

(Pages : 3)

J – 1204

Reg. No. :

Name :

Fourth Semester B.Sc. Degree Examination, March 2020

First Degree Programme under CBCSS

Zoology

Core Course IV

ZO1441-CELL BIOLOGY

(2015 Admission onwards)

Time : 3 Hours

Max. Marks : 80

- I. Answer the following questions in one or two sentences.
1. Endocytosis
 2. Cytochromes
 3. C-Value paradox
 4. Polysomes
 5. Centromere
 6. Histones
 7. Oncogenes
 8. Apoptosis
 9. Endomitosis
 10. Mitochondria

(10 × 1 = 10 Marks)

P.T.O.

II. Answer **any eight** of the following

11. Centrioles
12. Functions of lysosome
13. Oxidative Phosphorylation
14. Describe the biogenesis of endoplasmic reticulum.
15. Mention the composition of prokaryotic ribosomes.
16. Describe the significance of peroxisomes.
17. What is beta oxidation.
18. Define desmosomes: Mention its role
19. Describe the structure of nuclear pore complex.
20. What are oxysomes? Mention its function.
21. What is Na-K.Pump?
22. Explain the significance of 'S' Phase in cell cycle.

(8 × 2 = 16 Marks)

III. Answer **any six** of the following

23. Explain the different causes of Aging.
24. What are Giant Chromosomes? Mention its cytological significances.

25. Differentiate between Euchromatin and Hetero chromatin.
26. What is nucleolar cycle? Explain.
27. Describe polymorphism in lysosomes.
28. With the help of a diagram, describe the typical structure of a chromosome.
29. Describe Electron Transport chain.
30. What are protooncogenes ? Mention its role in carcinogenesis.
31. Describe the specializations of plasma membranes.

(6 × 4 = 24 Marks)

IV. Answer **any two** of the following

32. Write an essay on chromatin organisation.
33. Describe the ultra structure of plasma membrane.
34. What is transmembrane transport? explain the role of plasma membrane in transmembrane transport.
35. Explain the cytology of cancer.

(2 × 15 = 30 Marks)