

QP Code: 103383

Reg. No.....

**First Year M.Sc. MLT Degree Supplementary Examinations January 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. Discuss the formation, biochemical functions and methods of estimation of Vitamin D. (2+4+4)
2. Describe the coenzyme role of folic acid. Add a note on folate antagonists. (6+4)
3. Explain in detail the mechanism of action of G-protein coupled receptor system.
4. Enumerate the anterior pituitary hormones. Discuss the biological role of Growth hormone with its associated disorders. (2+4+4)
5. Elaborate on biological functions and disorders related to parathyroid hormone. (5+5)
6. Name the catecholamines. Discuss in detail their formation and biochemical functions. (1+4+5)
7. Discuss the clinical significance and methods of estimation of serum Thyroid Stimulating Hormone (TSH) (5+5)
8. Outline the synthesis of testosterone. Add a note on abnormalities related to male sex hormones. (5+5)
9. Discuss the laboratory investigations to be done in a case of diabetes mellitus.
10. Describe various methods of serum cortisol estimation. Add a note on its clinical significance. (5+5)

\*\*\*\*\*