

Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination – JULY 2015

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

- 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
 - 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
 - J. 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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