



B.Sc. I Semester (NEP) Degree Examination, March/April - 2022

ZOOLOGY

Cytology, Genetics and Infectious diseases.

Time : 03 Hours

Maximum Marks : 60

Instruction : Answer **all** the Sections.

SECTION - A

Answer the following sub-questions in **one** word or **one** sentence each. **10x1=10**

1. (a) Mention the types of Cell Signalling.
- (b) What is incomplete dominance ?
- (c) What do you mean by Syndrome ?
- (d) In which stage of meiosis synapsis takes place.
- (e) Define Co-dominance.
- (f) Expand CAMs and ECM.
- (g) What is Cytoplasmic inheritance ?
- (h) What is Apoptosis ?
- (i) Define Pathogen.
- (j) Define Epistasis.

SECTION - B

Answer **any four** of the following questions. **4x5=20**

2. Write a short note on multiple alleles.
3. Explain briefly about the types and functions of Lysosomes.
4. Explain the ultra structure of a Chromosome with the help of neat labelled diagram.
5. Explain the ultra structure of nucleus and its functions.
6. Explain First law of Mendel with example.
7. Write a short note on Down's Syndrome and Turner's Syndrome.



SECTION - C

Answer **any three** of the following questions.

3x10=30

8. Describe the effects of environment on gene expression.
9. With the help of labelled diagram, explain the Ultra Structure of mitochondria. Add a note on its functions.
10. Explain genic balance theory of C.B. Bridges.
11. Explain Watson and Crick model of DNA with a neat labelled diagram.
12. Describe the life cycle and pathogenicity of *Wucheraria bancrofti*.

- o O o -

