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

[AHS 0423] APRIL 2023 Sub. Code: 2734

## **B.OPTOM**

## FIRST YEAR (Regulation 2018-2019 onwards) PAPER IV-BASIC BIOCHEMISTRY & NUTRITION

Q.P. Code: 802734

Time: Three Hours Answer All questions Maximum: 100 Marks

I. Elaborate on:  $(3\times10=30)$ 

1. Explain the Glycolysis pathway and its significance.

- 2. Write about therapeutic and diagnostic applications of enzymes.
- 3. Explain the De novo synthesis of Palmitic acid.

II. Write note on:  $(8\times5=40)$ 

- 1. Discuss about Biological role of Lipids.
- 2. Hormonal regulation of blood glucose level.
- 3. Define amino acids and write down the properties of amino acid.
- 4. Formation and utilisation of ketone bodies.
- 5. Conversion of cholesterol into bile acids.
- 6. Factors affecting the Enzyme action.
- 7. Explain the Urea cycle.
- 8. Functions of calcium and copper.

## III. Short answer on:

 $(10 \times 3 = 30)$ 

- 1. Define Biomolecules.
- 2. Name essential Aminoacids.
- 3. pH.
- 4. Define Immunoglobulin.
- 5. Diabetes mellitus.
- 6. Obesity.
- 7. Hyperbilirubinemia.
- 8. Coenzymes.
- 9. Tears.
- 10. Define Electrophoresis.

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