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

# [BNYS 0124] JANUARY 2024 Sub. Code: 1501 (JUNE 2023 / OCTOBER 2023 EXAM SESSIONS)

## B.N.Y.S. DEGREE EXAMINATION FIRST YEAR PART - I

(For the candidates admitted from the academic year 2011-12)
PAPER I – BIO-CHEMISTRY

Q.P. Code: 821501

Time: Three Hours Answer ALL questions Maximum: 100 Marks

## I. Essay Questions:

 $(2 \times 15 = 30)$ 

- 1. Explain in detail on the biochemical changes of starvation and add a note on importance of basal metabolic rate.
- 2. Define proteins. Explain in detail on its structure and classification.

II. Write Notes on:  $(10 \times 5 = 50)$ 

- 1. Explain catabolism of amino acids.
- 2. Clearance Tests.
- 3. Write about Vitamin K, its chemistry, biochemical functions, RDA, dietary sources and deficiency symptoms.
- 4. Immunoglobulin, its structure, types and functions.
- 5. Write about phospholipids.
- 6. Regulation of blood sugar and Glucose tolerance test.
- 7. Define Enzyme. Write about its classification and specificity.
- 8. Outline the mechanism in regulation of blood calcium and its clinical condition.
- 9. Paper chromatography.
- 10. Define fatty acids. Write its classification and properties.

### III. Short Answers on:

 $(10 \times 2 = 20)$ 

- 1. Differentiate Fat soluble and water soluble vitamins.
- 2. Denaturation and coagulation of proteins.
- 3. Alkalosis and Acidosis.
- 4. Oncogenes and Reverse Transcription Viruses.
- 5. Lactose intolerance.
- 6. Myoglobin its structure and functions.
- 7. Protein Energy malnutrition.
- 8. Biologically important peptides.
- 9. Deficiency manifestations of Vitamin D.
- 10. Derived lipids.