

# Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase I Degree Examination - JULY 2015

**Time: Three Hours****Max. Marks: 90 Marks**

**PHYSIOLOGY**  
**Paper I (Old Scheme)**  
**Q.P. 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 cardiac output and cardiac index. Explain various factors regulating cardiac output. Add a note on high output cardiac failure. (2+6+2)
2. Describe the neuromuscular transmission and pathophysiology of Myasthenia Gravis. Enumerate neuromuscular blocking agents. (6+2+2)

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

3. Physiological features of coronary circulation
4. Platelets
5. Deglutition reflex
6. Rh factor
7. T lymphocyte
8. Process of glomerular filtration
9. Peripheral chemoreceptors and their effect on ventilation
10. Oxyhaemoglobin dissociation curve
11. Feedback mechanisms
12. Functions of a parietal cell in a gastric gland

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

13. How absolute refractory period differs in cardiac and skeletal muscle?
14. Differences between innate and acquired immunity
15. Actions of CCKPZ
16. CO<sub>2</sub> transfer at respiratory membrane
17. Cortical versus juxtamedullary nephrons
18. Functional residual capacity – definition and significance
19. Write the differences between graded potential and action potential.
20. Define Rheobase and chronaxie.
21. Breathing reserve
22. Neural control of defaecation reflex

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