## BSc Botany Complementary Course Outcome -Zoology 2019 onwards

Complementary course	Outcome
Animal diversity and Wildlife conservation	Describe the general characters of protists and salient features of phylum Rhizpoda, Ciliophora, Dinoflagellata and Apicomplexa
	Enumerate the salient features and examples of Phylum Porifera, Coelenterata, Platyhelminthes, Aschelminthes, Annelida, Arthropoda, Onychophora, Mollusca and Echinodermata, and the structural organization of Penaeus
	Describe the characteristic features and classification of phylum Chordata with examples and structural organization of Oryctolagus cuniculus
	Explain levels of biodiversity, threats to biodiversity, biodiversity hotspots, importance and strategies for conservation of wildlife and sustainable development
Economic Zoology	Explain parasitism and the major protist, cestode, trematode and nematode parasite of man and major insect vectors of human diseases and their control
	Understand major beneficial and harmful insects, damages caused to host plants and their control measures
	Understand pisciculture, prawn, mussel and pearl culture
Physiology and	Describe the structure of plasma membrane and the

Ethology	various trans-membrane transport mechanisms
	Enumerate the constituents of normal diet and the mechanism of digestion and absorption of carbohydrates, proteins and lipids and the regulation of gastrointestinal function
	Explain the mechanism of transport of respiratory gases, control of respiration, respiratory problems and artificial ventilation
	Explain the structure and working of human heart and mechanism of regulation of heartbeat; constituents of human blood and blood transfusion and cardiovascular problems
	illustrate the structure of human kidney, the mechanism of urine formation, hormonal control of kidney function and kidney disorders; osmoregulation and urea cycle
	Enumerate the structure of myofibrils and myofilaments; muscle contractile and regulatory proteins and mechanism of muscle contraction
	Explain different types of nerve cells and glial cells, maintenance of resting membrane potential, generation and propagation of action potential and synaptic transmission
	Describe innate behavior, learned behavior, patterns of behavior and factors that meet behavior
	Enumerate biological rhythms, communication in animals and social organization in mammals
Genetics and	Describe human karyotype, chromosomal anomalies

Immunology	and polygenic inheritance
	Explain the mechanisms of sex determination
	Enumerate the concept of genes, gene expression, genetic code, transcription and translation
	Illustrate the mechanism of recombinant DNA technology and its practical applications
	Explain the types of cancer, causes of transformation and characteristics of transformed cells
	Identify the cells and organs of immune system, antigens and antibodies
	Enumerate antigen-antibody interaction, generation of B-cell and T-cell response and major immune techni- ues
	Explain primary and secondary immunodeficiency diseases, autoimmune diseases, vaccination and vaccines