



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 pain pathway. Write important features of fast and slow pain.
2. Describe the molecular basis of skeletal muscle contraction. Add a note on isometric contraction.

**SHORT ESSAY**

**10 X 5 = 50 Marks**

3. Cushing's syndrome – clinical features and their physiological basis
4. Hypothyroidism – clinical features and their physiological basis
5. Action of parathormone
6. Thalamic syndrome
7. Regulation of water balance by hypothalamus
8. Enumerate effects of sympathetic stimulation.
9. Explain endometrial changes during menstrual cycle.
10. Describe the actions of testosterone in fetal and puberty stage.
11. Refractive errors and their correction
12. Mechanisms activated in body with exposure to heat. What is heat stroke?

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

13. EEG changes in Non REM sleep
14. Write steps showing fate of acetyl choline at neuromuscular junction.
15. Important features of EPSP
16. Functions and clinical significance of hCG
17. Differences between diabetes mellitus and diabetes insipidus
18. Write three actions of glucagon.
19. Actions of progesterone on fallopian tube, myometrium and mammary glands
20. Explain 3 mechanisms involved in dark adaptation.
21. Explain in brief impedance matching.
22. Draw olfactory pathway.

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