



DCZO101

Reg. No.

--	--	--	--	--	--	--	--

I Semester B.Sc. Degree Examination, April - 2023

ZOOLOGY

Cytology, Genetics and Infectious Diseases

Paper : I

(NEP Scheme 2021-22 Freshers and Repeaters)



Time : 2½ Hours

Maximum Marks : 60

Instructions to Candidates:

1. Draw neat labelled diagrams wherever necessary.
2. Answer should be completely in English.

PART - A

I. Answer the following in one word or one sentence.

(5×1=5)

1. What is endocytosis?
2. Define apoptosis.
3. Write the genotypic ratio of monohybrid cross.
4. Give an example for sex - influenced trait.
5. _____ lives as a flagellate parasite in the small intestine of man.

PART - B

II. Answer any Five of the following.

(5×3=15)

1. Write a note on microtubules.
2. Mention any three types of cell junctions.
3. Draw a neat labelled diagram of mitochondria.
4. Name any three types of DNA in Eukaryotes.
5. Explain incomplete dominance.
6. Briefly explain inheritance of multiple allelism.
7. What is X-linked recessive inheritance? Give an example.

[P.T.O.]



(2)

DCZO101

PART - C

III. Answer any Four of the following.

(4×5=20)

1. With a neat labelled diagram explain the structure of Endoplasmic reticulum.
2. Describe nucleosome model of chromatin organization with a neat labelled diagram.
3. What is cell cycle? Explain it with appropriate diagram.
4. With reference to maternal inheritance explain Kappa particles in Paramecium.
5. With a suitable example explain autosomal recessive pattern of inheritance.
6. Mention the name and disease caused by any five human pathogenic protozoans.

PART - D

IV. Answer any Two of the following:

(2×10=20)

1. With a neat labelled diagram describe the fluid mosaic model of plasma membrane.
 2. Describe mitotic cell division with neat labelled diagrams.
 3. Describe dihybrid cross with an example.
 4. Add a note on following with reference to Trypanosoma.
 - a) Morphology
 - b) Life cycle
-