

APRIL 2018

**1709315/UBYM31A**

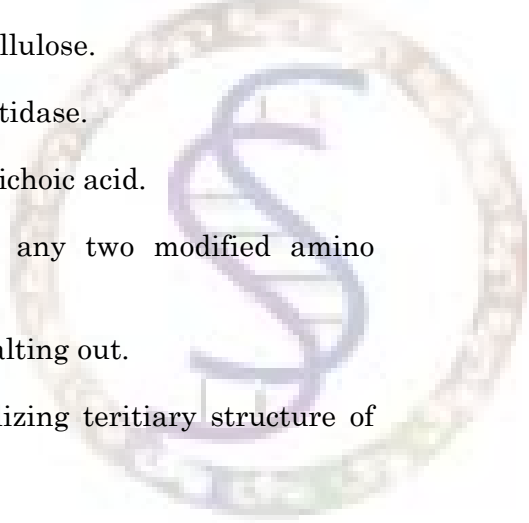
Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

Each question carries 2 marks.

1. Define enantiomers.
  2. Give the structure of basic amino acids.
  3. What is the important of phenyl hydrazine test?
  4. Give the functions of cellulose.
  5. What exo and endo peptidase.
  6. Give the structure of teichoic acid.
  7. Give the structure of any two modified amino acids.
  8. Define salting in and salting out.
  9. Name the bonds stabilizing tertiary structure of proteins.
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10. Explain the zwitter ionic form of amino acid.
11. How many amino acids are there in a chain of collagen? Name the prevalent amino acids.
12. What is pectin?

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

13. Explain the classification of monosaccharides.
14. Comment on the forces stabilizing the secondary and tertiary structure of proteins.
15. Explain any two methods for estimation of protein.
16. Give an account of chemical properties of amino acids due to  $\text{NH}_3$  and  $\text{COOH}$  group.
17. Write a note on biologically important peptides.
18. Write a note on mucopolysaccharides.
19. Discuss the physical properties of carbohydrates.

## SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

Each question carries 10 marks.

20. Explain the oxidation reduction reactions of monosaccharides.
21. Mention the color reactions of amino acids.
22. Describe the structure of bacterial cell wall polysaccharides.
23. Elaborate on classification of proteins.
24. Give a detailed account on structure of proteins.

