

21P114

(Pages: 2)

Name:

Reg.No:

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P ZO1 C01 - BIOCHEMISTRY AND BIOPHYSICS

(Zoology)

(2019 Admission onwards)

Time : 3 Hours

Maximum : 30 Weightage

Part-A

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

1. Van der Waals' interactions.
2. Mention the differences between alpha helix and beta pleated sheet of proteins.
3. Explain the specificity of an enzyme catalysed reaction.
4. What are the importance of Shikimate pathway?
5. Explain the Pathophysiology of gout.
6. What is Tyndal effect? Explain it.
7. Write a short note on the biological effects of ionizing radiations.

(4×2 = 8 Weightage)

Part-B

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

8. Brief out glucose.
9. Classify polysaccharides with examples.
10. Describe the structure and functions of prostaglandins.
11. Explain the laws of thermodynamics .
12. Explain Glycogenesis and its regulation.
13. Describe the beta-oxidation of palmitic acid indicating the energy yield.
14. Write on active transport.

(4 × 3 = 12 Weightage)

Part-C

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

15. Describe the Chargoff's base equivalent concept. Describe the features of Watson-Crick model for DNA. Compare this with A and Z form of DNA.
16. Describe the citric acid cycle with suitable illustrations.
17. Describe the mitochondrial oxidation of fatty acids with even number carbon atoms. Give the energy production.
18. Write on the physical aspects of sound transmission in ear.

(2 × 5 = 10 Weightage)
