

**SUBJECT-ZOOLOGY**  
**MDC 1: ANIMAL DIVERSITY**

**Course Objectives:**

**Theory:**

1. To form a general understanding of the diversity of the Animal Kingdom through the study of general characters of each Phylum/Class.
2. To form an understanding of the body plan, structural adaptations, life history, physiological processes, behaviour and evolutionary relationships in different animals through the study of special topics included in each Phylum/Class.

## MDC 1: ANIMAL DIVERSITY

DIFFICULTY LEVEL: 100

MODE OF INSTRUCTION: Lecture & Tutorial

### THEORY (CREDITS 3)

#### Group A: Non-Chordates

**Unit 1. Protista** 4

General characters of Protozoa; Life cycle of *Plasmodium vivax*.

**Unit 2. Porifera** 3

General characters of Porifera; Canal System in Sycon.

**Unit 3. Cnidaria** 3

General characters of Cnidaria; Polymorphism in Hydrozoa.

**Unit 4. Platyhelminthes** 3

General characters of Platyhelminthes; Life cycle of *Taenia solium*.

**Unit 5. Nematoda** 3

General characters of Nematoda; Parasitic adaptations.

**Unit 6. Annelida** 3

General characters of Annelida; Metamerism in Annelida.

**Unit 7. Arthropoda** 4

General characters of Arthropoda; Social life in insects.

**Unit 8. Mollusca** 3

General characters of Mollusca; Respiration in *Pila globosa*.

**Unit 9. Echinodermata** 3

General characters of Echinodermata, Water Vascular system in star fish.

#### Group B: Chordates:

**Unit 1. Protochordata** 2

Salient features of Protochordata with examples.

**Unit 2. Agnatha**

General features of Agnatha with examples.

**Unit 3. Pisces** 4

General characters of Pisces, Migration in fishes.

**Unit 4. Amphibia** 4

General characters of Amphibia; Parental care in Amphibia.

<b>Unit 5. Reptilia</b>	<b>5</b>
General characters of Reptilia; Dos and don'ts after snake bite.	
<b>Unit 6. Aves:</b>	<b>5</b>
General characters of Aves; Flight adaptations in birds.	
<b>Unit 7. Mammalia</b>	<b>6</b>
General characters of Mammalia; Dentition in mammals.	

### **SUGGESTED BOOKS**

- Barnes, R.D. (1992). Invertebrate Zoology. Saunders College Pub. USA.
- Ruppert, Fox and Barnes (2006) Invertebrate Zoology. A functional Evolutionary Approach 7th Edition, Thomson Books/Cole
- Campbell & Reece (2005). Biology, Pearson Education, (Singapore) Pvt. Ltd.
- Kardong, K. V. (2002). Vertebrates Comparative Anatomy. Function and Evolution. Tata McGraw Hill Publishing Company. New Delhi.
- Raven, P. H. and Johnson, G. B. (2004). Biology, 6th edition, Tata McGraw Hill Publications. New Delhi.