

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination – 06-May-2026

Time: Three Hours

Max. Marks: 100 Marks

HUMAN PHYSIOLOGY (RS - 5)

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 cardiac cycle. Discuss the phases during ventricular systole and diastole.
2. Explain the role of a triad in skeletal muscle contraction. Add a note on Myasthenia gravis.

Or

Enumerate the descending pathway. Trace pyramidal tracts, write its functions. Briefly describe the functions of cerebellum.

SHORT ESSAYS (Question No.3 & 12 choice)

10 x 5 = 50 Marks

3. Draw and label the oxygen dissociation curve. Explain the factors that shifts it to the right and left.

Or

Define Chronaxie and Rheobase. Draw a diagram of strength-duration curve.

4. Describe the functions of thrombocytes. What is the normal value?
5. Describe the composition and functions of saliva.
6. Define micturition. With a labeled diagram explain the micturition reflex.
7. Discuss the role of parathyroid hormone, calcitonin and 1,25 DHCC on blood calcium concentration.
8. Differentiate between fast pain and slow pain.
9. Tabulate the differences between the I and II heart sounds.
10. Define secondary sexual characteristics. Enumerate the secondary sexual characteristics in a female.
11. Draw and label the normal ECG waves. Write the cause of each wave. List the uses of ECG.
12. Outline the mechanism of neuro-muscular transmission.

Or

Explain accommodation reflex.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Define cardiac cycle.
14. What is a triad? Draw a labelled diagram of a triad.
15. Define Borh's effect.
16. State the Landsteiner's law.
17. Define myopia and Hypermetropia.
18. Give the normal value of PCV and ESR.
19. Name neuro-endocrine hormones.
20. What is ovulation? Write its hormonal basis.
21. Define Homeostasis.
22. What is artificial kidney?
