Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination - August 2006

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. Define shock. Describe stages of shock. Describe the compensatory mechanisms in compensated hypovolemic shock.
2. Describe the composition and functions of pancreatic juice. Describe the regulation of its secretion.

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

3. Describe the Na^+ - K^+ pump and Ca^+ pump with their physiological significance.
4. Define homeostasis and describe the different control systems of the body with examples.
5. What is meant by cross matching? Describe the hazards of mismatched blood transfusion.
6. Describe the stages of erythropoiesis with their characteristic features. Mention the sites where erythropoiesis occurs.
7. Describe the excitation- contraction coupling.
8. What is myasthenia gravis? Describe the physiological basis of its treatment.
9. Define glomerular filtration rate and describe the factors affecting it.
10. Describe micturition reflex. Write a note on automatic bladder.
11. Define lung compliance and describe the factors affecting it.
12. Describe oxygen dissociation curve and factors affecting it.

SHORT ANSWERS **10 X 2 = 20 Marks**

13. State the differences between simple and facilitated diffusion.
14. Name two anticoagulants with their mechanism of action.
15. Define chronaxie and rheobase.
16. State the functions of transverse tubular system.
17. Write the actions of CCK-PZ.
18. Insulin clearance test.
19. State the Poiseuille's law.
20. State the duration of each of first to fourth heart sounds.
21. Cyanosis
22. Define tidal volume and residual volume.

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