

# Rajiv Gandhi University of Health Sciences, Karnataka

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

**Time: Three Hours**

**Max. Marks: 100 Marks**

## **PHYSIOLOGY**

**(RS-3** – B.Sc Cardiac Care Technology, Perfusion Technology, Renal Dialysis Technology, Respiratory Care Technology, Neuro Sciences Technology, Anesthesia Technology, Operation Theatre Technology, Emergency and Trauma Care Technology)

**(RS-4** – B.Sc Medical Laboratory Technology, Medical Imaging Technology and Radiotherapy Technology) Anesthesia and Operation Theatre Technology

**Q.P. CODE: 3262**

**(QP contains two pages)**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

### **LONG ESSAYS (Second Question Choice)**

**2 x 10 = 20 Marks**

1. Classify white blood cells. Describe their morphological features with diagrams and list their functions.
2. What are the physiological effects of growth hormones? Describe the effects excess and deficiency of growth hormone.

**OR**

Define Blood Pressure. Explain regulation of blood pressure.

### **SHORT ESSAYS (Question No 5 & 10 choice)**

**10 x 5 = 50 Marks**

3. What is the chemical nature of surfactant? Explain its role as pulmonary functions.
4. Describe the endometrial and hormonal changes during menstrual cycle.
5. Discuss the phases of ventricular systole and diastole in cardiac cycle.

**OR**

Trace the pathway for pain sensation.

6. Define GFR. What is the normal value of GFR? What are the factors that influence GFR?
7. Trace the taste pathway.
8. Explain Lymph formation. Enumerate the functions of lymph.
9. Cause and features of Parkinson's disease.
10. Name the hormones secreted by the Islets of Langerhans. Describe any three physiological actions of insulin.

**OR**

Functions of cerebellum.

11. With the help of a diagram, briefly describe the defecation reflex.
12. Describe the body mechanisms by which it adjusts cold environment.

### **SHORT ANSWER (Question No 15 & 20 choice)**

**10 x 3 = 30 Marks**

13. Functions of plasma proteins.
14. Enumerate the basis of classification of nerve fibers.
15. Enumerate the functions of bile salts.

**OR**

Define Menopause. List three characteristic features of menopause.

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16. Define Shock and enumerate the types of shock.
17. What is Cyanosis? What are its types?
18. What is referred pain? Give an example.
19. Describe Cushing's syndrome.
20. Define urea clearance. What are its normal values?

**OR**

Define a Sarcomere with the help of a diagram.

21. Name any two GI hormones. List any one function of each.
22. Name the components of reflex arc.

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