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

[AHS 1023] OCTOBER 2023 Sub. Code: 1302

M.Sc. CLINICAL NUTRITION FIRST YEAR (From 2020-2021 onwards) PAPER III – NUTRITIONAL BIOCHEMISTRY

Q.P. Code: 281302

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. What are the three stages in which glucose is completely broken to Co₂ and H₂O with the formation of ATP?

2. How are lipids classified? Give examples of each group.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Rhodopsin cycle.
- 2. Explain the general properties of proteins.
- 3. State the clinical importance of enzymes.
- 4. Explain B-thalassemia.
- 5. Enumerate the metabolic role of tyrosine in the body.
- 6. Name the constituent enzymes of the fatty acid synthase multi-enzyme complex.
- 7. Illustrate the pituitary gland.
- 8. Difference between DNA and RNA.
- 9. Explain the biosynthesis of urea.
- 10. Write the glycogen storage diseases.
