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

(1 Page)

Name..... Reg.No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021 (Regular/Improvement/Supplementary)

ZOOLOGY FZOL1C01-BIOCHEMISTRY

Time: 3 Hours

Part A: Answer any *four* questions.Each carries *two* weightage.

Write short notes on:

- 1. Rancidity
- 2. Z-DNA
- 3. Isoelectric point of amino acids
- 4. Ribozymes
- 5. Enthalpy
- 6. Redox potential
- 7. Transamination

$(4 \times 2 = 8 \text{ weightage})$

Part B: Answer any *four* questions. Each carries *three* weightage.

- 8. Explain the pyruvate dehydrogenase complex.
- 9. Briefly discuss gluconeogenesis.
- 10. Differentiate between homo polysaccharides and hetero polysaccharides with examples.
- 11. Briefly describe the structural and biological role of cellobiose.
- 12. What is Km value? Explain the effect of substrate concentration on enzyme activity.
- 13. Briefly describe the osazone formation.
- 14. Describe the structure of t-RNA.

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

Part C: Answer any two questions. Each carries five weightage.

- 15. Describe pentose phosphate pathway and its significance.
- 16. Define enzyme inhibition. Explain different types of enzyme inhibitions with suitable examples.
- 17. Elucidate the structural organization of proteins.
- 18. Explain biosynthesis of cholesterol.

Maximum Weightage: 30