

QP Code: 103383

Reg. No.....

**First Year M.Sc. MLT Degree Regular/Supplementary Examinations  
October 2023  
(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. Explain the mechanism of action of steroid hormones with examples.
2. Discuss in detail the metabolic inter relationships of one carbon transfer.
3. Discuss the chemistry, biochemical role and deficiency manifestations of vitamin A. (3+3+4)
4. Describe the chemistry, mechanism of action and biochemical role of insulin. Add a note on insulin resistance. (2+3+3+2)
5. Describe in detail the chemistry, synthesis and biochemical functions of niacin. (3+3+4)
6. Describe the synthesis and functions of sex hormones. Add a note on the hypothalamo pituitary gonadal axis.
7. Classify hormones based on their mechanism of action.
8. Describe the chemistry, synthesis and biochemical role of adrenal medullary hormones.
9. Describe the role of renin - angiotensin in regulating blood pressure.
10. Classify G protein coupled receptor family and their mechanism of action.

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