

Lesson Plan

Name of the Assistant/ Associate Professor: Sunil Kumar Sem. Ist

Class and Section: B.Sc. Ist year

Subject: Zoology (P.II: Cell Biology)

Month	Topics
21 st July 2023 to 31 st July 2023	Ultrastructure of different cell organelles of Animal cell. Plasma Membrane: fluid mosaic model, various mode of transport across the membrane Active and passive transport; Endocytosis and Exocytosis
1 st August 2023 to 31 st August 2023	Endoplasmic Reticulum: type and Role of ER in protein Synthesis; Golgi Body: structure and Role of Golgi Complex in Animal cell Ribosomes: type, biogenesis and Role in protein Synthesis, Lysosomes: structure, Enzyme and their role; Polymorphism.
1 st September 2023 to 30 th Sept. 2023	Mitochondria: Mitochondrial DNA; Semi autonomous Body; Biogenesis; Mitochondrial enzyme; Cytoskeleton: microtubule; microfilament Centriole; Cilia and Flagella. Unit test.
1 st October 2023 to 31 st Oct. 2023	Ultrastructure and function of nucleus: Nuclear Membrane, nuclear lamina, nucleolus; nucleosome Concept. Structure of chromosome Euchromatin and Heterochromatin; Lampbrush Chromosome and Polytene Chromosome. Unit test
1 st Nov. 2023 to 24 th Nov. 2023	Mitosis and Meiosis. Brief account of Causes of Cancer. An elementary idea of Cellular Basis of Immunity

Teacher's Signature

Lesson Plan

Name of the Assistant/ Associate Professor: Sunil Kumar Sem. IIIrd

Class and Section: B.Sc. IInd year Subject: Zoology

Month	Topics
21 st July 2023 to 31 st July 2023	<u>Principle of classification</u> : origin and evolutionary tree Tree; Role of amnion in Evolution; Silent feature of Chordate and Economic importance.
1 st August 2023 to 31 st August 2023	<u>General character and classification of</u> phyla upto order with example <u>Protochordata</u> : systematic position; Ecology morphology and Affinities <u>Urochordata</u> : Herdmania-type study. <u>Cephalochordata</u> : Amphioxus - type study.
1 st September 2023 to 30 th Sept. 2023	<u>Cyclostomes</u> : Classification and Ecological Importance; type study of Petromyzon <u>Pisces</u> : scales & fins, Parental Care in fish; fish migration; type study of Labes Unit test
1 st October 2023 to 31 st Oct. 2023	<u>Introduction, Classification, Structure, function</u> and general properties of Carbohydrates and Lipids. <u>Protein</u> : Structure, function and General Property <u>Mechanism of Enzyme Action</u> ; Transport through Biomembrane Unit test
1 st Nov. 2023 to 24 th Nov. 2023	<u>Nutrition</u> : Nutritional Component; Absorption and assimilation; Control of Enzyme secretion <u>Muscle</u> : type of muscle; ultrastructure <u>Bones</u> : Structure and type, Classification, bone growth and Resorption; Bone disorders.

Sunil Kumar
Teacher's Signature