

24P114

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Name:

Reg.No:

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P ZOL1 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. Comment on nucleic acids.
2. What is a disaccharide? Give two examples.
3. Give a short account on Gibbs free energy of activation.
4. What is the significance of TCA cycle?
5. Describe the four major steps in beta-oxidation
6. Write a short note on the properties of colloids.
7. What is audible sound frequency? Explain the pitch perception theory.

(4 × 2 = 8 Weightage)

Part-B

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

8. Write a short note on oxidation of sugars.
9. Mention Gnaven system of fatty acids.
10. Explain the salient feature of tRNA.
11. Distinguish between competitive and non competitive inhibition.
12. Explain Glycogenesis and its regulation
13. Explain the biosynthesis of Pyrimidines and the allosteric regulation.
14. What is sodium potassium pump? Explain the mechanism of sodium potassium pump.

(4 × 3 = 12 Weightage)

Part-C

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

15. Explain the classification of amino acids with suitable examples.

16. What are general biosynthesis and degradation pathways of amino acids? Give the importance of these reactions.
17. Describe the biosynthesis of cholesterol. Indicate the rate limiting step.
18. What are the biological effects of ionizing radiations?

(2 × 5 = 10 Weightage)
