

Government College, Chhachhrauli

Summary of Lesson Plan

Name of Teacher: Sujata Rani

Academic Session : 2023-24

Class: B.Sc. I

Semester : 1st

Subject : Diversity of Non-Chordates

Unit	Topic/Chapters to be covered	Duration	Assignment and Tests
1	Introduction to invertebrates, Phylum Protozoa: General characters and classification up to class level, Type study of Plasmodium, Phylum Porifera: General characters and classification up to class level	01 Aug to 15 Aug	
1	Type study of Sycon, Phylum – Coelentrata: General characters and classification up to class level	16 Aug to 31 Aug	
2	Type Study of Obelia, Phylum – Platyhelminthes and Aschelminthes: General characters and classification up to class level	01 Sep to 15 Sep	Assignment-1
2	Type study of Liver Fluke, Fasciola hepatica, Phylum – Annelida: General characters and classification up to class level, Phylum – Arthropoda: General characters and classification up to class level	16 Sep to 30 Sep	Test-1
3	Type study of Earthworm, Pheretima posthuma (Habitat, habits, metamerism, digestive System, circulatory system, nervous system, reproductive system) Type study of Cockroach, Periplaneta americana (Habitat, habits, external morphology, digestive system, respiratory system, excretory system, reproductive system) Seminars in the form of PPT on assigned topics	01 Oct to 15 Oct	Test- 2

3	<p>Phylum - Mollusca: General characters and classification up to class level</p> <p>Phylum – Echinodermata: General characters and classification up to class level,</p> <p>Phylum Hemichordata: General characters of Hemichordates with examples</p> <p>Type study of Pila</p> <p>Seminars in the form of PPT on assigned topics</p>	16 Oct to 31 Oct	Assignment-2
4	<p>Type study of Asterias (Sea Star) (Habitat, habits, external morphology, water vascular system, Circulatory</p>	01 Nov to 15 Nov	
4	<p>Discussion of previous year papers</p> <p>Revision, Discussion of important questions</p>	16 Nov to 24 Nov	

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Name of Teacher: Sujata Rani

Academic Session : 2023-24

Class: B.Sc. II Semester : 3rd Subject : Paper I: Life and diversity of chordates-1 & Paper II: Mammalian physiology-I

Unit	Topic/Chapters to be covered	Duration	Assignment and Tests
1	Introduction to Chordates, protochordates and their features, Classification of chordates, Chordates: Origin and Evolutionary tree, Urochordata: Classification up to orders and affinities, Type Study:Urochordata Herdmania, Cephalochordata: Characters,Classification upto orders and affinities	01 Aug to 15 Aug	
1	Type Study: Cephalochordate Amphioxus, Cyclostomata: Classification upto orders and affinities Chondrichthyes: Characters,Classification upto orders and affinities, Osteichthyes: Characters,Classification upto orders and affinities	16 Aug to 31 Aug	
2	Bones: Structure and types, classification, bone growth and resorption, effect of ageing on Skeletal system and bone disorders, Nomenclature, Classification and mechanisms of enzyme action, Transport through bio membranes (Active and Passive), buffers	01 Sep to 15 Sep	Assignment-1
2	Introduction of amino acids , structure , peptide bond Classification, Structural levels of proteins,Functions of proteins Carbohydrates: Introduction, General properties Classification & Structure of Carbohydrates: Mono and disaccharides Polysaccharides: Structure and functions Lipids: Introduction, Fatty acids, classification, Structures	16 Sep to 30 Sep	Test-1
3	Nutrition: Nutritional components; Carbohydrates, fats, lipids,Vitamins and Minerals, Digestion of lipids, proteins, carbohydrates & nucleic acids; symbiotic digestion, Absorption of nutrients & assimilation; control of enzyme secretion, Cyclostomes: Type study of Petromyzon	01 Oct to 15 Oct	Test- 2

3	Nutrition: Nutritional components; Carbohydrates, fats, lipids, Vitamins and Minerals, Digestion of lipids, proteins, carbohydrates & nucleic acids; symbiotic digestion, Absorption of nutrients & assimilation; control of enzyme secretion, Cyclostomes: Type study of Petromyzon	16 Oct to 31 Oct	Assignment-2
4	Fish migration, Types study of Labeo	01 Nov to 15 Nov	
4	Discussion of previous year papers Revision, Discussion of important questions	16 Nov to 24 Nov	

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Summary of Lesson Plan

Name of Teacher: Sujata Rani

Academic Session : 2023-24

Class: B.Sc. III Semester : 5th Subject : Paper I: Environmental Biology & Paper II: Evolution and Developmental Biology

Unit	Topic/Chapters to be covered	Duration	Assignment and Tests
1	Historical perspectives, aims and scope of developmental biology. Generalized structure of mammalian ovum & sperm, spermatogenesis and Oogenesis, Fertilization, Parthenogenesis, Different types of eggs and patterns of cleavage	01 Aug to 15 Aug	
1	Blastulation, Gastrulation movements, Embryonic development of Frog, Embryonic development of Chick	16 Aug to 31 Aug	
2	Origin of life: Theories, experimental evidences, Phylogeny of horse, Evolution of man	01 Sep to 15 Sep	Assignment-1
2	Evidences of organic evolution: Morphological, Anatomical, Biochemical, Palaeontological, Biogeographical, Theories of organic evolution, Concept of micro, macro-and megafauna, Introduction to ecology and basic concepts, Ecological hierarchy- definitions, basic concepts Concepts of habitat and Niche Introduction to major ecosystems of the world Ecosystem: Concept, components, properties and functions; Ecological energetics and energy flow-food web, trophic structure; ecological pyramids concept of productivity.	16 Sep to 30 Sep	Test-1
3	Concept of species, Elementary knowledge of primary organizers, Elementary knowledge of extra embryonic membranes, Concepts of competence, determination and differentiation, Concept of regeneration, Biogeochemical cycles: Concept, reservoir pool, gaseous cycles and sedimentary cycle, Seminars/ PPT presentation on Designated Assignments	01 Oct to 15 Oct	Test- 2

3	Population: Growth and regulation, Concept of biodiversity (Levels, gradients, community biodiversity, Uses of biodiversity, Threats to biodiversity, IUCN red list, Conservation of biodiversity: Ex-situ & In-situ methods) and conservation of natural resources, Migration in fishes and birds Seminars/ PPT presentation on Designated Assignments	16 Oct to 31 Oct	Assignment-2
4	Population interactions: Competition, predation, parasitism, commensalisms and mutualism, Environmental Pollution: Air, water, soil and management strategies, Factors affecting environment: Abiotic factors (light-intensity, quality and duration), temperature, humidity, topography; edaphic factors; Biotic factors.	01 Nov to 15 Nov	
4	Discussion of previous year papers, Revision, Discussion of important questions	16 Nov to 24 Nov	

Note:-

The teaching of topics to the students on the dates/days mentioned in the above lesson plan may not be exactly followed and may have little variations/fluctuations because of some unforeseen circumstances. For example: various Functions/Activities organized by the College (*Musical Meet, Blood Donation, Important Days Celebrations, Co-Curricular/Extra-curricular Activities etc.*), Response of Students in the Class, Request of Students for Repetition of some specific Topics, Unpredicted Leaves, Restricted Holidays etc.

Students can ask any query on my E-Mail ID also

> E-Mail: ssujatasharma@gmail.com