

Course Code	Course Title	C	H	I	E	T
17U2ZMC2	LIFE AND DIVERSITY OF VERTEBRATES	5	5	25	75	100

### Unit – 1 Prochordata & Agnatha

15 Hrs

General characters and classification of Prochordates up to classes with examples - Geological time scale-General characters of Urochordates – Ascidian: feeding mechanism, Ascidian tadpole larva and retrogressive metamorphosis in Ascidia – Salient features of Amphioxus – Affinities of Amphioxus - General characters of Agnatha - Migration of Petromyzon.

### Unit – 2 Pisces

15 Hrs

General characters and outline classification of fishes – Shark: Circulatory system and reproductive system – Accessory respiratory organs – Parental care in fishes – Migration of fishes – Evolutionary significance of Dipnoi.

### Unit – 3 Amphibia & Reptilia

15 Hrs

General characters and outline classification of Amphibians - Frog: Respiratory system- Parental care in amphibians-Metamorphosis in amphibians-Neoteny in amphibians.

General characters and classification of Reptiles in brief - Calotes: Digestive system - Poisonous snakes: Types of venom, biting mechanism and venomous snakes of south India-Identification of poisonous and non poisonous snakes.

### Unit – 4 Aves

15 Hrs

General characters and outline classification of Aves - Pigeon: Digestive system and reproductive system – Bird migration – Flight adaptation in birds – Flightless birds – Evolutionary significance of Archaeopteryx.

### Unit 5 Mammalia

15 Hrs

General characters and outline classification of Mammalia – Characters and examples of Prototheria, Metatheria and Eutheria – Rabbit: Digestive system and Sense organs – Adaptation in aquatic mammals.

### TEXT BOOK

1. Thangamani, A., S. Prasanakumar, L.M. Narayanan and N. Arumugam. 2005. A text book of Chordates. Saras publication, Nagercoil.

### REFERENCE BOOKS

1. Kardong, K.V. (2005) Vertebrates Comparative Anatomy, Function and evolution. IV Edition. McGrawHill Higher Education.

2. Kent, G.C. and Carr R.K. (2000). Comparative Anatomy of the Vertebrates. IX Edition. The McGraw-Hill Companies.
3. Young, J.Z. (2004). The life of vertebrates. III Edition. Oxford university press.
4. Hall B.K. and Hallgrimsson B. (2008). Strickberger's Evolution. IV Edition. Jones and Bartlett Publishers, Inc.
5. A Text Book of Zoology, Vertebrates, Vol-II, Jeffery Parker and W.A. Haswel, Edited by Marshall and Williams, CBS Publication, New Dehli.
6. Chordate Zoology, 1982, P.S Dhami and J.K.Dhami, R.Chand and Co., New Dehli.
7. A Text Book of Zoology, 1984, R.D. Vidyarthi, R. Chand and Co., Dehli. 4. Modern Text Book of Zoology, Vertibrates. R. L. Kotpal, 3rd edn. Rastogi Publications, Meerut.