



24900024

Name:.....

First Semester

(2024 ADMISSION ONWARDS)

Maximum Marks: 50

Students should attempt atleast one question from each course outcome to enhance their overall outcome attainability.

[Learning Domain][CO No(s)]

Each question carries 1 mark

- | | | | |
|---|---|-------------------|-----|
| 1 | Which of the following hetero polysaccharides plays a role in blood clotting? | [U] | [2] |
| | a) Chitin | b) Heparin | |
| | c) Cellulose | d) starch | |
| 2 | The secondary structure of protein is stabilized by | [U] | [3] |
| | a) Hydrogen bond | b) Disulfide bond | |
| | c) Peptide bond | d) All of these | |
| 3 | What type of bond links nucleotides in a DNA strand? | [K] | [4] |
| | a) Hydrogen bond | b) Ionic bond | |
| | c) Phosphodiester linkage | d) Peptide bond | |
| 4 | Cholesterol is categorized as which type of lipid? | [An] | [4] |

- $$(5 \times 1 = 5)$$

- $$(5 \times 2 = 10)$$

(5 × 3 = 15)

Part D

Short Essay Type Questions

Answer any 4 questions

Each question carries 5 marks

- | | | |
|----|---|----------|
| 18 | What are heteropolysaccharides, and how do they differ from homopolysaccharides? | [U] [2] |
| 19 | Discuss the contributions of James Watson and Francis Crick to our understanding of the DNA structure. | [An] [4] |
| 20 | Describe the structural organization of proteins. | [U] [3] |
| 21 | Describe the structure of lecithin (phosphatidylcholine). How are its components organized, and what role does each component play in its function? | [U] [4] |
| 22 | Explain what is biochemistry, and why is it considered a pivotal field in the life sciences? | [U] [1] |
| 23 | Discuss in detail about a) Stereoisomers b)Epimers. c)Anomers | [U] [2] |

(4 × 5 = 20)

END OF THE QUESTION PAPER
