

Lesson Plan (2025-26)

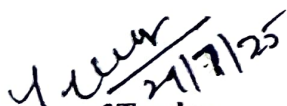
Name of Assistant Professor: Dr. Pooja Jakhar

Class: B.Sc. I (1st Semester) Subject: Zoology (DSC)

Name of paper - Animal diversity-I, C24ZOO101T

Lesson Plan: 14th July to 24th Nov 2025

Weeks	Topic Covered
Week 1(14 th to 19 th July)	Phylum Protozoa: General characters and classification up to class level
Week 2(21 st July to 26 th July)	Type study of Plasmodium
Week 3 (28 th July to 2 nd Aug)	Phylum Porifera: General characters and classification up to class level,
Week 4 (04 Aug to 09 Aug.)	Type study of Sycon.
Week 5 (11 Aug to 16 Aug)	Phylum Coelentrata: General characters and classification up to class level
Week 6 (18 th Aug to 23 rd Aug)	Type Study of Obelia
Week 7(25 th Aug to 30 th Aug)	Phylum Platyhelminthes and Aschelminthes: General characters and classification up to class level
Week 8(1 st Sep to 6 th Sep)	Type study of Liver Fluke (Fasciola hepatica).
Week 9 (8 th Sep – 13 th Sep)	Phylum Annelida: General characters and classification up to class Level, Test
Week 10 (15 th Sep-20 th Sep)	Type study of Earthworm (Pheretima posthuma).
Week 11 (22 nd Sep-27 th Sep)	Phylum Arthropoda: General characters and classification up to class level
Week 12 (29 th Sep-04 th Oct.)	Type study of Cockroach (Periplaneta americana)
Week 13 (6 th Oct. -11 th Oct.)	Phylum Mollusca: General characters and classification up to class level, Test
Week 14 (13 th Oct – 18 th Oct)	Type study of Pila.
Week 15 (27 th Oct – 31 th Oct)	Phylum Echinodermata: General characters and classification up to class level,
Week 16 (3 rd Nov- 8 th Nov)	Phylum Echinodermata: General characters and classification up to class level, Type study of Sea star (Asterias)
Week 17 (10 th Nov- 15 th Nov)	Phylum Hemichordata: General characters of Hemichordates
Week 18 (18 th Nov-22 nd Nov)	Revision


Signature of Teacher


Principal

Lesson Plan (2025-26)

Name of Assistant Professor: Dr. Pooja Jakhar

Class: B.Sc. II (3rd Semester) Subject: Zoology (DSC)

Name of paper: Biomolecules and Mammalian Physiology (C24ZOO301T)

Lesson Plan: 14th July to 24th Nov 2025

Weeks	Topic Covered
Week 1(14 th to 19 th July)	Introduction, classification, structure, function and general properties of proteins
Week 2(21 th July to 26 th July)	Nomenclature, classification and mechanisms of enzyme action; factors affecting enzyme activity, inhibition of enzymes.
Week 3 (28 th July to 2 nd Aug)	Vitamins and Minerals. Transport through bio-membranes (Active and Passive), osmotic pressure, hydrogen ion concentration and buffers.
Week 4 (04 Aug to 09 Aug.)	Introduction, classification, structure, function and general properties of carbohydrates and lipids. Digestion of proteins, carbohydrates, lipids
Week 5 (11 Aug to 16 Aug)	Muscles: ultra-structure of skeletal muscle, neuromuscular junction. Bio- chemical and physical events during muscle contraction, single muscle twitch, tetanus, muscle fatigue, muscle tone
Week 6 (18 th Aug to 23 rd Aug)	Oxygen debt, Cori's cycle, single unit smooth muscles, their physical and functional properties.
Week 7(25 th Aug to 30 th Aug)	Circulation: Origin, conduction and regulation of heart beat; cardiac cycle. Composition and functions of blood & lymph; Mechanism of coagulation of
Week 8(1 st Sep to 6 th Sep)	Respiration: Exchange of respiratory gases, transport of gases, lung air volumes, oxygen dissociation curve of haemoglobin, Bohr's effect, Hamburger's phenomenon (Chloride shift), Myoglobin.
Week 9 (8 th Sep – 13 th Sep)	Excretion: Patterns of excretory products viz. Ammoniotelic, ureotelic uricotelic, ornithine cycle; Urine formation, composition of Urine, counter- current mechanism of urine formation, osmoregulation, micturition, Test
Week 10 (15 th Sep-20 th Sep)	Neural Integration: Nature, origin and propagation of nerve impulse along with medullated & non-medullated nerve fiber,
Week 11 (22 nd Sep-27 th Sep)	Conduction of nerve impulse across synapse, synaptic delay and synaptic Fatigue, Neurotransmitter.
Week 12 (29 th Sep-04 th Oct.)	Functions of different endocrine glands, hormonal disorders. Reproduction: Spermatogenesis, Capacitation of spermatozoa
Week 13 (6 th Oct. -11 th Oct.)	Oogenesis, ovulation, formation of corpus luteum, oestrous-anoestrous cycle, Menstrual cycle in human, Test
Week 14 (13 th Oct – 18 th Oct)	Fertilization, implantation and gestation, parturition.
Week 15 (27 th Oct – 31 th Oct)	Tests and Revision
Week 16 (27 th Oct – 31 th Oct)	Phylum Echinodermata: General characters and classification up to class level, Type study of Sea star (Asterias)
Week 17 (3 rd Nov- 8 th Nov)	Phylum Hemichordata: General characters of Hemichordates
Week 18 (10 th Nov- 15 th Nov)	Revision & Test

Signature of Teacher

Principal

Lesson Plan (2025-26)

Name of Assistant Professor: Dr. Pooja Jakhar

Class: B.Com. II (3rd Semester) Subject: Zoology (MDC)

Name of paper: Basics of Zoology III (C2MDC329T)

Lesson Plan: 14th July to 24th Nov 2025

Weeks	Topic Covered
Week 1(14 th to 19 th July)	Humans Skeleton and bones
Week 2(21 th July to 26 th July)	Humans Skeleton and bones
Week 3 (28 th July to 2 nd Aug)	Joints, cartilage and ligaments
Week 4 (04 Aug to 09 Aug.)	Interaction between skeletal muscles and nerves.
Week 5 (11 Aug to 16 Aug)	ABO and RH system in humans
Week 6 (18 th Aug to 23 rd Aug)	Methods of determination, importance and dangers of blood transfusion
Week 7(25 th Aug to 30 th Aug)	Human cell and chromosomes
Week 8(1 st Sep to 6 th Sep)	Cell as unit of life, morphology and functional elements of human chromosome
Week 9 (8 th Sep – 13 th Sep)	Sex Determination: Definition, different types and scope, Test
Week 10 (15 th Sep-20 th Sep)	Respiration in humans: Anatomy and physiology of respiration,
Week 11 (22 nd Sep-27 th Sep)	Factors affecting change of gases and diffusing capacity. Introduction to Dental Formula, types and development of tooth
Week 12 (29 th Sep-04 th Oct.)	Concept of evolution, theory of Darwinism
Week 13 (6 th Oct. -11 th Oct.)	Neo-Darwinism, Genetic drift,
Week 14 (13 th Oct – 18 th Oct)	Hardy Weinberg Law Human Evolution: Origin and evolution
Week 15 (27 th Oct – 31 th Oct)	Adaptive evolution.
Week 16 (27 th Oct – 31 th Oct)	Revision & Test
Week 17 (3 rd Nov- 8 th Nov)	Revision & Test
Week 18 (10 th Nov- 15 th Nov)	Revision & Test

Signature of Teacher

Principal

Lesson Plan (2025-26)

Name of Assistant Professor: Dr. Pooja Jakhar

Class: B.Sc. III (5th Semester) Subject: Zoology

Name of paper: ZOO 501 L. Applied Zoology I & ZOO 502 L. Applied Zoology II

Lesson Plan: 14th July to 24th Nov 2025

Weeks	Topic Covered
Week 1(14 th to 19 th July)	Host, Definitive host, Intermediate host, Parasitism, Symbiosis, Commensalism, Reservoir
Week 2(21 th July to 26 th July)	Zoonosis Transmission, Prevention and control of diseases: Tuberculosis, typhoid
Week 3 (28 th July to 2 nd Aug)	Biology, Control and damage caused by <i>Pyrilla perpusilla</i> and <i>Papilio demoleus</i>
Week 4 (04 Aug to 09 Aug.)	Biology, Control and damage caused by <i>Callosobruchus chinensis</i> and <i>Tribolium castaneum</i> , Principles of poultry breeding
Week 5 (11 Aug to 16 Aug)	Management of breeding stock and broilers, Processing and preservation of eggs, Genetic improvements in aquaculture industry
Week 6 (18 th Aug to 23 rd Aug)	Brief account of <i>Rickettsia prowazekii</i> , <i>Borrelia recurrentis</i> and <i>Treponema pallidum</i> , Life history and pathogenicity of <i>Plasmodium vivax</i>
Week 7(25 th Aug to 30 th Aug)	Life history and pathogenicity <i>Trypanosoma gambiense</i> , Life history and pathogenicity of <i>Ancylostoma duodenale</i> and <i>Wuchereria bancrofti</i> , Assignment -1, Test-1
Week 8(1 st Sep to 6 th Sep)	Medical importance and control of <i>Pediculus humanus corporis</i> , Medical importance and control of <i>Anopheles</i> , <i>Culex</i>
Week 9 (8 th Sep – 13 th Sep)	Medical importance and control of <i>Aedes</i> , <i>Xenopsylla cheopis</i> , Preservation and artificial insemination in cattle
Week 10 (15 th Sep-20 th Sep)	Induction of early puberty and synchronization of estrus in cattle, Preservation and artificial insemination in cattle
Week 11 (22 nd Sep-27 th Sep)	Induction of early puberty and synchronization of estrus in cattle Assignment -2, Test-2
Week 12 (29 th Sep-04 th Oct.)	Induced breeding and transportation of fish seed
Week 13 (6 th Oct. -11 th Oct.)	Life history and pathogenicity of <i>Entamoeba histolytica</i> , Biology, Control and damage caused by <i>Sitophilus oryzae</i>
Week 14 (13 th Oct – 18 th Oct)	Biology, Control and damage caused by <i>Helicoverpa armigera</i>
Week 15 (27 th Oct – 31 th Oct)	Revision & Test
Week 16 (27 th Oct – 31 th Oct)	Revision & Test
Week 17 (3 rd Nov- 8 th Nov)	Revision & Test
Week 18 (10 th Nov- 15 th Nov)	Revision & Test

Signature of Teacher

Principal