

QP Code : 103383

Reg . No.....

**First Year M.Sc. MLT Degree Examinations – November 2015  
(Biochemistry)**

PAPER – III VITAMINS AND HORMONES

**Time : 3 hrs.**

**Max. marks : 100**

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

**Essays:**

**(10x10 = 100)**

1. Discuss niacin with reference to the following: sources, co-enzyme form, daily requirements and deficiency manifestations.
2. Explain the term second messenger and mention two examples. Explain the mechanism of action of any hormone with cAMP as its second messenger.
3. What are anti vitamins. Explain the role of vitamin E and glutathione peroxidase , together as anti oxidants.
4. Enumerate the disorders of the adrenal gland. Mention the lab. diagnostic criteria to evaluate a case of Addison's disease and Cushing's syndrome.
5. Discuss briefly the coenzyme forms and mention two reactions of pyridoxine & pantothenic acid. Add a note on pyridoxine deficiency .
6. Name any three gonadal hormones and its functions. Discuss the mechanism of the regulation of the hormone secretion of any one of them.
7. Discuss chemistry, biological functions and disorders of parathyroid hormone and aldosterone
8. Explain briefly the different forms, sources, daily requirements and deficiency symptoms of vitamin A.
9. Explain the synthesis, activation and actions of vitamin D<sub>3</sub>
10. Discuss cretinism and V M A ( vanillyl mandelic acid)

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