

1ST SEMESTER SYLLABUS (REGULAR)

SEM-I						
Paper Code	Course	Credit	Credit Distribution (L+T+P)	End Sem Marks	Internal Marks	Total Marks
ZOO-101R	DSC-1A: Animal Diversity	6	4+0+2	60(Theo)+20(Pract)	20	100
Paper-102R	DSC-2A	6	4+0+2	60(Theo)+20(Pract)	20	100
Paper-103R	DSC-3A	6	4+0+2	60(Theo)+20(Pract)	20	100
COMM-104HR	AEC: AECC-1: English/Hind/MIL (Communication)	2	2+0+0	50	-	50
Total		20	20	290	60	350

DSC-1A: ANIMAL DIVERSITY

THEORY

(CREDITS 4)

Unit 1: Kingdom Protista	4 Lectures
General characters and classification up to classes; Locomotory Organelles and locomotion in Protozoa	
Unit 2: Phylum Porifera	3
General characters and classification up to classes; Canal System in <i>Sycon</i>	
Unit 3: Phylum Cnidaria	3
General characters and classification up to classes; Polymorphism in Hydrozoa	
Unit 4: Phylum Platyhelminthes	3
General characters and classification up to classes; Life history of <i>Taenia solium</i>	
Unit 5: Phylum Nematelminthes	5
General characters and classification up to classes; Life history of <i>Ascaris lumbricoides</i>	
Unit 6: Phylum Annelida	3
General characters and classification up to classes; Metamerism in Annelida	
Unit 7: Phylum Arthropoda	5
General characters and classification up to classes; Metamorphosis in Insects	
Unit 8: Phylum Mollusca	4
General characters and classification up to classes	
Unit 9: Phylum Echinodermata	4
General characters and classification up to classes; Water-vascular system in Asteroidea	
Unit 10: Protochordates	2

General features of Protochordata	
Unit 11: Agnatha	2
General features of Agnatha and classification of cyclostomes up to classes	
Unit 12: Pisces	4
General features and Classification up to orders	
Unit 13: Amphibia	4
General features and Classification up to orders	
Unit 14: Reptiles	4
General features and Classification up to orders; Poisonous and non-poisonous snakes	
Unit 15: Aves	5
General features and Classification up to orders	
Unit 17: Mammals	5
Classification up to orders	
Note: Classification of Unit 1-9 to be followed from "Barnes, R.D. (1982). <i>Invertebrate Zoology</i> , V Edition"	

PRACTICAL

(CREDITS 2)

1. Study of the following specimens:
2. *Amoeba*, *Paramecium*, *Sycon*, and *Obelia*, *Tubipora*, *Metridium*, *Taenia solium*, Male and female *Ascaris lumbricoides*, *Pheretima*, *Hirudinaria*, *Cancer*, *Limulus*, *Julus*, *Periplaneta*, *Apis*, *Dentalium*, *Pila*, *Loligo*, *Octopus*, *Echinus*, *Cucumaria* and *Balanoglossus*, *Herdmania*, *Petromyzon*, *Torpedo*, *Labeo*, *Ichthyophis*/ *Salamandra*, *Bufo*, *Chelone*, *Hemidactylus*, *Vipera*, *Naja*, Any three common birds from different orders Bat, *Funambulus*
Study of the following permanent slides:
3. Study of life history stages of *Taenia*, T.S. of Male and female *Ascaris*

An "animal album" containing photographs, cut outs, with appropriate write up about the above-mentioned taxa. Different taxa/ topics may be given to different sets of students for this purpose.

SUGGESTED READINGS

- Ruppert and Barnes, R.D. (2006). *Invertebrate Zoology*, VIII Edition. Holt Saunders International Edition.
- Barnes, R.S.K., Calow, P., Olive, P.J.W., Golding, D.W. and Spicer, J.I. (2002). *The Invertebrates: A New Synthesis*, III Edition, Blackwell Science
- Young, J. Z. (2004). *The Life of Vertebrates*. III Edition. Oxford university press.
- Pough H. *Vertebrate life*, VIII Edition, Pearson International.
- Hall B.K. and Hallgrimsson B. (2008). *Strickberger's Evolution*. IV Edition. Jones and Bartlett Publishers Inc.