

2026

ML & MDT

Course Name : Basic Biochemistry and Nutrition

Course Code : MDT-DSC-2024

Full Marks : 45

Time : 2 Hours

The figures in the margin indicate full marks for the questions.

1. Choose the correct answer : 1x5=5
- a) The simplest carbohydrate is called.....
 - i) Polysaccharide
 - ii) Monosaccharide
 - iii) Disaccharide
 - iv) Oligosaccharide
 - b) The building blocks of proteins are.....
 - i) Fatty acids
 - ii) Amino acids
 - iii) Nucleotides
 - iv) Monosaccharides
 - c) DNA stands for
 - i) Deoxyribonucleic Acid
 - ii) Dinucleic Acid
 - iii) Double Nitrogen Acid
 - iv) Deoxy Nitric Acid
 - d) The main storage form of fat in the body is
 - i) Cholesterol
 - ii) Phospholipid
 - iii) Triglyceride
 - iv) Glycolipid

(Turn over)

- e) Enzymes are mainly composed of
- i) Lipids
 - ii) Carbohydrates
 - iii) Minerals
 - iv) Proteins

2. Answer the following questions (*any five*): 2x5=10
- a) What is molarity and normality? 1+1
 - b) Write two biological functions of carbohydrates.
 - c) What are lipoproteins? Give one example. 1+1
 - d) Define amino acids with examples. 1+1
 - e) What is a nucleotide and its components? 1+1
 - f) What is RDA?
 - g) What is Basal Metabolic Rate?
3. Answer the following questions (*any four*): 5x4=20
- a) Write the classification of carbohydrates with examples. 3+2
 - b) Write a short note on cholesterol and its functions. 3+2
 - c) Write the classification of vitamins.
 - d) Define enzymes. Mention its classification. 1+4
 - e) Differentiate between DNA and RNA.
 - f) Write the properties of amino acids.
4. Answer *any one* of the following questions: 10x1=10
- a) Explain the classification, functions, RDA and deficiency diseases of fat soluble vitamins. 3+2+1+4
 - b) Explain the Watson and Crick model of DNA.
 - c) Explain the mechanism of enzyme action and factors affecting enzyme activity. 4+6

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