



QP CODE: 25047430



Reg No : .....

Name : .....

**M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025**  
**Third Semester**  
M Sc BIOCHEMISTRY  
**Core Course - BC010303 - MOLECULAR ENDOCRINOLOGY**  
2019 ADMISSION ONWARDS  
BE9B5AD6

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight 1 each.*

1. Give the binding properties of cell surface receptors.
2. Explain the properties of thyroid hormone receptors.
3. What is the role of hypothalamo hypophyseal portal system in the transport of pituitary hormones?
4. Name the disorder that may occur due to the hypersecretion of posterior pituitary hormone.
5. What is thyroglobulin? Give its importance.
6. Discuss the mode of action of thyroid hormones.
7. Write a short note on Angiotensin.
8. The testes are classified as both endocrine glands and reproductive organs. Justify.
9. Discuss insulin secretion.
10. What are the different enteroendocrine cells of gastrointestinal tract?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight 2 each.*

11. Give the structure and general features of G-protein linked receptors.
12. Discuss the disorders caused due to the hyperactivity of growth hormone.
13. Discuss thyroid gland dysfunction and related issues.
14. What are the biological functions of parathormone and calcitonin?
15. If innervation to the adrenal medulla was disrupted, what would be the physiological outcome?





16. Explain the etiology and pathophysiology of any two diseases arising from the abnormal secretion of adrenal hormones.
17. Describe the events of the follicular and luteal phases of the ovarian cycle. Correlate the phases of the uterine cycle with those of the ovarian cycle.
18. Discuss about the hormone produced by  $\beta$ - cells of islets of langerhans.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Write notes on: a) Cell surface hormone receptors b) Second messengers.
20. Examine the action of growth hormone.
21. Explain how the parathormone, calcitonin and calcitriol maintains the normal blood calcium level.
22. Explain the hormones secreted by liver, kidney and heart.

(2×5=10 weightage)

