22P228 (Pages: 2) Name: .....

Reg.No: .....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2023

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P BOT2 C04 - CELL BIOLOGY, MOLECULAR BIOLOGY AND BIOPHYSICS.

(Botany)

(2019 Admission onwards)

Time : 3 Hours Maximum : 30 Weightage

Part-A

Answer any ***four*** questions. Each question carries 2 weightage.

1. Explain different types of Banding.
2. Explain the significance of p53 gene in cancer.
3. Explain repetitive DNA.
4. Explain the significance of origin and evolution of genome.
5. Explain buffer.
6. Explain a Short account on PAGE.
7. Describe RIA and ELISA.

(4 × 2 = 8 Weightage)

Part-B

Answer any ***four*** questions. Each question carries 3 weightage.

8. Describe different Phases of cell cycle.
9. Explain cellular interaction and its applications.
10. Explain the molecular mechanism of cellular differentiation.
11. Discuss the experimental evidences in support of semiconservative method of replication of DNA.
12. Explain genetic code and add a note on its features.
13. Explain mutation and make a note on physical and chemical mutagens.
14. Explain colorimetry and its application.

(4 × 3 = 12 Weightage)

Part-C

Answer any ***two*** questions. Each question carries 5 weightage.

15. Explain the different types of Syndromes.

16. Explain the process of apoptosis and add a note on ageing.

17. Describe the major steps of protein synthesis in prokaryotes.

18. Explain the theory, types and applications of centrifugation.

(2 × 5 = 10 Weightage)

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