

Reg. No. : .....

Name : .....

Fourth Semester B.Sc. Degree Examination, May 2021

First Degree Programme under CBCSS

Zoology

Core Course IV

ZO 1441 – CELL BIOLOGY

(2015 to 2018 Admn.)

Time : 3 Hours

Max. Marks : 80

I. Answer **all** the following questions. (In **one** to **two** sentences. **1** mark each)

1. Programmed Cell Death.
2. Lampbrush Chromosome.
3. Metaphase.
4. Cellular Currency.
5. Amitosis.
6. ATP synthase.
7. Peroxisomes.
8. Role of Histones in Nucleosome.
9. Meiosis.
10. G<sub>2</sub> Phase of Cell Cycle.

(10 × 1 = 10 Marks)

P.T.O.

II. Answer **any eight** of the following. (Not to exceed **one** paragraph. Each carries **2** mark)

11. Cell Communication.
12. Causes for Cancer.
13. Function of Mitochondria.
14. What are Nucleolar Organizers?
15. Microfilaments.
16. Euchromatin.
17. Nucleolar Cycle.
18. Comment on Free Radicals.
19. Significance of Apoptosis.
20. What is an Interphase Nucleus?
21. Cytoskeletal Structure.
22. Define Chromosome banding.

**(8 × 2 = 16 Marks)**

III. Answer **any six** of the following. (Not to exceed **120** words. Each carries **4** mark)

23. Peroxisomes and Glyoxosomes.
24. Synatonemal Complex.
25. Fluid Mosaic model of Plasma Membrane.
26. Eukaryotes and Prokaryotes.

27. Structure of Proteosomes.
28. Condensation and Coiling in Chromosome.
29. Short note on Centrioles and Basal bodies.
30. Oncogenes.
31. History and Discovery of Cells.

(6 × 4 = 24 Marks)

IV. Answer **any two** of the following. (Each carries **15** mark)

32. Write an essay on the Modern version of Cell Theory.
33. Explain the Biology of Cancer.
34. Describe different types of Ribosomes and their functions.
35. List out the phases and stages of the Cell Cycle.

(2 × 15 = 30 Marks)

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