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

[AHS 1122]

NOVEMBER 2022

Sub. Code: 5002

Maximum: 100 Marks

B.Sc. MEDICAL LABORATORY TECHNOLOGY FIRST YEAR (Regulation 2010-2011) PAPER II – BASIC CHEMISTRY *O.P. Code: 725002*

Time: Three Hours

Answer All questions

I. Elaborate on:

- 1. Classify Carbohydrates. Write about the properties and biological importance of Carbohydrates.
- 2. Define Enzyme. Write a note on factors affecting enzyme activity.
- 3. Write about sources, requirement, functions and deficiency manifestations of Calcium.

II. Write Notes on:

- 1. Functions and importance of Phospholipids.
- 2. Vitamin K sources and functions.
- 3. Dietary fiber.
- 4. Wald's Visual Cycle.
- 5. Define isomerism. Mention the types of isomerism with examples.
- 6. Biological importance of proteins.
- 7. Essential fatty acids.
- 8. Define pH and write about buffers.

III. Short Answers on:

- 1. Mention the biologically important nucleotides.
- 2. Define co-enzyme with examples.
- 3. Basal Metabolic Rate (BMR).
- 4. Difference between animal and plant cells.
- 5. Name three aromatic compounds of physiological importance.
- 6. Iodine value.
- 7. Specific dynamic action.
- 8. Name three enzyme inhibitors.
- 9. mRNA.
- 10. Peptide linkage.

(8X5=40)

(10X3=30)

(**3X10=30**)

V LIVIDL'IN 2022