

# Rajiv Gandhi University of Health Sciences

M.B.B.S. PHASE - I Degree Examination – DECEMBER 2015

Time: 3 Hrs.

[Max. Marks: 100]

## PHYSIOLOGY - I (RS2 & RS3)

QP Code: 1077

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 cycle and describe the mechanical changes during a cardiac cycle.
2. Explain oxygen transport from the lungs to the tissues.

### SHORT ESSAY

10 X 5 = 50 Marks

3. Functions of plasma proteins
4. Describe the fate of haemoglobin following haemolysis.
5. Explain the second stage of deglutition.
6. Describe the actions of bile salts. Name the effects of bile duct obstruction.
7. Cholecystokinin – pancreozymin
8. Define glomerular filtration rate and describe the factors affecting it.
9. Sinoaortic reflex
10. QRS complex
11. Briefly describe the changes occurring during acclimatization to high altitude.
12. Explain the role of inspiratory and expiratory muscles in normal respiration.

### SHORT ANSWERS

10 X 3 = 30 Marks

13. Name the methods of measurement of cardiac output.
14. Three functions of saliva
15. Functions of collecting duct
16. Explain the role of 'Vasa recta' in renal functioning.
17. Differences between pulmonary and systemic circulation
18. Axon reflex
19. Intercellular communication
20. Physiological dead space
21. Cross matching
22. Important features of iron deficiency anaemia

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# Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase – I Degree Examination - DECEMBER 2015

Time: Three Hours

Max. Marks: 100 Marks

## Physiology – Paper II (RS2 & RS3)

**Q.P. CODE: 1078**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

### LONG ESSAYS

2 x 10 = 20 Marks

1. Describe the origin, course, termination and functions of pyramidal tract with the help of a diagram. What is hemiplegia and paraplegia?
2. Describe the source, physiological actions and regulation of secretion of thyroxine. Add a note on Myxoedema.

### SHORT ESSAYS

10 x 5 = 50 Marks

3. Functions of middle ear
4. Visual pathway and its lesions at various levels
5. Color blindness
6. Functions of insulin
7. Endometrial changes during Menstrual cycle
8. Hormones regulating lactation
9. Mechanism of skeletal muscle contraction
10. Functions of cerebellum
11. What is the cause, clinical features and treatment of Parkinsonism?
12. Functional properties of smooth muscle

### SHORT ANSWERS

10 x 3 = 30 Marks

13. Draw and label Organ of Corti.
14. List the differences between pituitary dwarf and a cretin.
15. List the features of Hypocalcemic tetany.
16. Draw and label Milk ejection reflex.
17. Wallerian degeneration
18. Draw and label taste pathway.
19. List the features of Thalamic syndrome.
20. List three differences between REM sleep and Slow wave sleep.
21. What is Renshaw cell inhibition?
22. What is Quantal summation?

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