

Reg. No. :

Name :

Third Semester B.Sc. Degree Examination, March 2022

Career Related First Degree Programme under CBCSS

Group 2(a) : Biochemistry and industrial Microbiology

Vocational Course – III

IM 1371 : CELL BIOLOGY

(2019 & 2020 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION - A

Answer all questions. Each question carries 1 mark.

1. Fox's Experiment
2. Natural selection theory
3. Glyoxisomes
4. Pachytene
5. Chemotaxis
6. Complementation test
7. Telomere
8. Leucine Zipper
9. Nucleotide
10. Caspase.

(10 × 1 = 10 Marks)

P.T.O.

SECTION – B

Answer **any eight** of the following. Each question carries **2 Marks**.

11. Urey Miller Experiment
12. Species
13. Bacterial Chromosome
14. Mitochondrial DNA
15. Prokaryotic ribosome
16. Integrins
17. Mitosis
18. Cell cycle checkpoints
19. Ras pathway
20. Rubisco
21. Aneuploidy
22. Endoplasmic reticulum
23. P53
24. Transversion Mutation
25. Adherins
26. Philadelphia Chromosome.

(8 × 2 = 16 Marks)

SECTION – C

Answer **any six** of the following. Each question carries **4 Marks**.

27. How Spontaneous generation theory was disproved?
28. Cell theory.

29. Genetic drift.
30. Bacterial Cell wall.
31. Bacterial flagella - ultrastructure.
32. Difference between apoptosis and necrosis.
33. G banding.
34. FISH.
35. JAKSTAT.
36. Nucelosome.
37. Microsatellites.
38. DNA supercoiling.

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** of the following. Each question carries **15** Marks.

39. Briefly explain the scientific theories regarding the origin of life in Earth.
40. Give a brief account on the ultrastructure of eukaryotic cell.
41. Explain different cell interactions.
42. Cell Cycle and Checkpoints.
43. Chromosomal mutations.
44. Oncogenes and tumour suppressor genes.

(2 × 15 = 30 Marks)