

# Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - June/July 2009

Time: 3 Hrs.

[Max. Marks: 90]

## PHYSIOLOGY - PAPER I (Old Scheme)

### QP Code: 1003

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

#### LONG ESSAY

**2 X 10 = 20 Marks**

1. Where are the chemoreceptors located? Explain the chemical regulation of respiration
2. Discuss the mechanism of concentration of urine

#### SHORT ESSAY

**10 X 5 = 50 Marks**

3. Explain the mechanism of HCl secretion with the help of a diagram
4. List **any four** properties of cardiac muscle. Explain **any one** property
5. What is respiratory distress syndrome? Explain the mechanism
6. Enumerate the factors regulating venous return. Explain the role of **any one factor** in detail
7. Explain the peculiarities of coronary circulation
8. Draw the diagram of a cardiac pace maker potential and explain the ionic basis
9. Explain the role of enteric nervous system in the gut
10. Explain the physiological basis of artificial kidney
11. Explain biofeedback mechanism with an example
12. What is immunity? Name the types and explain **any one** in detail

#### SHORT ANSWERS

**10 X 2 = 20 Marks**

13. Enumerate functions of leucocytes
14. Enumerate any four functions of capillary circulation
15. Explain the significance of ventilation / perfusion ratio
16. What is "Cystometrogram"? Name the physical law.
17. What is renal threshold? What is the renal plasma threshold for glucose?
18. What is dietary fibre
19. List the effects of mis matched blood transfusion
20. Explain Donnan's equilibrium
21. What is Von Wille Brand's disease?
22. List the factors that influence peripheral resistance

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