**zoology syllabus for ii semester**

**ZOOLOGY - PAPER - II**

**animal diversity – chordates**

|  |
| --- |
|  |
|  |

 **ZOO 2306 CREDITS:4**

**Periods:60 Max. Marks: 100**

**Unit - I**

**1.1 General characters of Chordata**

**1.2 Prochordata**

 1.2.1 Salient features of Cephalochordata

 1.2.2 Structure of *Branchiostoma*

 1.2.3 Affinities of Cephalochordata

 1.2.4 Salient features of Urochordata

 1.2.5 Structure and life history of *Herdmania*

 1.2.6 Significance of Retrogressive metamorphosis

**Unit - II**

**2.1 Cyclostomata**

 2.1.1 General characters of Cyclostomata

 2.1.2 Comparision of the *Petromyzon* and *Myxine*

**2.2 Pisces**

 2.2.1 General characters of Fishes

 2.2.2 Classification of fishes up to sub - class level with examples

 2.2.3 *Scoliodon* - External features, Digestive system, Respiratory system,
 Heart, Brain

 2.2.4 Migration in Fishes

 2.2.5 Types of Scales

 2.2.6 Dipnoi

**Unit - III**

**3.1 Amphibia**

 3.1.1 General characters of Amphibian

 3.1.2 Classification of Amphibia upto orders with examples.

 3.1.3 *Rana hexadactyla* - External features, Digestive system, Respiratory system, Heart,

Brain

**3.2 Reptilia**

 3.2.1 General characters of Reptilia

 3.2.2 Classification of Reptilia upto orders with examples

 3.2.3 Calotes - External features, Digestive system, Respiratory system, Heart, Brain

 3.2.4 Identification of Poisonous snakes and Skull in reptiles

**Unit - IV**

**4.1 Aves**

 4.1.1 General characters of Aves

 4.1.2 Classification of Aves upto subclasses with examples.

 4.1.3 *Columba livia* - External features, Digestive system, Respiratory system,
 Heart, Brain

 4.1.4 Migration in Birds

 4.1.5 Flight adaptation in birds

**Unit - V**

**5.1 Mammalia**

 5.1.1 General characters of Mammalia

 5.1.2 Classification of Mammalia upto sub - classes with examples

**5.2 Comparision of Prototherians, Metatherians and Eutherians**

**5.3 Dentition in mammals**



**zoology practical syllabus for ii semester**

**ZOOLOGY - PAPER - II**

**animal diversity - chordates**

**Periods: 24 Max. Marks: 50**

 **ZOO2306 CREDITS-4**

**Observation of the following slides / spotters / models**

 **Protochordata :** *Herdmania, Amphioxus, Amphioxus* T.S. through pharynx

 **Cyclostomata :** *Petromyzon, Myxine*

 **Pisces :** *Pristis, Torpedo, Channapleuronectes, Hippocampus, Exocoetus, Eheneis, Labeo, Catla, Clarius, Auguilla,Protopterus*

Placoid scale, Cycloid scale, Ctenoid scale

 **Amphibia :** *Ichthyophis, Amblystoma, Siren, Hyla, Rachophous*

 Axolotl larva

 **Reptilia :** *Draco, Chemaeleon, Uromastix, Vipera russeli, Naja, Bungarus, Enhydrina, Testudo, Trionyx, Crocodilus*

 **Aves :** *Passer, Psittacula, Bubo, Alcedo, Columba, Corvus, Pavo,* Study of different types of feathers : Quill, Contour, Filoplume down

 **Mammalia :** *Ornithorthynchus, Tachyglossus, Pteropus, Funambulus, Manis, Loris,* Hedgehog

 **Osteology :** Appenducular skeletons of Varanus, Pigeon

 Rabbit - Skull, fore limbs, hind limbs and girdles

**Demonstration of dissection / dissected / virtual dissection:**

 1. V, VII, IX, X cranial nerves of shark / locally available fishes

 2. Arterial system, venous system of Shark / Calotes / Fowl / Rat

 3. Digestive system of fish

b **Laboratory record work shall be submitted at the time of practical examination**

b **Compulsory one species to be adopted for demonstration only be the faculty**



**LEARNING OUTCOMES:**

* It gives knowledge of about body construction from unicellular to multi cellular organism &itd evolution.
* Gain the knowledge about the formation leech to evolution of life.

 understand social organization insects.

* To Trace The Evolution Of Chordates To Inculcate Research Aptitude.

S