



CLUSTER UNIVERSITY SRINAGAR

SYLLABUS (FYUP UNDER NEP 2020)

Offered By Department Of ZOOLOGY

Semester 1st to 3rd (Multi-Disciplinary Course)

Course Title: Understanding the Living World

Course Code: UGZOO22D101

Credits: 3

Contact Hrs: 45

Max. Marks: 75

External: 55; Min Marks: 22

Internal (Continuous Assessment): 20 Marks, Min Marks: 08

Learning objectives:

This course is designed to acquaint the student with:

1. The basic structure of prokaryotic and eukaryotic cell.
2. Importance of bio- membranes.
3. Five kingdom classification.
4. Distinguishing features of animal kingdom.

Learning outcomes:

After successful completion of the course the students will be able to elucidate:

1. Characteristic features of each kingdom.
2. Economic importance of invertebrates.
3. Body organization of animals.

Unit 1

Basics of cell

(15 Hrs)

- 1.1. Prokaryotic cell.
- 1.2. Eukaryotic cell.
- 1.3. Different models of cell membrane- Basic concept (Overton, Gorter and Grendel, Robertson, and Dannielli and Davson).
- 1.4. Fluid mosaic model of cell membrane.

Unit-2:

The living World

(15 Hrs)

(General characters with examples)

- 2.1. Kingdom Monera.
- 2.2. Kingdom Protista.
- 2.3. Kingdom Fungi.
- 2.4. Kingdom Plantae.

Unit-3:

Kingdom Animalia

(15 Hrs)

- 3.1. Outline classification of animal kingdom.
- 3.2. Body plan and organization of animals.
- 3.3. Types of body cavities in animals.
- 3.4. Beneficial and Harmful invertebrates.

Suggested Reading

1. Shannon Lee " Invertebrate Zoology"
2. Janet Moore " An Introduction to the Invertebrates"
3. E. L. Jordan and P. S. Verma " Invertebrate Zoology"
4. R. L. Kotpal " Modern text book of Zoology: Invertebrates"
5. C.B. Powar "Cell biology"
6. Gupta, Jangir "Cell biology- Fundamentals and applications"
7. P.K. Gupta "Cell and molecular biology"