

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.P.T. Degree Examination – 18-May-2023**

**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 ventricular phases with the help of a graph.
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 and add a note on Hemiplegia.

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

**10 x 5 = 50 Marks**

3. Define stroke volume. Explain the factors affecting venous return.

**Or**

Define Action Potential. Discuss the ionic basis of Action Potential.

4. Describe the functions of bile. What are Cholegogues?
5. Describe the stages of Erythropoiesis. With a flow chart outline the factors regulating it.
6. Describe the role of collecting duct loop of henle and vasa recta in counter current mechanism.
7. Explain the mechanism of spermatogenesis. List three factors influencing it.
8. Define hypoxia. Tabulate the features of different types of hypoxias giving examples for each.
9. Describe the action of insulin on target cells. Add a note on Diabetes Mellitus.
10. Trace the visual pathway. Explain the effects of lesion at different levels of the pathway.
11. Briefly outline the structure of Juxta glomerular apparatus and its functions.
12. Discuss any five properties of synapse.

**Or**

With the help of flowchart outline the chemical regulation of respiration.

**SHORT ANSWERS**

**10 x 3 = 30 Marks**

13. What is a motor unit?
14. Define Haldane effect.
15. Define Homeostasis
16. Name the GI hormones
17. What is thrombocytopenic purpura?
18. Trace the pathway for fine touch.
19. Define Anemia. List the types of Anemia.
20. Write the normal RBC count and WBC count.
21. Define Cyanosis.
22. What is End Diastolic Volume'?

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