

## School of Biological Sciences Doon University Dehradun, Uttarakhand

Question Paper: End term-Semester Examination Session: Jan 2024 – Jun 2024

B.Sc. Biological Sciences (4th Semester)

Course: Biomolecules -II Course Code: BSC251 Total Marks: 30

Maximum Time: 2:00 Hrs

(Marks:  $1 \times 6 = 6$ )

## PART I Give answers to any six questions:

- 1. Write the name of any two metalloproteins.
- 2. Conjugated proteins contains...... and......
- 3. Define Km?
- 4. What is the SI unit of enzyme activity?
- 5. Write the names of positively charged amino acids.
- 6. Which amino acid is the optically inactive?
- 7. Give the name of few super-secondary structures of proteins?

## PART II Give answers to any four questions:

(Marks:  $3 \times 4 = 12$ )

- 8. Write a short note on Michalis- Menten equation.
- 9. What are the metal based drugs? Give example of two metal-based drugs with their functions.
- 10. What is competitive, non-competitive and uncompetitive inhibition?
- 11. What are proteinaceous amino acids? Explain the classes of amino acid based on metabolic fate.
- 12. Explain the regulation of ATCase enzyme.

## PART III Give answers to any two questions:

(Marks:  $6 \times 2 = 12$ )

- 13. What is enzyme immobilization and why it is needed? Discuss the methods of enzyme immobilization.
- 14. Describe the methods of enzyme isolation and purification.
- 15. Discuss the different carriers in mitochondrial electron transfer chain.