

Rajiv Gandhi University of Health Sciences, Karnataka
First Year Bachelor in Prosthetics and Orthotics Degree Examination – 27-Oct-2025

Time: Three Hours

Max. Marks: 80 Marks

PHYSIOLOGY – (RS3)

Q.P. CODE: 2962

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

ESSAYS TYPE (answer any Two)

2 x 10 = 20 Marks

1. Describe the structure, functions of the neuron and the properties of nerve fibers in detail.
2. Describe the mechanics of respiration.
3. Define Neuro Muscular Junction (NMJ), draw a neat labeled diagram of it and explain the transmission of impulse across it. Add a note on myasthenia gravis.

SHORT ESSAYS TYPE (answer any Six)

6 X 5 = 30 Marks

4. Define action potential and with a help of a neat labeled diagram explain its ionic basis
5. Describe the conducting system of the heart.
6. Draw a neat labeled diagram of a cell and explain its organelles
7. Describe the action of insulin and add a note on symptoms of diabetes mellitus
8. Differentiate the RBC and WBC based on their functions
9. Describe the stages of a complete section of the spinal cord.
10. Write about the Blood brain barrier.
11. Describe the intrinsic mechanism of coagulation.

SHORT ANSWERS TYPE (answer any Ten)

10 x 3 = 30 Marks

12. List the Descending tracts
13. Draw a neat labeled diagram of a reflex arc.
14. Define cardiac output and cardiac index and give its normal value.
15. Axon reflex.
16. Draw a neat labeled diagram of an ECG.
17. State Landsteiner's law.
18. Neuroglia and its types.
19. Name the muscles of respiration.
20. Features of Brown Sequard syndrome.
21. Define RMP and its ionic basis.
22. Draw a neat labeled diagram of a reflex arc.
23. List the different body fluid compartments.
