

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 5002

**B.Sc. MEDICAL LABORATORY TECHNOLOGY**  
**FIRST YEAR (Regulations 2010-2011 & 2018-2019 onwards)**

**PAPER II – BASIC CHEMISTRY**

*Q. P. Code: 725002*

**Time: Three hours**

**Maximum : 100 Marks**

**Answer ALL Questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Write in detail about
  - (i) Classification of Carbohydrates
  - (ii) Functions of Carbohydrates
  - (iii) Chemical properties of Carbohydrates.
2. Enumerate the classification and physicochemical properties of Aminoacids.
3. Write in detail about
  - (i) Classification of Enzymes
  - (ii) Factors affecting Enzyme Activity.

**II. Write notes on:** **(8 x 5 = 40)**

1. Biologically important nucleotides.
2. Functions and deficiency manifestation of Vitamin D.
3. Protein energy malnutrition.
4. Dietary fibres.
5. Vitamin C.
6. Distinguish between DNA and RNA.
7. Biological importance of Phospholipids.
8. Functions and deficiency manifestations of Thiamine.

**III. Short answers on:** **(10 x 3 = 30)**

1. Pellagra.
2. What are Nucleosides and Nucleotides?
3. Specific dynamic action.
4. Define Acid and Base.
5. Isoelectric pH.
6. Ribosomes.
7. Define Respiratory Quotient.
8. Buffer system of blood and their uses.
9. Nitrogen balance.
10. Co-enzymes.

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