

# Rajiv Gandhi University of Health Sciences, Karnataka

**I Year B.Sc. Allied Health Sciences Degree Examination – 27-Oct-2025**

**Time: Three Hours**

**Max. Marks: 80**

## **PHYSIOLOGY (RS-3)**

(**RS-3** – Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology

**RS-2** – Operation Theatre Technology, Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Anaesthesia Technology and Neurosciences Technology)

**Q.P. CODE: 3152**

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

### **SHORT ESSAYS (Answer any Eight)**

**8 x 5 = 40 Marks**

1. Trace the origin, course, termination and functions of pathway for fine touch
2. Explain the ventricular events of cardiac cycle in detail
3. Illustrate the stages of erythropoiesis. Add a note on the factors regulating erythropoiesis
4. Explain the mechanism of coagulation
5. Explain in detail test for pregnancy
6. Explain defecation reflex in detail
7. Explain how body temperature is regulated in a cold climate
8. Define a Sarcomere. Explain excitation contraction coupling in detail
9. Functions of kidneys
10. Explain the neural regulation of respiration with the help of diagram

### **SHORT ANSWERS (Answer any Ten)**

**10 x 3 = 30 Marks**

11. Write any three functions of thalamus
12. Write the functions of large intestine
13. Write the functions of surfactants
14. Write three differences between Dwarfism and Cretinism
15. What is Cushing's syndrome?
16. Define shock. Add a note on hypovolemic shock
17. Explain upper motor neuron lesion and lower motor neuron lesion
18. Explain micturition reflex
19. Define hypoxia and any three types
20. Write any three functions of sympathetic nervous system
21. Landsteiner's law of blood grouping
22. Name the placental hormones. Write the functions of each

### **TO THE POINT ANSWERS (Answer any Five)**

**5 x 2 = 10 Marks**

23. What is Hemophilia?
24. What is myasthenia gravis?
25. What is the normal serum calcium level in plasma?
26. Write any two functions of basal ganglia
27. What are the main features of gigantism?
28. What is haemostasis?
29. Write any two functions of skin

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