

Lesson Plan: Department of Zoology						
Semester	Programme	Course & Name of the paper	Topic	Teacher	No. of Hours	
	HONS.	CC1-1-TH Non-Chordata - I	Unit 1: Basics of Animal Classification	PM	04	
			Unit 2: Protista and Metazoa	PM, DD, SC	15	
			Unit 3: Porifera	PM	06	
			Unit 4: Cnidaria	SS	10	
			Unit 5: Ctenophora	SS	02	
			Unit 6: Platyhelminthes	DD	06	
			Unit 7: Nematoda	SC	07	
		CC-1-1-P Non-Chordates - I	Study of whole mount of Euglena, Amoeba and Paramecium	PM	60 Hrs	
			Identification with reason & Systematic position of Amoeba, Euglena, Entamoeba, Paramecium, Plasmodium, Balantidium, Vorticella (from the prepared slides)	PM, DD		
			Identification with reason & Systematic position of Sycon, Poterion (Neptune's Cup), Obelia, Physalia, Aurelia, Gorgonia, Metridium, Pennatula, Madrepora, Fasciola hepatica, Taenia solium and Ascaris lumbricoides.	SS, DD		
			Staining/mounting of any protozoa/helminth from gut of Periplaneta sp.	DD		
		CC1-2-TH Molecular Biology	Unit 1: Nucleic Acids	SK	03	
			Unit 2: DNA Replication	SK	09	
			Unit 3: Transcription	SK	09	
			Unit 4: Translation	SK	09	
			Unit 5: Post Transcriptional Modifications and Processing of Eukaryotic RNA	SK	08	
			Unit 6: Gene Regulation	SK	07	
			Unit 7: DNA Repair Mechanism	SC	02	
			Unit 8: Molecular Techniques	SC	03	
		CC-1-2-P Molecular Biology	Demonstration of polytene and lampbrush chromosome from photograph	PM	60 Hrs	
			Isolation and quantification of genomic DNA from goat liver.	SK		
			Agarose gel electrophoresis for DNA.	SK		
			Histological staining of DNA and RNA in prepared slides	SK		
		GENERAL	CC1-1-TH Animal Diversity	Unit 1: Kingdom Protista	SS	02
				Unit 2: Phylum Porifera	PM	02
				Unit 3: Phylum Cnidaria	SS	02

			Unit 4: Phylum Platyhelminthes	DD	02
			Unit 5: Phylum Nematelminthes	DD	02
			Unit 6: Phylum Annelida	DD	04
			Unit 7: Phylum Arthropoda	PM	04
			Unit 8: Phylum Mollusca	SS	02
			Unit 9: Phylum Echinodermata	DD	04
			Unit 10: Protochordates	SC	02
			Unit 11: Agnatha	SC	02
			Unit 12: Pisces	SS	04
			Unit 13: Amphibia	SC	04
			Unit 14: Reptiles	PM	04
			Unit 15: Aves	SC	04
			Unit 16: Mammals	SC	04
		CC1-1-P Animal Diversity	Identification with reasons of the following specimens: <i>Amoeba</i> , <i>Euglena</i> , <i>Paramecium</i> , <i>Sycon</i> , <i>Obelia</i> , <i>Aurelia</i> , <i>Metridium</i> , <i>Taenia solium</i> , <i>Ascaris lumbricoides</i> (Male and female), <i>Aphrodite</i> , <i>Nereis</i> , <i>Hirudinaria</i> , <i>Palaemon</i> , <i>Cancer</i> , <i>Limulus</i> , <i>Apis</i> , <i>Chiton</i> , <i>Dentalium</i> , <i>Unio</i> , <i>Sepia</i> , <i>Octopus</i> , <i>Echinus</i> , <i>Cucumaria</i> and <i>Antedon</i> , <i>Balanoglossus</i> , <i>Branchiostoma</i> , <i>Petromyzon</i> , <i>Torpedo</i> , <i>Labeo rohita</i> , <i>Exocoetus</i> , <i>Salamandra</i> , <i>Hyla</i> , <i>Chelone</i> , <i>Hemidactylus</i> , <i>Chamaeleon</i> , <i>Draco</i> , <i>Vipera</i> , <i>Naja</i> , <i>Bat</i> , <i>Funambulus</i>	PM & SC	60 Hrs
			Key for Identification of poisonous and non-poisonous snakes	PM	
			Study of anatomy of digestive system, salivary gland, mouth parts of <i>Periplaneta</i> , Study of reproductive system of female cockroach	PM & SC	
			An "animal album" containing photographs, cut outs, with appropriate write up about the above mentioned taxa. Different taxa/ topics may be given to different sets of students for this purpose	PM & SC	
2	HONS.	CC2-3-TH Non- Chordates - II	Unit 1: Introduction	PM	02
			Unit 2: Annelida	DD	10
			Unit 3: Arthropoda	PM	16
			Unit 4: Onychophora	DD	02
			Unit 5: Mollusca	SS	10
			Unit 6: Echinodermata	DD	08
			Unit 7: Hemichordata	SS	02
		CC-2-3-P Non- Chordates - II	Study of following specimens: a. Annelids - <i>Aphrodite</i> , <i>Nereis</i> , <i>Chaetopterus</i> , Earthworm, <i>Hirudinaria</i>	PM, SS	60

		<p>b. Arthropods - Limulus, Palaemon, Balanus, Eupagurus, Scolopendra, Peripatus, Silkworm – life history stages, Termite – members of a colony and Honey bee – members of the colony</p> <p>c. Molluscs - Dentalium, Patella, Chiton, Pila, Achatina, Pinctada, Sepia, Octopus, Nautilus</p> <p>d. Echinoderms - Asterias, Ophiura, Clypeaster, Echinus, Cucumaria and Antedon</p>		
		Anatomy study: Nervous system, Reproductive system (Male & female), Mouth parts & Salivary apparatus in Periplaneta sp	DD	
	CC2-4-TH Cell Biology	Unit 1: Plasma Membrane	SC	07
		Unit 2: Cytoplasmic Organelles I	SC	05
		Unit 3: Cytoplasmic Organelles II	SK	07
		Unit 4: Cytoskeleton	SK	05
		Unit 5: Nucleus	SK	08
		Unit 6: Cell Cycle	SK	10
		Unit 7: Cell Signalling	DD	08
	CC-2-4-P Cell Biology	Preparation of temporary stained squash of onion/arum root tip to study various stages of mitosis	SK	60 Hrs
		Study of various stages of meiosis from grasshopper testis	SK	
		Preparation of permanent slide to show the presence of Barr body in human female blood cells/cheek cells.	SK	
		Preparation of permanent slide to demonstrate: a. DNA by Feulgen reaction b. Cell viability study by Trypan Blue staining	SK	
GENERAL	CC2-2-TH Comparative Anatomy & Developmental Biology	Unit 1: Integumentary System	SC	04
		Unit 2: Digestive System	SC	04
		Unit 3: Respiratory System	SC	06
		Unit 4: Circulatory System	SC	06
		Unit 5: Urino-genital System	SC	06
		Unit 6: Early Embryonic Development	PM	14
		Unit 7: Late Embryonic Development	PM	10
	CC2-2-P Comparative Anatomy & Developmental Biology	Osteology: Limb bones, girdle and vertebra of Pigeon & Guinea pig, Mammalian skulls: One herbivorous; Guinea pig and one carnivorous; Dog.	PM & SC	60
	Larval stages: Veliger, Nauplius, Trochophore, Mysis.	SC		

			Study of the different types of placenta- histological sections through photomicrographs.	PM	
			Developmental stages of chick embryo: 24 Hrs., 48 Hrs, 72 Hrs., 96 Hrs.	PM	
3	HONS	CC3-5-TH Chordata	Unit 1: Introduction to Chordates	PM	02
			Unit 2: Protochordata	SS	07
			Unit 3: Agnatha	SS	02
			Unit 4: Pisces	SS	07
			Unit 5: Amphibia	PM	07
			Unit 6: Reptilia	PM	08
			Unit 7: Aves	PM	08
			Unit 8: Mammals	SK	09
		CC-3-5-P Chordata	Identification with Reasons a) Protochordata: <i>Balanoglossus</i> , <i>Branchiostoma</i> b) Agnatha: <i>Petromyzon</i> c) Fishes: <i>Scoliodon</i> , <i>Sphyrna</i> , <i>Pristis</i> , <i>Torpedo</i> , <i>Mystus</i> , <i>Heteropneustes</i> , <i>Labeo rohita</i> , <i>Exocoetus</i> , <i>Hippocampus</i> , <i>Anabas</i> , Flat fish d) Amphibia: <i>Necturus</i> , <i>Bufo</i> (<i>Duttaphrynus</i>) <i>melanostictus</i> , <i>Rana</i> (<i>Hoplobatrachus</i>) <i>tigerinus</i> , <i>Hyla</i> , <i>Tylostotriton</i> , Axolotl larva e) Reptilia: <i>Chelone</i> , <i>Trionyx</i> , <i>Hemidactylus</i> , <i>Varanus</i> , <i>Calotes</i> , <i>Chamaeleon</i> , <i>Draco</i> , <i>Vipera</i> , <i>Naja</i> , <i>Hydrophis</i> , f) Mammalia: Bat (Insectivorous and Frugivorous), <i>Funambulus</i> (Indian Palm squirrel)	PM, SS	60 Hrs
			2. Dissection of brain and pituitary – <i>ex situ</i> , digestive and Urino-genital system of <i>Tilapia</i>	SK	
			3. Pecten from Fowl head	PM	
			4. Power point presentation on study of habit, habitat or behaviour of any one animal by student – for internal assessment only	PM, SS, DD, SC, SK	
		CC3-6-TH Animal Physiology	Unit 1: Tissues	PM	04
			Unit 2: Bone and Cartilage	SS	04
			Unit 3: Nervous System	SS	10
			Unit 4: Muscular System	SK	10
			Unit 5: Reproductive System	DD	06
Unit 6: Endocrine System	DD		16		
CC3-6-P Animal Physiology	1. Recording of cardiac and simple muscle twitch with electrical stimulation	SK	60 Hrs		

			2. Preparation of temporary mounts: Squamous epithelium, Striated muscle fibres and nerve cells	SK	
			3. Study of permanent slides of Mammalian Skin, Spinal cord, Pancreas, Testis, Ovary, Adrenal, Lung, pyloric stomach, cardiac stomach, Thyroid, small intestine and large intestine of mammal (white rat)	DD	
			4. Microtomy: Preparation of permanent slide of any five mammalian (Goat/white rat) tissues	DD	
	CC3-7-TH Fundamentals of Biochemistry	Unit 1: Carbohydrates	SC	08	
		Unit 2: Lipids	SC	07	
		Unit 3: Proteins	SC	10	
		Unit 4: Nucleic Acids	SK	10	
		Unit 5: Enzymes	DD	13	
		Unit 6: Oxidative Phosphorylation	SC	02	
	CC-3-7-P Fundamentals of Biochemistry	1. Qualitative tests for carbohydrates, proteins and lipids	SC	60 Hrs	
		2. Qualitative estimation of Urea & Uric acid	SC		
		3. Paper chromatography of amino acids.	SK		
		4. Quantitative estimation of water soluble proteins following Lowry Method	DD		
	SEC(A)-3-2-TH Sericulture	Unit 1: Introduction	SS	06	
		Unit 2: Biology of Silkworm	SC	04	
		Unit 3: Rearing of Silkworm	PM	10	
		Unit 4: Pest and Diseases	DD	07	
		Unit 5: Entrepreneurship in Sericulture	SK	03	
GENERAL	CC3-3-TH Physiology & Biochemistry	Unit 1: Nerve and Muscle	SC	08	
		Unit 2: Digestion	SC	06	
		Unit 3: Respiration	SC	06	
		Unit 4: Cardio-vascular system	SC	06	
		Unit 5: Excretion	SC	06	
		Unit 6: Reproduction and Endocrine Glands	SC	10	
		Unit 7: Carbohydrate Metabolism	SC	02	
		Unit 8: Lipid Metabolism	SC	02	
		Unit 9: Protein Metabolism	SC	04	
		Unit 10: Enzyme	SC	02	
	CC3-3-P Physiology & Biochemistry	1. Study of permanent histological sections of mammalian pituitary, thyroid, pancreas, adrenal gland.	DD	60 Hrs	
		2. Study of permanent histological sections of mammalian duodenum, liver, lung, kidney.	SS		

			3. Qualitative test for carbohydrate samples.	SS	
		SEC-A-3-1-TH Apiculture	Unit 1: Biology of Bees	SC	02
			Unit 2: Rearing of Bees	SS	14
			Unit 3: Diseases and Enemies		06
			Unit 4: Bee Economy	SC	02
			Unit 5: Entrepreneurship in Apiculture	SK	06
4	HONS	CC4-8-TH Comparative Anatomy of Vertebrates	Unit 1: Integumentary System	PM	10
			Unit 2: Digestive System	PM	06
			Unit 3: Respiratory System	SS	06
			Unit 4: Circulatory System	DD	07
			Unit 5: Urinogenital System	DD	05
			Unit 6: Nervous system and sense organs	SS	08
			Unit 7: Skeletal System	PM&SS	08
		CC4-8-P Comparative Anatomy of Vertebrates	1. Study of placoid, cycloid and ctenoid scales through permanent slides/photographs	SC	60 Hrs
			2. Study of disarticulated skeleton of toad, Pigeon, Guineapig (limb bones, vertebrae, limb and girdle)	PM	
			3. Comparative study of heart and brain, with the help of model/picture	SS	
			4. Identification of skulls: Pigeon, one herbivore (Guineapig) and one carnivore (Dog) animal	PM	
		CC4-9-TH Animal Physiology	Unit 1: Physiology of Digestion	SC	10
			Unit 2: Physiology of Respiration	SC	10
			Unit 3: Physiology of Circulation	SC	08
			Unit 4: Physiology of Heart	SC	08
			Unit 5: Thermoregulation and Osmoregulation	PM	06
			Unit 6: Renal Physiology	PM	08
		CC4-9-P Animal Physiology	1. Determination of ABO Blood group	DD	60 Hrs
			2. Estimation of haemoglobin using Sahli's haemoglobin meter	SC	
			3. Identification of blood cells from human blood	PM	
			4. Preparation of haemin crystals and haemochromogen crystals	SK	
			5. Identification of blood cells from cockroach haemolymph		
			6. Demonstration of blood pressure by digital meter	SC	
CC4-10-TH Immunology	Unit 1: Overview of Immune System	DD	03		
	Unit 2: Innate and Adaptive Immunity	DD	09		
	Unit 3: Antigen	DD	06		
	Unit 4: Immunoglobulins	DD	10		
	Unit 5: Major Histocompatibility Complex	DD	06		
	Unit 6: Cytokines	DD	03		

			Unit 7: Complement System	DD	05
			Unit 8: Hypersensitivity	DD	04
			Unit 9: Vaccines	DD	04
		CC4-10-P Immunology	1. Demonstration of lymphoid organs (by picture).	DD	60 Hrs
			2. Histological study of Bursa fabricius, spleen, thymus and lymph nodes through slides/ Photographs	DD	
			3. Demonstration of ELISA	DD	
		SEC(B)-4-1-TH Aquarium Fishery	Unit 1: Introduction to Aquarium Fish Keeping	SS	02
			Unit 2: Biology of Aquarium Fishes	SS	10
			Unit 3: Food and Feeding of Aquarium Fishes	SS	08
			Unit 4: Fish Transportation	SS	05
			Unit 5: Maintenance of Aquarium	SS	05
	GENERAL	CC4-4-TH Genetics & Evolutionary Biology	Unit 1: Mendelian Genetics and Its Extension	SK	10
			Unit 2: Linkage, Crossing Over	SK	08
			Unit 3: Mutation	SK	08
			Unit 4: Sex Determination	SK	08
			Unit 5: Origin of Life	SK	02
			Unit 6: Evolutionary Theories	SK	06
			Unit 7: Process of Evolutionary Changes	SK	04
			Unit 8: Speciation	SK	04
		CC4-4-P Genetics & Evolutionary Biology	1. Verification of Mendelian Ratio using Chi square test.	SK	60 Hrs
			2. Identification of Human Aneuploidy using photograph of karyotype.	SK	
			3. Phylogeny of horse with diagram of limb and skull.	SK	
			4. Study and identification of Darwin Finches from photographs.	SK	
			5. Visit to natural history museum and submission of report.	PM/SS/DD/SC/SK	
5	HONS	CC5-11-TH Ecology	Unit 1: Introduction to Ecology	SS	04
			Unit 2: Population	SS	20
			Unit 3: Community	SS	11
			Unit 4: Ecosystem	SS	08
			Unit 5: Applied Zoology	SS	07
		CC5-11-P Ecology	1. Determination of population density in a natural/hypothetical community by quadrat method and calculation of Shannon-Weiner diversity index for the same community	SS	60 Hrs

			2. Study of an aquatic ecosystem: Phytoplankton and zooplankton, Measurement of area, temperature, salinity, determination of pH, and Dissolved Oxygen content (Winkler's method), Chemical Oxygen Demand and free CO ₂	SS	
			3. Report on a visit to National Park/Biodiversity Park/Wildlife sanctuary/ any place of ecological interest/ ecological uniqueness/ Zoological Garden	PM/SS/DD/SC/SK	
	CC5-12-TH Principles of Genetics	Unit 1: Mendelian Genetics and its Extension		SK	12
		Unit 2: Linkage, Crossing Over and Linkage Mapping		SK	08
		Unit 3: Mutations		SK	12
		Unit 4: Sex Determination		SK	08
		Unit 5: Extra-chromosomal Inheritance		SK	02
		Unit 6: Genetic Fine Structure		SK	02
		Unit 7: Transposable Genetic Elements		SK	06
	CC5-12-P Principles of Genetics	1. Chi-square analyses for genetic ratio test		SK	60 Hrs
		2. Identification of chromosomal aberration in <i>Drosophila</i> and man from photograph		SK	
		3. Pedigree analysis of some inherited traits in animals		SK	
	DSE(A)-5-1-TH Parasitology	Unit 1: Introduction to Parasitology		DD	02
		Unit 2: Parasitic Protists		DD	12
		Unit 3: Parasitic Platyhelminthes		DD	12
		Unit 4: Parasitic Nematodes		DD	12
		Unit 5: Parasitic Arthropods		DD	10
		Unit 6: Parasitic Vertebrates		DD	02
	DSE(A)-5-1-P Parasitology	1. Study of life stages of <i>Giardia intestinalis</i> , <i>Trypanosoma gambiense</i> , <i>Leishmania donovani</i> , <i>Plasmodium vivax</i> , <i>Plasmodium falciparum</i> through permanent slides/micro photographs		DD	60 Hrs
		2. Study of adult and life stages of <i>Schistosoma haematobium</i> , <i>Taenia solium</i> through permanent slides/micro photographs		DD	
		3. Study of adult and life stages of <i>Ancylostoma duodenale</i> through permanent slides/micro photographs.		DD	
		4. Study of monogenea from the gills of fresh/marine fish [Gills can be procured from fish market as by product of the industry]		DD	

			5. Study of nematode/cestode parasites from the intestines of Poultry bird [Intestine can be procured from poultry/market as a by-product] & Goat.	DD		
			6. Submission of a brief report on parasitic vertebrates	DD		
		DSE(B)-5-2-TH Reproductive Biology	Unit 1: Reproductive Endocrinology	PM	10	
			Unit 2: Functional Anatomy of Male Reproduction	PM	14	
			Unit 3: Functional Anatomy of Female Reproduction	PM	18	
			Unit 4: Reproductive Health	PM	08	
		DSE(B)-5-2-P Reproductive Biology	1. Study of animal house: set up and maintenance of animal house, breeding techniques, care of normal and experimental animals (only demonstration through chart).	PM	60 Hrs	
			2. Tissue fixation, embedding in paraffin, microtomy and slide preparation of any endocrine gland.	PM		
			3. H-E staining of histological slides.	PM		
			4. Examination of histological sections from photomicrographs/ permanent slides of rat/human: testis, epididymis and accessory glands of male reproductive systems; ovary, fallopian tube, uterus (Proliferative and secretory stages), cervix and vagina.	PM		
	GENERAL	DSE-A-5-1-TH Applied Zoology	Unit 1: Host & Parasite Relationship	DD	02	
				Unit 2: Epidemiology of Diseases	SK	05
				Unit 3: Parasitic Protozoa	DD	07
				Unit 4: Parasitic Helminthes	SK	08
				Unit 5: Insect of Economic Importance	PM	08
				Unit 6: Insect of Medical Importance	PM	02
				Unit 7: Animal Husbandry	SC	06
				Unit 8: Poultry Farming	SS	06
				Unit 9: Fish Technology	SS	06
			DSE-A-5-1-P Applied Zoology	1. Study of <i>Plasmodium vivax</i> , <i>Entamoeba histolytica</i> , <i>Trypanosoma gambiense</i> , <i>Ancylostoma duodenale</i> and <i>Wuchereria bancrofti</i> and their life stages through permanent slides/ photomicrographs or specimens.	DD, SK	60 Hrs
				2. Study of arthropod vectors associated with human diseases: <i>Pediculus</i> , <i>Culex</i> , <i>Anopheles</i> , <i>Aedes</i>	SK	
				3. Study of insect damage to different plant parts/stored grains through damaged products/photographs.	SK	

			4. Identifying feature and economic importance of <i>Helicoverpa</i> ; <i>Heliothis armigera</i> , <i>Papilio demoleus</i> , <i>Pyrilla perpusilla</i> , <i>Callosobruchus chinensis</i> , <i>Sitophilus oryzae</i> and <i>Tribolium castaneum</i>	SK	
			5. Visit to poultry farm or animal breeding centre. Submission of visit report	SK	
			6. Maintenance of freshwater aquarium (demonstration only)	SK	
6	HONS	CC6-13-TH Developmental Biology	Unit 1: Early Embryonic Development	PM	20
			Unit 2: Late Embryonic Development	PM	10
			Unit 3: Post Embryonic Development	PM	08
			Unit 4: Implications of Developmental Biology	PM	12
		CC-6-13-P Developmental Biology	1. Study of whole mounts of developmental stages of chick embryo through permanent slides: 24, 48, and 96 hours of incubation	PM	60 Hrs
			2. Study of the developmental stages and life cycle of <i>Drosophila</i>	PM	
			3. Study of different sections of placenta (photomicrograph/ slides)	PM	
			4. Identification of Invertebrate larva through slides/ photographs of Phylum Annelida, Arthropoda, Mollusca and Echinodermata	PM	
		CC6-14-TH Evolutionary Biology	Unit 1: Origin of Life	SC	
			Unit 2: Historical Review of Evolutionary Concepts	SC	
			Unit 3: Geological time Scale	SC	
			Unit 4: Natural Selection	SC	
			Unit 5: Species Concept	SC	
			Unit 6: Origin and Evolution of Man	SC	
			Unit 7: Population Genetics	SK	
			Unit 8: Extinction	SC	
			Unit 9: Phylogenetic Tree	SC	
CC-6-14-P Evolutionary Biology	1. Study of fossils from models/ pictures: Dickinsonia, Paradoxides (Trilobita), Asteroceras (Ammonoid), Pentremites (Blastoid Echinoderm), Ichthyosaur, Archaeopteryx, Cynodont.	SC	60 Hrs		
	2. Study of homology and analogy from suitable specimens.	SC			
	3. Phylogenetic trees, Construction & interpretation of Phylogenetic tree using parsimony, Construction of dendrogram following principles of phenetics & cladistics from a data table.	SC			

		DSE(A)-6-2-TH Animal Biotechnology	Unit 1: Introduction	SK	05
			Unit 2: Molecular Techniques in Gene manipulation	SK	23
			Unit 3: Genetically Modified Organisms	SK	12
			Unit 4: Culture Techniques and Application	SK	10
		DSE(A)-6-2-P Animal Biotechnology	1. Genomic DNA isolation from <i>E. coli</i> and Plasmid DNA isolation (pUC 18/19) from <i>E. coli</i>	SK	60 Hrs
			2. To study following techniques through photographs - Southern Blotting, Northern Blotting, Western Blotting, PCR, DNA fingerprinting	SK	
			3. Project report on animal cloning & Application & ethical Issues.	SK	
		DSE(B)-6-1-TH Animal Behaviour	Unit 1: Patterns of Behaviour	DD	10
			Unit 2: Social and Sexual Behaviour	DD	20
			Unit 3: Chronobiology & Biological Rhythm	DD	20
		DSE(B)-6-1-P Animal Behaviour	1. To study nests and nesting habits of the birds and social insects.	DD	60 Hrs
			2. To study the behavioural responses of wood lice to dry and humid conditions (demonstration only).	DD	
	3. To study geotaxis behaviour in earthworm.		DD		
	4. To study the phototaxis behaviour in insect larvae.		DD		
	5. Visit to Forest/ Wildlife Sanctuary/Biodiversity Park/Zoological Park to study behavioural activities of animals and prepare a short report.		DD		
	6. Study of circadian functions in humans (daily eating, sleep and temperature patterns).		DD		
	GENERAL	DSE-B-6-2-TH Ecology & Wildlife Biology	Unit 1: Introduction to Ecology	SS	04
			Unit 2: Population	SS	20
			Unit 3: Community	SS	11
			Unit 4: Ecosystem	SS	10
Unit 5: Wildlife			SS	05	
DSE-B-6-2-P Ecology & Wildlife Biology		1. Identification of flora, mammalian fauna, avian fauna	SS	60 Hrs	
		2. Demonstration of basic equipment needed in wildlife studies use, care and maintenance (Compass, Binoculars, Spotting scope, Range Finders, Global Positioning System, Various types of Cameras and lenses)	SS		

			3. Familiarization and study of animal evidences in the field; Identification of animals through pug marks, hoof marks, scats, pellet groups, nest, antlers, etc.	SS	
			4. Study of an aquatic ecosystem: Phytoplankton and zooplankton, Measurement of area, temperature, salinity, determination of pH, and Dissolved Oxygen content (Winkler's method), Chemical Oxygen Demand and free CO ₂	SS	
		SEC-B-6-4-TH Medical Diagnosis	Unit 1: Diagnostic Methods Used for Analysis of Blood	SK	08
			Unit 2: Diagnostic Methods Used for Urine Analysis	SS	04
			Unit 3: Non-infectious Diseases	DD	06
			Unit 4: Infectious Diseases	SC	03
			Unit 5: Clinical Biochemistry	SS	01
			Unit 6: Clinical Microbiology	SC	01
			Unit 7: Tumours	SK	02
			Unit 8: Visit to Pathological Laboratory and Submission of Project	SC	05

PM – Dr. PATRALEKHA MUKHOPADHAY

SS – Dr. SUCHARITA SAHA

DD – Dr. DEBJANI DAS (GHOSH)

SC – Sm. SUCHONA CHAKRABORTY

SK – Sri SUMALLYA KARMAKAR