Rajiv Gandhi University of Health Sciences, Karnataka

First Phase MBBS Degree Examination – June 2013

Time: Three Hours   **Max. Marks: 100 Marks**

PHYSIOLOGY-PAPER I
(REVISED SCHEME)
QP Code: 1053

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

LONG ESSAYS   **2 x 9 = 18 Marks**

1.   Describe the various stages of Leucopoiesis
2.   Describe the physiological basis of 'irreversible shock'

SHORT ESSAYS   **10 x 5 = 50 Marks**

3.   Describe the extrinsic pathway of clotting

4.   Describe the regulation of gastric secretion

5.   Describe the mechanism of gaseous exchange in the lungs

6.   Describe the mechanism of auto regulation of renal blood flow

7.   Describe the role of chemo recepors in regulation of blood pressure

8.   Describe the role of the kidney in water balance

9.   Describe the pharyngeal stage of deglutition.

10. Describe the mechanism of sodium reabsorption in the kidney

11. Explain the effects of vagal stimulation on heart

12. Describe the characteristic features of splanchnic circulation

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

13. Draw a labeled diagram of ECG taken from Lead II.
14. Explain the principles of artificial respiration
15. How does "Muller's Manoeuvre" affect circulation?
16. Define 'timed vital capacity. Mention its significance.
17. Explain the mechanism of ventilation during quite breathing.
18. Explain the changes in blood in obstructive jaundice
19. Give the agglutinogen and agglutinin content of different blood groups of ABO System.
20. Define 'pitting edema'. Give it's physiological basis
21. Enumerate the functions of saliva.
22. Explain the actions of 'Secretin'
23. Enumerate the functions of large intestine.
24. Give the site of aborption of a) Vitamin B12 and b) Iron in the gut.
25. What is 'steatorrhea? Give it's physiological basis
26. List the functions of cell membrane.
27. Define 'facilitated diffusion'. Explain its mechanism.
28. How is a substance handled by the kidney if its 'clearance rate' is 160 ml per minute?

* * * * *