

**Time: 3 Hours.****Max. Marks: 100 Marks****PHYSIOLOGY - I (RS3)****QP Code: 1077**

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

**LONG ESSAY****2 X 10 = 20 Marks**

1. Define cardiac output and cardiac index. Describe the various factors regulating cardiac output.
2. What are chemoreceptors? Describe the chemical control of regulation of respiration. Add a note on Cheynes-Stokes breathing.

**SHORT ESSAY****10 X 5 = 50 Marks**

3. Factors affecting erythropoiesis.
4. Describe the formation and functions of immunoglobulins.
5. Gastric phase of gastric secretion
6. Outline the formation, transport and excretion of bilirubin.
7. Describe the different types of movements of small intestine.
8. Describe micturition reflex.
9. Timed vital capacity
10. Briefly describe the changes occurring during acclimatization to high altitude.
11. Draw and describe pacemaker potential.
12. Peripheral resistance

**SHORT ANSWERS****10 X 3 = 30 Marks**

13. Explain the functions of plasma albumin.
14. Pancreatic enzymes
15. Write the changes occurring in tubular fluid, in the collecting duct.
16. Draw a neat diagram of cortical and juxtamedullary nephron.
17. Significance of AV nodal delay
18. Incomplete tetanus
19. Draw and label different lung volumes and capacities.
20. Facilitated diffusion
21. Functions of T helper cell
22. Steatorrhea

\* \* \* \* \*