(LI 151) APRIL 2016 **Sub. Code:2046**

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 10 = 20)**

1. Discuss briefly the laboratory assessment of chronic renal failure.
2. Describe biochemical basis of senile and differentiate post menopausal Osteoporosis with the specific bio-markers.

II. Short Questions: **(8 x 5 = 40)**

1. Metabolic alkalosis.
2. Hyponatremia.
3. Prostate specific antigen.
4. Body Mass Index.
5. Mechanism of action and catabolism of Thyroid hormones.
6. Cyclic AMP.
7. Delta bilirubin and its clinical significance.
8. Cytochrome P 450.

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

1. Carbonic anhydrase inhibitors cause normal anion gap metabolic acidosis.
2. While correcting diabetic ketoacidosis, hypokalemia may occur.
3. Paresthesia in respiratory alkalosis.
4. Alpha-1 anti trypsin deficiency is produced in nephrotic syndrome.

IV. Very Short Answers: **(10 x 2 = 20)**

1. Synthesis of cortisol.
2. Endorphins.
3. Fractional excretion of Sodium.
4. Macroamylasemia.
5. Schilling test.
6. Gamma Glutamyl transferase.
7. Xanthomas.
8. C reactive protein.
9. Urine preservatives.
10. Role of Vitamin E in hemolytic anemia.

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