

K.T.S.P. Mandal's
Hutatma Rajguru Mahavidyalaya, Rajgurunagar
Department of Zoology.
Syllabus completion Report (A.Y.2022 - 2023)

F. Y. B. Sc. Zoology
Course Title: Animal Diversity -I
Course Code: ZO - 111

Sr.No	Month	Topics	Teacher
1	Sept & Oct	Principles of Classification: Taxonomy & Systematics 1.1 Taxonomy: Basic terminology and Introduction •Alpha, Beta and Gamma levels of taxonomy, Micro-taxonomy •Macro taxonomy: Phenetics (numerical taxonomy, Cladistics (Phylogenetic systematics), Evolutionary taxonomy (evolutionary systematics) •Classical taxonomy and experimental or neo taxonomy (biochemical taxonomy and Cytotaxonomy) •Significance of Taxonomy 1.2 Systematics: definition introduction 1.3 Linnaean system of classification (Six level classification: Phylum, class, order, family, genus, species) 1.4 Concept of Species: Biological & Evolutionary 1.5 Introduction to Binomial Nomenclature. 1.6 Introduction to Five kingdom system	DNB
2	Oct	General Features of kingdom Animalia: 2.1 General characters of Kingdom Animalia, Grades of organization 2.2 Symmetry.	DNB
3	Nov	Kingdom Protista (Phylum: Protozoa) 3.1 Introduction to Phylum Protozoa 3.2 Salient features of Phylum Protozoa 3.3 Classification of Phylum Protozoa up to classes with two examples of each class (names only). Class Rhizopoda (e.g :Entamoebahistoltytica, Arcella), Class Mastigophora (e.g: Euglena viridis, Trypanosomagambiense), Class Ciliata (e.gParamoeciumcaudatum, Opalinaranarum), Class Sporozoa (e.gPlasmodium vivax, Toxoplasomagondii) 3.4 Locomotion in Protozoa: Amoeboid, Ciliary and Flagellar with suitable examples 3.5 Type Study: Paramecium caudatum: Classification, Habit and Habitat, External morphology, Feeding and digestion, Excretion, Reproduction (binary fission and Conjugation) 3.6. Economic importance of Protozoa (three harmful and one useful protozoan) 3.6.1-Harmful Protozoa: Plasmodium vivax (malaria parasite), Entamoeba histolytica (Amoebic dysentery), Trypanoso magambiense (Gambian sleeping sickness). 3.6.2- Useful Protozoa: Trichonympha	DNB
4	Dec	Origin of Metazoa : 4.1 Introduction Origin and importance of Metazoa	DNB

5	Dec	Phylum : Porifera 5.1. Introduction to Phylum Porifera 5.2 Classification of Phylum Porifera up to classes with two examples of each class (names only, no description of specimens). Class Calcarea (e.g.: Leucosolenia, Sycon (Scypha) Class Hexactinellida (e.g: Euplectella (venus flower basket), Hyalonema (glass sponge)) Class Demospongiae (e.g: Chalina (Mermaid's gloves, Spongilla (fresh water sponge)) 5.3 Canal system in sponges: Ascon, Leucon and Rhagon type. 5.4 Skeleton in sponges: Spicules, its types: Microscleres & Megascleres, Monoaxon – monactinal, diactinal, Amphidiscs, Triaxon, Polyaxon, Spongin fibres. 5.5 Regeneration in sponges. 5.6 Economic importance of Phylum Porifera.	DNB
6	Jan	Phylum: Cnidaria 6.1 Introduction to Phylum Cnidaria 6.2 Salient features of Phylum Cnidaria 6.3 Classification of Phylum Cnidaria up to class level with given examples each class (names of examples only) Class Hydrozoa e.g.: Hydra, Physalia (Portuguese man of war) Class Scyphozoeae.g: Aurelia (Jelly fish), Leucernaria (trumpet shaped Jellyfish) Class Anthozoa: e.g; Metridium (Common sea anemone) 6.4 Polymorphism in Hydrozoa: Polyps & Medusa (polyp types: gastrozooids, dactylozooids, gonozooids) and functions 6.5 Economic importance of Cnidarians with reference to Corals and Coral reefs.	DNB
7	Feb	Phylum : Platyhelminthes 7.1 Introduction to Phylum Platyhelminthes 7.2 Salient features of Phylum Platyhelminthes 7.3 Classification of Phylum Platyhelminthes up to classes with two examples each class (names of examples only). Class: Turbellaria (e.g: Dugesia, Bipallium) Class: Trematoda (e.g: Fasciola hepatica, schistosoma haematobium) Class Cestoda: (Taeniasolium (pork tape worm), Echinococcus granulosus (dog tapeworm) 7.4 Parasitic adaptations in Platyhelminthes: structural and physiological. 7.5 Economic importance of Platyhelminthes	DNB

As per above mention theory syllabus of Semester I completed successfully.


 Prof. D. N. Birkhade