

**First Year M.Sc. MLT Degree Examinations November 2017
(Biochemistry)**

PAPER – III VITAMINS AND HORMONES

Time: 3 hrs.

Max. marks: 100

- *Answer all questions*
- *Draw diagrams wherever necessary*

Essays:

(10x10 = 100)

1. Classify vitamins. Discuss the chemistry, biological importance, deficiency manifestations and methods of estimation of vitamin C.
2. Discuss the formation, biochemical role and deficiency manifestations of vitamin D
3. Describe the factors that regulate receptor activity.
4. Discuss the synthesis of thyroid hormones. Enumerate the tests that assess the metabolic role of thyroid hormones.
5. Describe the co-enzyme role of pyridoxine and the conditions leading to its deficiency.
6. Discuss the formation of cortisol. What are the tests done in a patient with Cushing's syndrome
7. Explain the vitamin K cycle. How does warfarin interfere with vitamin K
8. Classify second messengers and discuss their mechanism of action.
9. Folate antagonists.
10. Enumerate the tests to assess thiamine deficiency.
