



24900197

**Name:**.....

(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

- Which carbohydrate is primarily used for energy storage in animals? [U] [1]
  - Starch
  - Cellulose
  - Glycogen
  - Chitin
- Which of the following statements about starch is true? [K] [1]
  - It is a protein.
  - It is a structural carbohydrate
  - It is soluble in water.
  - It is a form of storage carbohydrate in plants.
- Which of the following is an example of globular proteins? [U] [2]
  - Keratin
  - Fibrinogen

- c) Collagen                                  d) Myoglobin
- 4 Which amino acid is known for forming disulfide bonds? [U] [2]
- a) Glycine                                  b) Cysteine
- c) Glycine                                  d) Alanine
- 5 Which vitamin is known to have antioxidant properties? [K] [3]
- a) Vitamin E                              b) Vitamin A
- c) Vitamin K                              d) Vitamin D
- 6 Which of the following properties characterizes vitamin C? [K] [3]
- a) It is fat-soluble.                      b) It is stored in the body.
- c) Calcium absorption                d) Helps in hormonal regulation.

## Part B

- |    |  |     |     |
|----|--|-----|-----|
| 7  | List out the applications of radioactive isotopes                          | [K] | [1] |
| 8  | List the characteristics of $\alpha$ -helices and $\beta$ -pleated sheets. | [U] | [2] |
| 9  | Distinguish between essential and non-essential amino acids                | [U] | [2] |
| 10 | Explain the synthesis of cholecalciferol                                   | [K] | [3] |

## Part C

- |    |  |     |     |
|----|--|-----|-----|
| 11 | Discuss on the classification of polysaccharides with examples       | [K] | [1] |
| 12 | Discuss the functional classification of proteins                    | [K] | [2] |
| 13 | Explain the classification of fatty acids based on hydrocarbon chain | [U] | [2] |
| 14 | Explain the role of vitamin A in vision.                             | [U] | [3] |
| 15 | Explain the role of thiamine   | [K] | [3] |

- 16 Describe the structure and properties of folic acid [K] [3]

(4 × 5 = 20)

**Part D**

Long Essay Questions.  
Answer any two questions.  
Each question carries ten marks.

- 17 Define carbohydrates and explain its classification. [K] [1]  
18 Describe the classification of fatty acids [U] [2]  
19 Explain the structure, properties and role of vitamin D. [U] [3]  
20 Describe the structure , properties and functions of vitamin C [K] [3]

(2 × 10 = 20)

**END OF THE QUESTION PAPER**

\*\*\*