QP Code: 103383 Reg. No......

First Year M.Sc. MLT Degree Examinations – September 2016 (Biochemistry)

PAPER - III VITAMINS AND HORMONES

Time: 3 hrs. Max. marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays: (10x10 = 100)

- 1. Discuss thiamine with reference to the following: sources, coenzyme form and mention two reactions, daily requirements and deficiency manifestations.
- 2. Classify hormones and explain the mechanism of action of steroid hormones.
- 3. Explain vitamin K cycle and the role of vitamin k in coagulation..
- 4. Enumerate the disorders of the thyroid. Mention the diagnostic criteria to evaluate a case of hypothyroidism. Add a note on anti –TPO (Antibodies to thyroid peroxidase).
- 5. Describe the components and mechanism of action of G protein receptor system.
- 6. Name any three pancreatic hormones and its functions. Discuss the mechanism of action of insulin.
- 7. Discuss briefly the sources, different co-enzyme forms, daily requirements and deficiency symptoms of vitamin B₁₂.
- 8. Discuss briefly the pro-vitamin and active forms, mechanism of action, daily requirements and deficiency symptoms of vitamin D.
- 9. Mention any two methods for the quantitative estimation of cortisol. Discuss the interpretation of the diurnal serum cortisol levels and ACTH stimulation test
- 10. Discuss Wald's visual cycle and riboflavin
