FACULTY OF SCIENCE
M. Sc. II – Semester Examination, May / June 2018

Subject : Biochemistry
Paper – IV
Endocrinology and Metabolic Disorders

Time : 3 Hours
Max. Marks: 80

Note : Answer all questions from Part–A and Part–B. Each question carries 4 marks in Part–A and 12 marks in Part – B.

PART – A (8 x 4 = 32 Marks)
(Short Answer Type)

1. Prolactin.
2. Testosterone and estradiol.
3. Contraception.
4. Stress.
5. Diabetes.
6. Hyperphenylalaninemia.
8. Gout.

PART – B (4 x 12 = 48 Marks)
(Essay Answer Type)

9. (a) Write an essay on mechanism of action of peptide hormones and receptors.
   OR
   (b) Give the chemistry, synthesis and disorders of thyroid hormones.

10. (a) Describe endocrine regulation of growth. Add a note on regulatory pathways.
    OR
    (b) Describe in detail calcium homeostasis. Add a note on adipocyte cytokines.

11. (a) Give an account of hemoglobinopathies and thalassemia.
    OR
    (b) Write short notes on: (i) Disorders of tyrosine metabolism (ii) Maple syrup urine disease.

12. (a) Enumerate the clinical features, genetics of Downs and Turner's syndrome.
    OR
    (b) Write short notes on (i) Lesch-Nyhan syndrome (ii) Fabry disease.

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