

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. Write in detail the Sources, RDA, Functions and Deficiency manifestations of Folic acid. Add a note on Folate antagonists.
2. Write in detail organization, reactions of Electron Transport Chain and the inherited disorders of Oxidative phosphorylation.

II. Short notes:**(10 x 5 = 50)**

1. Metabolism and significance of Low Density Lipoprotein.
2. Digestion and absorption of Lipids.
3. Disposal of Ammonia.
4. Synthesis and functions of Prostaglandins.
5. Regulation of Glycolysis.
6. Selenium.
7. Biochemical importance of Glycine.
8. Significance of Heparin.
9. Polyamines.
10. Metabolism of Red Blood Cell.

III. Reasoning Out:**(4 x 5 = 20)**

1. Glucokinase functions as Glucose sensor in blood glucose Homeostasis.
2. Enzyme -3 Deficient form of Maple Syrup Urine disease is associated with Lactic acidosis.
3. Adipose tissue is an endocrine organ.
4. Class B scavenger receptor B1 has dual role in HDL metabolism.
