

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

[MBBS 0123]

JANUARY 2023

Sub. Code :5055

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted upto the Academic Year 2018-2019)

FIRST YEAR

PAPER V – BIOCHEMISTRY – I

Q.P. Code: 525055

Time: Three hours

Maximum : 50 Marks

Answer All Questions

I. Essay: **(1 x 10 = 10)**

1. Describe the various mechanism of Enzyme Action and add a note on Enzyme Regulation.

II. Write notes on: **(5 x 4 = 20)**

1. Brief the Fluid Mosaic model and its clinical significance.
2. Write the Sources, functions and deficiency manifestations of Vitamin-D.
3. Explain the physiological significance of HMP shunt Pathway.
4. Write about the metabolism of High Density Lipoprotein and its clinical importance.
5. Brief the various complexes of Electron Transport Chain.

III. Short answers on: **(10 x 2 = 20)**

1. What are ligand gated channels and voltage gated channels?
2. Optical activity of Glucose.
3. a) Saponification number b) Iodine number.
4. "Pompe" Disease.
5. What is the normal serum?
 - a) Fasting blood glucose level
 - b) Postprandial blood glucose level
 - c) Cholesterol level
 - d) Triglyceride level.
6. Name the adipose tissue derived Hormones.
7. Brief: Malate-Aspartate shuttle.
8. Name any four prophyria's with their defective enzymes.
9. Detail the deficiency manifestations of folic acid.
10. What are the factors that affect Nitrogen balance?
