

Government PG College, Ambala Cantt.

Subject: Zoology Name of Teacher : Dr. Tarsem Kumar

Lesson Plan Session 2022-23 Semester: 1st Class: B.Sc. Medical

Month	Details
September 2022	1. Ultrastructure of different cell organelles of animal cell. 2. Plasma Membrane: Fluid mosaic model, various modes of transport across the membrane, mechanism of active and passive transport, endocytosis and exocytosis.
October 2022	3. Endoplasmic reticulum (ER) : types, role of ER in protein synthesis and transportation in animal cell. 4. Golgi complex: Structure, Associated enzymes and role of golgi-complex in animal cell. 5. Ribosomes: Types, biogenesis and role in protein synthesis.
November 2022	6. Lysosomes: Structure, enzyme and their role; polymorphism 7. Mitochondria: Mitochondrial DNA; as semiautonomous body, biogenesis, mitochondrial enzymes (only names), role of mitochondria.
December 2022	8. Cytoskeleton: Microtubules, microfilaments, centriole and basal body. 9. Cilia and Flagella
	Class test , Semester end Examinations



Government PG College, Ambala Cantt.

Subject: Zoology Name of Teacher : Dr. Tarsem Kumar

Lesson Plan Session 2022-23 Class: B.Sc. 3rd sem.

Month	Details
September 2022	1. Chordates : Origin and Evolutionary tree. 2. Protochordates : Systematic position, distribution, ecology, morphology and affinities Urochordata <i>Herdmania</i> - type study
October 2022	Cephalochordata, <i>Amphioxus</i> – type study Cyclostomes : Type study of <i>Petromyzon</i> . 4. Pisces : Scales & Fins, Parental care in fishes, fish migration.
November 2022	Nutrition : Nutritional components; Carbohydrates, fats, lipids, Vitamins and Minerals.
December 2022	Types of nutrition & feeding, Digestion of dietary constituents, viz. lipids, proteins, carbohydrates & nucleic acids; symbiotic digestion. Absorption of nutrients & assimilation; control of enzyme secretion



Government PG College, Ambala Cantt.

Subject: Zoology Name of Teacher : Dr. Tarsem Kumar

Lesson Plan Session 2022-23 Class: B.Sc. 5th sem.

Month	Details
September 2022	<p>1. Basic concepts of ecology: Definition, signification. Concepts of habitat and ecological niche.</p> <p>2. Factors affecting environment: Abiotic factors (light-intensity, quality and duration), temperature, humidity, topography; edaphic factors; Biotic factors.</p>
October 2022	<p>3. Introduction to major ecosystem of the world.</p> <p>4. Ecosystem: Concept, components, properties and functions; Ecological energetics and energy flow-food chain, food web, trophic structure; ecological pyramids concept of productivity.</p>
November 2022	<p>5. Biogeochemical cycles: Concept, reservoir pool, gaseous cycles and sedimentary cycles.</p> <p>Class Test</p>
December 2022	<p>Concept of biodiversity and conservation of natural resources.</p> <p>8. Migration in fishes and birds</p>

