23P114

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Name: .....

Reg.No: .....

#### FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

#### (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. Ionic bonds.
- 2. What is rancidity? How it can be prevented?
- 3. What are ribozymes?
- 4. Give the structure of shikimate. Describe the biosynthesis of chorismate from shikimate.
- 5. Give the structure of Cholesterol. Describe the synthesis of mevalonate from acetate.
- 6. Explain the mechanism of sodium potassium pump.
- 7. What is ionizing radiation? What are the types of ionizing radiations?

### $(4 \times 2 = 8$ Weightage)

## Part-B

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

- 8. Differentiate stereo and structural isomerism.
- 9. Briefly explain biosynthesis of trehalose.
- 10. Explain the salient feature of tRNA.
- 11. Explain the role of ATP as a free energy carrier in a biological system.
- 12. Explain Pentosephosphate pathway.
- 13. Explain Biosynthesis of cholesterol.
- 14. Write a short on the properties of colloids.

 $(4 \times 3 = 12 \text{ Weightage})$ 

# Part-C

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

- 15. Explain the classification of amino acids with suitable examples.
- 16. Describe the role of TCA cycle as the common oxidative pathway.
- 17. Explain the biosynthesis and degradation of different Pyrimidine nucleotides.
- 18. Write on the physical aspects of sound transmission in ear.

 $(2 \times 5 = 10 \text{ Weightage})$ 

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