

QP Code: 103383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations**  
**August 2024**  
**(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. Enumerate the biochemical functions of vitamin A. Explain in detail the role of Vitamin A in vision. Add a note on deficiency manifestations of Vitamin A (2+5+3)
2. Classify hormones based on their mechanism of action. Write in detail the mechanism of action of steroid hormones. (5+5)
3. Describe the synthesis and secretion of thyroid hormones. Add a note on its regulation. (6+4)
4. Discuss the absorption, co-enzyme role and methods of estimation of Vitamin B<sub>12</sub>. (2+5+3)
5. Name the posterior pituitary hormones. Explain in detail the biological functions and clinical significance of any one of them (1+5+4)
6. Give a detailed account of adrenal function tests.
7. Discuss the clinical significance and methods of estimation of serum prolactin. (5+5)
8. Elaborate on the biological functions and clinical significance of progesterone. (5+5)
9. Explain in detail the role of hormones involved in calcium homeostasis.
10. Explain the mechanism of action and biochemical role of insulin. (5+5)

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