NOVEMBER 2017 **1709112/UBYM31A**

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

Each question carries 2 marks.

1. Name two tests to isolate monosaccharides.

2. Write the name and function of biologically active peptide.

3. Define primary structure of protein.

4. Give the structure of arginine and serine.

5. What are defence proteins?

6. Define glycosamino glycans.

7. What are glycoproteins?

8. What are blood group substances?

9. Why sucrose is called as non reducing sugar?

10. Explain the zwitter ionic form of amino acid.

11. How many aminoacids are there in a chain of collagen? Name the prevalent amino acids.

12. What is heparin?

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each question carries 5 marks.

13. Explain the general colour tests for carbohydrates.

14. Briefly discuss the structural distribution and function of hyaluronic acid.

15. Write a note on classification of proteins based on function.

16. Give an account of carbohydrate in cell membrane.

17. Explain the secondary structure of protein with an example.

18. Write the reactions of amino acid due to amino group.

19. Give an account on denaturation and renaturation of proteins.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

Each question carries 10 marks.

20. Explain the reactions of carbohydrates due to aldehyde and ketone groups.

21. Describe the tertiary and quaternary structure of proteins with examples.

22. Describe the structure of bacterial cell wall polysaccharides.

23. Enumerate the different approaches to determine the amino acid sequence of proteins.

24. Give a detailed account on classification of amino acids.

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