

# Rajiv Gandhi University of Health Sciences, Karnataka

**I Semester B.O.T Degree Examination – 30-  
May-2024**

**Time: Three Hours**

**Max. Marks: 100 Marks**

## **Human Physiology – I (RS)**

**Q.P. CODE: 3412**

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

### **LONG ESSAYS (Answer any Two)**

**2 x 10 = 20 Marks**

1. Define Cardiac output and related normal values. Discuss factors affecting cardiac output
2. Discuss structure and function of cell nucleus
3. Discuss structure of nephron

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

**10 x 5 = 50 Marks**

4. What is necrosis? Discuss its causes and process
5. Discuss characteristics and causes of first heart sound
6. Composition and functions of cell membrane
7. Discuss functions of blood
8. Discuss compliance of lungs with respect to normal values and types
9. Functions of saliva
10. Define Hemorrhage. Discuss its types and causes
11. What is GFR? Discuss factors affecting GFR.
12. Define dead space and discuss its types
13. Functions of liver
14. Discuss Plasmapheresis with respect to its clinical significance and uses
15. What is ECG? Enumerate waves of normal ECG with its causes.

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

**10 x 3 = 30 Marks**

16. What is a cell? Discuss general characteristics of cell.
17. Draw a neat and labelled diagram showing section of heart
18. Steatorrhea
19. Define arterial blood pressure and state the related normal values
20. Classify Anaemia
21. Functions of Platelets
22. Define vital capacity, functional residual capacity and total lung capacity
23. Crohn's Disease
24. Draw a neat and labelled diagram showing events of urine formation
25. Discuss properties of WBCs
26. Atrial flutter
27. Discuss velocity of blood flow and factors maintaining it

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