

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

[MD 1022]

OCTOBER 2022

Sub. Code: 2045

M.D. DEGREE EXAMINATION

BRANCH XIII – BIOCHEMISTRY

**PAPER III – INTERMEDIARY METABOLISM, MACRO AND MICRO
NUTRIENTS AND INBORN ERRORS OF METABOLISM**

Q.P. Code: 202045

Time: Three Hours

Maximum: 100 Marks

I. Essay Questions:

(2 x 15 = 30)

1. Define isoenzymes. Discuss in detail about various isoenzymes with its clinical applications.
2. Detail the steps of heme synthesis and its associated disorders.

II. Short notes:

(10 x 5 = 50)

1. Functions of Vitamin A.
2. Functions and deficiency manifestation of Selenium.
3. Anti oxidants.
4. Regulation of Ketogenesis.
5. Lipid storage disorders.
6. Galactosemia.
7. Inhibitors and uncouplers of oxidative phosphorylation.
8. Mega vitamin therapy.
9. Km value.
10. Gout.

III. Reasoning Out:

(4 x 5 = 20)

1. Some individual even after consuming large quantity of food are lean.
2. What is the first line of defense body adopts in ammonia detoxification.
3. Erythrocyte derives energy mainly from which pathway. Why?
4. Hyperbaric O₂ therapy is given for acute carbon monoxide poisoning.
