

**SRI VENKATESWARA UNIVERSITY: : TIRUPATHI**  
**W.E.F. 2016-17**  
**ZOOLOGY SYLLABUS FOR II SEMESTER**  
**ZOOLOGY –PAPER-II (THEORY)**  
**ANIMAL DIVERSITY –CHORDATES**

PERIODS- 60

MAX. MARKS -100

**UNIT-1 (PROTOCHORDATA)**

- 1.1. Origin of Chordata.
- 1.2. Chordata: Distinctive Features & Classification of up to class level.
- 1.3. Protochordata : Sailer Features
- 1.4. Herdmania; Structure, Life History & Retrogressive Metamorphosis.

**UNIT-2: CYCLOSTOMATA & FISHES**

- 2.1. Cyclostomata: General characters & Difference between Petromyzon and Myxine
- 2.2. Fishes: General Characters & Classification up to sub-class level with examples
- 2.3. Migration of Fishes
- 2.4. Types of Scales in Fishes

**UNIT-3: AMPHIBIA & REPTILIA**

- 3.1 Amphibia: General characters & Classification up to the level of order with examples
- 3.2. Type Study: *Rana hexadactyla*: External Features, Skeleton System (Skull, Girdles and Limb bones only), Digestive System, Respiratory System, Heart, Arterial System, Venous System and Central Nervous System (Brain & Spinal cord).
- 3.3. Reptelia: General Characters & Classification up to the level of order with examples.

Signature of the Chairman / Chairperson (B.O.S.):

Signature of the Members:

  
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### UNIT-4 (AVES)

- 4.1 Aves: General Characters & Classification up to sub-class level with examples
- 4.2. Type Study: Columba livia - External Features, Digestive System, Respiratory systems, Heart and Double Circulation (Systemic and Pulmonary Circulations).
- 4.3. Migration of Birds.
- 4.4. Flight adaptations in Birds
- 4.5. Evolutionary Significance of Archaeopteryx.

### UNIT-5 (MAMMALIA & ZOOGEOGRAPHY)

- 5.1 Mammalia: General Characters & Classification up to sub class level with examples
- 5.2. Dentition in Mammals
- 5.3. Geographical Features of Oriental Region & its Fauna.
- 5.4. Geographical Features of Australian Region & its Fauna.
- 5.5. Geographical Features of Ethiopian Region & its Fauna.

### SUGGESTED READINGS

1. **E.L.Jordan and P.S Verma** 'Chordate Zoology' -S .Chand Publications
2. **Mohan P Arora** 'Chordata -I,Himalaya Publishing House Pvt.ltd.
3. **Marshal, Parker and Haswell** 'Text book of vertebrates.' ELBS and Mc Millan , England .
4. **Alfred Sherwood Romer.** Thomas S Pearson' The Vertebrates body, Sixth edition, CBS college publishing Saunders College Publishing.
5. **George C.Kent,Robert K Carr.** Comparative Anatomy of the Vertebrates,9<sup>th</sup> ed. Mc Graw Hill.
6. **Kenneth Kardong Veretbrates** : Comparative Anantomy Function and Evolution,4<sup>th</sup> ed, 'McGraw Hill.
7. **J.W.Young** The life of Vertebrates , 3<sup>rd</sup> ed, Oxford University Press.
8. **Harvey Pough F, Christine M Janis, B Heiser,** Vertebrate Life, Pearson 6<sup>th</sup> ed, pearson Education Inc. 2002.
9. **R.L Kotpal,** Modern text book of Zoology, Rastagi Publications.

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