



CLUSTER UNIVERSITY SRINAGAR

SYLLABUS (FYUP UNDER NEP 2020)

Offered By Department Of ZOOLOGY

Semester 2nd (Major Course)

Course Title: Animal Diversity- Chordata

Course Code: UGZOO22J201

Credits: 4 (Theory: 3, Practical: 1)

Contact Hrs:75 (Theory: 45, Practical: 30)

Max. Marks 100

Theory External: 60; Min Marks: 24

Theory Internal (Continuous Assessment): 15 Marks, Min Marks: 06

Practical Experimental Basis= 15, Min. Marks: 06

Practical Experimental (Continuous assessment) = 10, Min. Marks: 04

Learning Objectives:

This course is designed to acquaint the student with:

1. The diversity of phylum chordata.
2. Characteristic features of each class.
3. Adaptive radiations in mammals.

Learning outcomes:

After the completion of the syllabus the student will be able to:

1. Identify the lower chordates and set them apart from higher chordates.
2. Understand the distinguishing features of different classes of vertebrata.
3. Understand the concept of osmoregulation, migration and parental care in vertebrates.

UNIT-I

15 Hrs

Chordate- I

- 1.1 General character and outline classification of phylum Chordata.
- 1.2 General character and classification of protochordates up to order level.
- 1.3 General character and classification of Pisces up to order level.
- 1.4 Migration and Osmoregulation in fishes.

UNIT-II

15 Hrs

Chordate-II

- 2.1 General character and classification of amphibians up to order level.
- 2.2 Parental care in amphibians.
- 2.3 General character and classification of reptiles up to order level.
- 2.4 General features of poisonous and non-poisonous snakes.

UNIT- III

15 Hrs

Chordate-III

- 3.1 General character and classification of aves up to order level.
- 3.2 Flight adaptation and migration in birds.
- 3.3 General character and classification of mammals up to order level.
- 3.4 Adaptive radiations in mammals.

UNIT-IV**30 Hrs****PRACTICAL (Lab Course)**

A) Classification and diagnostic features of following museum specimens /slides (At least 3 from each group)

- a) Protochordata
- b) Pisces
- c) Amphibia
- d) Reptilia
- e) Aves
- f) Mammalia

B) Dissections

- Alimentary canal and cranial nerves of carp.

C) Collection and identification of feathers in birds.

D) Field Trip.

Suggested Reading:

1. R. L. Kotpal "Modern text book of Zoology: Vertebrates"
2. P S Verma and E L Jordan "*Chordate Zoology*"
3. Donald W Linzey "Vertebrate Biology"
4. S. N. Prasad, Vasantika Kashyap "A Textbook Of Vertebrate Zoology"
5. N. Arumugam, A. Thangamani, S. Prasanna kumar, L.M. Narayanan, "A Text Book of Chordates"