

# Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - February 2007

Time : 3 Hrs.

[Max. Marks : 100]

## PHYSIOLOGY - PAPER II (Revised Scheme)

### QP Code: 1054

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

#### LONG ESSAY

**2 X 9 = 18 Marks**

1. Describe the connections and functions of basal ganglia and discuss the patho-physiology of the characteristic features of the Parkinsonian syndrome.
2. Discuss the hypothalamo-hypophyseal control of Ovulation and Spermatogenesis

#### SHORT ESSAY

**10 X 5 = 50 Marks**

3. Contents & functions of middle ear
4. Enumerate structures included in the limbic system and their functions
5. Describe the different types of inhibition at the synapse
6. Describe the mechanism by which hormones regulate Growth
7. Distinguish between the functions of rods and cones. Explain how rhodopsin-retinene cycle
8. Describe the taste pathway
9. Describe the sarco-tubular system. Explain the excitation contraction coupling the skeletal muscle
10. Give an account of action potential in the nerve
11. Describe the ovarian changes during a menstrual cycle
12. Discuss the neuroendocrinal basis for the use of oral contraceptives

#### SHORT ANSWERS

**16 X 2 = 32 Marks**

13. Draw a cross section of the spinal cord and label the prominent structures
14. Brown Sequard syndrome
15. Functions of prefrontal lobe
16. Four effects of aldosterone
17. Four effects of parathormone
18. Diabetes mellitus
19. Mechanism of actions of polypeptide hormones
20. Hormones affecting lactation
21. Impedance matching in middle ear
22. Color blindness
23. Ionic basis of resting membrane potential
24. Spinal shock
25. Describe the functions of Corpus Luteum
26. Adrenogenital syndrome
27. Blood-testis barrier
28. Role of sweating in body temperature regulation

\* \* \* \* \*