

# Rajiv Gandhi University of Health Sciences, Karnataka

**I Year B.P.T. Degree Examination - 04-Mar-2021**

**Time: Three Hours**

**Max. Marks: 100 Marks**

## **HUMAN PHYSIOLOGY (RS5)**

**Q.P. CODE: 2732**

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. Define arterial blood pressure. Give the normal value. Explain the mechanism of long-term regulation of blood pressure.
2. Define and draw a labelled diagram of sarcomere. Explain excitation-contraction coupling in detail.

**OR**

With the help of a neat diagram, describe oxygen-haemoglobin dissociation curve. Explain any four factors that shift the curve to right.

### **SHORT ESSAYS (Question No 3 & 12 choice)**

**10 x 5 = 50 Marks**

3. Name the types of Deafness and write the tests to differentiate them.

**OR**

Define and classify anemia. Explain the causes and symptoms of Megaloblastic anemia.

4. Describe the events in neuromuscular transmission.
5. With the help of flow chart, explain defecation reflex.
6. Draw a labelled diagram of normal Electrocardiogram and explain the basis of each wave.
7. Draw and explain normal spirogram.
8. Write the circulation and functions of cerebrospinal fluid.
9. What are the different phases of gastric juice secretion? Explain any one phase.
10. What is a negative feedback mechanism? Explain with an example.
11. Differentiate T-lymphocytes from B-lymphocytes
12. Outline the functions of cerebellum

**OR**

Trace the pain pathway. Define referred pain.

### **SHORT ANSWERS**

**10 x 3 = 30 Marks**

13. List the plasma proteins with one function each.
14. What are anticoagulants? Write the mechanism of action of Heparin.
15. Write a note on Facilitated diffusion with example.
16. List the functions of Bile.
17. Define and state the cause of Tetany.
18. Draw and label Juxtaglomerular apparatus.
19. What is Haemophilia? How is it caused?
20. What is Presbyopia? How is it corrected?
21. What is Acromegaly? Write its symptoms.
22. What are the factors influencing GFR?