



QP CODE: 25022403



Reg No :

Name :

M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

Third Semester

M.Sc BIOCHEMISTRY

CORE - BC010303 - MOLECULAR ENDOCRINOLOGY

2019 ADMISSION ONWARDS

EB068D03

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is the importance of inositol triphosphates?
2. Explain the general features of nuclear receptor ligands.
3. Hypersecretion of growth hormone after the fusion of epiphysis with shaft causes acromegaly. Justify.
4. Recall the disorder caused due to the hyposecretion of ADH.
5. Distinguish between T4 & TSH
6. Write about the type of receptor of thyroid hormones.
7. What are the three tissue zones of adrenal cortex? What are the hormones released by these tissue zones?
8. Explain the pathophysiology of congenital adrenal hyperplasia.
9. What is C -peptide?
10. What is atrial natriuretic peptide(ANP)?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain the cell surface hormone receptors.
12. Show the role of TSH, ACTH, FSH, LH and prolactin in our body.
13. Describe the biological actions of PTH & calcitonin.





14. Evaluate the role of calcitriol in calcium metabolism.
15. Androgens synthesized from adrenal gland is not important in primary sexual characteristics. Comment on this statement.
16. What are the physiological changes that accompany the release of the catecholamines?
17. Discuss and compare the mechanism of action of testosterone and estrogen.
18. Explain the hormone produced by α - cells of islets of langerhans.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain the important chemical classes of hormones.
20. Elaborate the source of secretion, synthesis, action and regulation of growth hormone.
21. Elaborate on the biological role of thyroid hormones.
22. Explain the physiological role of gastrointestinal hormones.

(2×5=10 weightage)

