

Time: 3 Hrs.

[Max. Marks: 100]

PHYSIOLOGY - II (RS2 & RS3)**QP Code: 1078**

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

LONG ESSAY**2 X 10 = 20 Marks**

1. Describe the parts, connections and functions of cerebellum.
2. Describe the ovarian and endometrial changes during menstrual cycle. Explain their hormonal regulation.

SHORT ESSAY**10 X 5 = 50 Marks**

3. Role of hypothalamus in regulation of food intake
4. Components and functions of limbic system
5. Role of cortisol in stressful situation
6. Explain the action of insulin on carbohydrate metabolism.
7. Steps in thyroid hormone synthesis and their clinical applications
8. Mechanisms involved in accommodation reflex
9. Describe taste pathway.
10. Describe neuromuscular transmission in skeletal muscle.
11. Role of calcium in skeletal muscle contraction
12. What is core and shell temperature? Explain heat loss mechanisms.

SHORT ANSWERS**10 X 3 = 30 Marks**

13. Write the role of epididymis, seminal vesicle and prostate in reproduction.
14. Functions of CSF
15. Write differences between cardiac and smooth muscle.
16. Draw a sarcomere in relaxed and contracted state.
17. Three differences between superficial and deep reflexes
18. Functions, absorption of Aqueous humor and its applied aspect
19. Attenuation reflex and impedance matching
20. Draw a visual pathway.
21. Mention three hormones regulating blood calcium levels. State their mechanism of actions.
22. What is an aldosterone escape?

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