

Rajiv Gandhi University of Health Sciences, Karnataka

MBBS (Phase - I) Degree Examination - DEC-2014

Time: Three Hours

Max. Marks: 100 Marks

PHYSIOLOGY - Paper II (Revised Scheme) O.P. CODE: 1054

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

LONG ESSAYS

 $2 \times 9 = 18 \text{ Marks}$

- Describe the physiological actions of insulin on carbohydrate metabolism. List the features
 of diabetes mellitus.
- 2. Describe the internal connections and functions of cerebellum.

SHORT ESSAYS $10 \times 5 = 50 \text{ Marks}$

- 3. Describe the physiological actions of vitamin D.
- 4. Describe the maternal changes in cardiovascular system during pregnancy.
- 5. Describe the blood-testis barrier.
- 6. Define EPSP and IPSP. Describe their features.
- 7. Describe the mechanisms and features of REM sleep.
- 8. Describe the mechanism of decerebrate rigidity.
- 9. Describe the genesis of photoreceptor potential in rods.
- 10. Describe the pathway of taste.
- 11. Explain the ionic basis of different phases of nerve action potential.
- 12. Explain the strength duration curve.

SHORT ANSWERS 16 x 2 = 32 Marks

- 13. Explain the aldosterone escape phenomenon.
- 14. Explain the cause of tachycardia in hyperthyroidism.
- 15. List the features of a pituitary dwarf.
- 16. With an example, explain Paracrine signaling of hormone.
- 17. Explain the physiological basis of lactational amenorrhea.
- 18. List four functions of oestrogen.
- 19. List four properties of a synapse.
- 20. List the features of Kluver-Bucy syndrome.
- 21. What are types of deafness? Give an example for each.
- 22. Name the receptors of vision. Give their functions.
- 23. What is Saltatory conduction? What is its significance?
- 24. Explain the physiological basis of a drug for treatment of myasthenia gravis.
- 25. List the differences between isotonic and isometric contraction.
- 26. What is a motor unit?
- 27. List four changes seen on exposure to cold environment.
- 28. Write four functions of skin.
