

(LI 150)

APRIL 2016

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 10 = 20)

1. Discuss the metabolism of glycogen, and explain the role of calmodulin in the regulation of glycogen metabolism.
2. Describe the metabolic adaptations in diabetes mellitus.

II. Short Questions:

(8 x 5 = 40)

1. Leptin.
2. Watson Schwart's test.
3. Prostaglandins.
4. Control of Pentose Phosphate Pathway.
5. Metabolism of HDL.
6. Glycine Cleavage system.
7. Vitamin K.
8. Hyperphenylalaninemas.

III. Reasoning Out:

(4 x 5 = 20)

1. Role of Nitric oxide in the various clinical conditions.
2. Dietary fibers are good for health.
3. Bile acid is important for lipid digestion and absorption.
4. Iron absorption is decreased by cereals.

IV. Very Short Answers:

(10 x 2 = 20)

1. Functions of Zinc.
2. Markers of bone resorption.
3. Transport of Vitamin B12.
4. Hartnup disease.
5. Free radicals.
6. Formation of Vitamin D₃.
7. Carboxypeptidases.
8. Proteosomes.
9. Tay-Sachs disease.
10. Lipoprotein lipase.
