

B. Sc. Semester-III Examinations-2020
Subject- Biochemistry
Paper: CC-6
Physiology and Hormones (Theo)

F.M.: 40

Time- 2 hrs.

Answer *any eight* questions of the following:

5 × 8 = 40

Q1. What are the major buffer systems in human body? “Haemoglobin is present within RBC, still Hb buffer system is called as extracellular buffer system”. Give justification.

Q2. What is the histological basis of auto-rhythmic nature of cardiac muscle? Why does pulmonary circulation is a low pressure system and systematic circulation is a high pressure system?

Q3. Write the significance of Crassulacean Acid **Metabolism (CAM)** pathway. What types of plants use the CAM pathway?

Q4 How many types of hormones are there in human? State the major functions of T3 and T4.

Q5. Briefly state with examples ultra short loop, short loop and long loop feedback systems.

Q6. What are auxins? State its types and mention its role in root growth.

Q7. State in brief the basic mechanism of light absorption by plants.

Q 8. State the functions and origin of gastrin, secretin, VIP and GIP.

Q9. State the role of calcium binding proteins in excitation-contraction coupling.

Q10. Mention the cellular origin, sources and functions of pancreatic hormones.