

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. Discuss in detail the synthesis, regulation, mechanism of action and functions of Thyroid Hormones. Add a note on laboratory evaluation of Hypothyroidism.
2. Define Tumor markers. Discuss in detail about carbohydrate marker, oncofetal antigen, receptors and their clinical applications.

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

1. Metabolic changes in Type 2 Diabetes Mellitus.
2. Tests to assess the tubular functions of Kidney.
3. Laboratory diagnosis of Myocardial infarction.
4. Secondary Hyperparathyroidism.
5. Neonatal Screening.
6. Hypomagnesemia.
7. Markers of Bone Resorption.
8. SIADH.
9. Paraproteinemias.
10. Addison's disease.

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

1. Point mutation results in Malignant Hyperthermia.
2. Digitalis is a Positive Inotropic agent.
3. Anti – oxidant can be Pro-oxidant.
4. Epigenetic mechanisms involved in cancer.
