

M.D. DEGREE EXAMINATION**BRANCH XIII – BIOCHEMISTRY****PAPER IV – CLINICAL BIOCHEMISTRY, HUMAN NUTRITION,
ENDOCRINOLOGY, IMMUNOLOGY AND RECENT ADVANCES IN
BIOCHEMISTRY***Q.P. Code: 202046***Time: Three Hours****Maximum: 100 Marks****I. Essay Questions:****(2 x 15 = 30)**

1. What are the hormones acting on Calcium homeostasis? How do they act in the regulation of serum Calcium? Add a note on the investigations in hypocalcemia and hypercalcemia.
2. Write an essay on Biochemical investigations for a case of Hepatocellular Carcinoma?

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

1. Phage display.
2. Antenatal screening.
3. Synthetic nucleotide analogues.
4. Immunoglobulins.
5. Fortification of food.
6. Cytokines.
7. Biochemical functions of Placenta.
8. Clinical manifestations of Peroxisomal dysfunction.
9. Serum Lipid profile.
10. Gastro intestinal hormones.

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

1. In MODY HbA1c is normal.
2. In Glucose metabolism Substrate cycles are not futile cycles.
3. Pompe's disease infantile form is associated with failure to thrive.
4. Benzoate is used in treatment of Urea cycle defects.
