

QP Code: 103383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations July 2025
(Biochemistry)**

Paper III - Vitamins and Hormones

Time: 3 hrs.

Max. marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays:

(10x10=100)

1. Classify vitamins. Discuss the chemistry, biological importance and deficiency manifestations of Vitamin D. (1+1+4+4)
2. Explain in detail the mechanism of action of steroid hormones with examples.
3. Describe the chemistry, biological functions and deficiency manifestations of Niacin. (2+4+4)
4. Describe the chemistry, biosynthesis, biochemical and physiological functions of thyroid hormones. (2+2+6)
5. What are the active forms of thiamine, pyridoxine and Vitamin B₁₂. Describe their metabolic role. (3+7)
6. Discuss the biological functions and disorders related to male sex hormones. (5+5)
7. Explain Vitamin K cycle. How does warfarin interfere with Vitamin K activity. (5+5)
8. Name two pancreatic hormones and describe in detail their biological functions. (2+8)
9. Describe the chemistry, biochemical functions and deficiency manifestations of Ascorbic acid. (2+4+4)
10. Name the posterior pituitary hormones. Describe in detail the biological functions and disorders associated with the deficiency of any one of them. (2+4+4)
