene frequency, Herdy Weinberg Law

CO.3. Knowledge about Human Chromosome, Sex linked inheritance, Dizygotic and Monozygotic twins, Inborn errors in metabolism, PKU, Genetic disorders

CO.4. Knowledge about Microbial genetics like transformation, Conjugation and Transduction

CO.5. To understand Genetic Engineering

PAPER – XI

ANIMAL PHYSIOLOGY

CO.1. To understand brief introduction of physiology of Digestion

CO.2. To understand Physiology of Respiration

CO.3. Knowledge about physiology of circulation

CO.4. Knowledge about physiology of Excretion

CO.5. Knowledge about Nerve Physiology, Structure and Synapse

CO.6. To provide knowledge about Muscle Physiology

CO.7. To provide knowledge about Reproductive Physiology

PAPER – XI

BIOCHEMISTRY AND ENDOCRINOLOGY

CO.1. Knowledge about Enzyme, Concept and Nomenclature, Properties, Classification, Mechanism of enzyme action and factor affecting enzyme action

CO.2. To give the knowledge about definition, Classification and Metabolism of Carbohydrate

CO.3. knowledge about Definition, Classification, Structure and Metabolosm of Protein

CO.4. Knowledge about Definition, Classification and Metabolism of Lipid

CO.5. To understand the Vitamin source and deficiency

CO.6. To studt the morphology, Histological Structure, Hormones and functions of endocrine glands like Pituitary, Thyroid, Adrenal gland and Pancreas.

Three Theory Periods per paper per week per semester

Six Practical Periods perweek per batch

B.Sc. III

PAPER – XV

ECOLOGY

CO.1. Introduction about Definition , Concept, terminology used in ecology

CO.2. To understand abiotic environmental factors, Effect of Temperature and light on animals, Adaptation to salinity and moisture

CO.3. Biotic environmental factors- Competition, Predation, Commensalism, Mutualism, Parasitism – definition , Types with examples

CO.4. To study the definition and concept of population, Characteristics, population growth, population regulation

CO.5. Definition , concept and types of community, Structure and characters of community, Community succession

CO.6. To understand various ecosystem

PAPER – XVI

ENTAMOLOGY - I

CO.1. Introduction about economic Entomology

CO.2. To understand methods of collection and preservation of insect

CO.3. To understand systematic position, external morphology, digestive, nervous, reproductive system of Grasshopper

CO.4. To understand insect orders like Thysanura, Collembella, Lepidoptera, Diptera, Coeloptera, Hymenoptera

CO.5. To understand House hold and Human insect pest- Bed bugs, Mosquito, Rat Flea and house fly, Cockroach, Pediculus

CO.6. knowledge about metamorphosis in insect, types of metamorphosis with example

CO.7. To understand insect culture, Apiculture, Sericulture and Lac culture

PAPER – XIX

EVOLUTION

CO.1. To introduce the organic evolution and their theories

CO.2. Description of origin of life and introduction to chemical evolution

CO.3. To introduce or describe the evidences of organic evolution

CO.4. Darwinism- Introduction about natural selection theory, Artifical and Sexual selection theory

CO.5. Describe elemental forces of evolution on genetics base changes

CO.6. Describe basic pattern of evolution- Sequentional, microevolution, Macroevolution and megaevolution

CO.7. To understand species – speciation and their types of speciation

CO.8. To describe fossils , fossil formation and types of fossils

PAPER – XX

ENTAMOLOGY – II

CO.1. Introduction about pest- Definition, Types of pest

CO.2. Study of major crop pest

CO.3. Study of stored grain pests

CO.4. Knowledge about control measures of insect pest- Chemical, Biological, Integrated pest management

CO.5. To study migration of insect

CO.6. To understand insecticides and plant protection appliances like Hand compression spray, Hand rotating duster, bucket pump

Three Theory Periods per paper per week per semester

Six Practical Periods perweek per batch