Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - January 2009

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 synthesis, regulation and functions of thyroid hormone
2. Describe the various nuclei and functions of hypothalamus. Describe its role in feeding and satiety

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

3. Describe the effects of hemisection of the spinal cord
4. Describe the pathway of fine touch
5. Describe the maternal changes during pregnancy
6. Describe the role of FSH and LH in regulation of ovarian cycle
7. Describe the regulation and functions of Glucagon
8. Describe the mechanism of smooth muscle contraction
9. Describe the oxygen debt mechanism
10. Describe the mechanism of dark and light adaptation
11. Describe the sequence of events in phototransduction in Rods and Cones
12. Explain the Ionic basis of photoreceptor potentials

SHORT ANSWERS **16 X 2 = 32 Marks**

13. List the functions of corpus luteum
14. Explain the role of parathyroid hormone in calcium metabolism
15. Give typical findings in the adrenogenital syndrome in a post pubertal woman
16. Describe typical findings in acromegaly
17. Describe the innervation and movements of extra ocular muscles
18. Enumerate the functions of semicircular canals, utricle and saccule
19. Draw and label basic neural circuits in olfactory bulb
20. Describe thermoregulatory responses activated by exposure to heat
21. Describe the distribution and functions of eccrine sweat glands
22. Draw and label structure and innervation of muscle spindle
23. Explain the doctrine of specific nerve energies
24. Explain reciprocal innervation
25. Explain the functions of flocculonodular lobe
26. Draw and label action potential in a neuron
27. Differentiate between isotonic and isometric contraction
28. Enumerate the properties of smooth muscle