

P.G. Diploma (C.S.S) EXAMINATION, NOVEMBER 2024  
2020, 2021, 2022, 2023 ADMISSIONS SUPPLEMENTARY  
SEMESTER I - CORE COURSE Clinical Nutrition And Dietetics  
CN1C01TPGD20 - Human Biomechanics

Time : 3 Hours

Maximum Weight : 30

**Part A****I. Answer any Eight questions. Each question carries 1 weight****(8x1=8)**

1. Write a note on first-line immunity.
2. Write a note on various types of muscles and their functions.
3. Describe the importance of WBC in blood.
4. Discuss the term cardiac cycle.
5. Write the exchange of gases at tissue level.
6. Discuss the digestive functions of saliva.
7. Explain the role of kidney in maintaining acid-base balance.
8. Discuss on SIADH.
9. Describe the stages of parturition.
10. Discuss on diencephalon.

**Part B****II. Answer any Six questions. Each question carries 2 weight****(6x2=12)**

11. Write the role of various membranous organelles in the cell.
12. Differentiate between various leukocytes in the blood.
13. Discuss on regulation of heart rate.
14. Explain various digestive movements that occur in intestine.
15. Discuss the factors affecting GFR.
16. Explain the disorders associated with hypersecretion of adrenocortical hormones.
17. Discuss the anatomy of mammary gland with an aid of a diagram.
18. Discuss on autonomic nervous system.

**Part C****III. Answer any Two questions. Each question carries 5 weight****(2x5=10)**

19. Discuss in detail the mechanism of muscle contraction with a flowchart and diagram.
20. Discuss the structure of heart with a labeled diagram. Explain the regulation of heart rate.
21. Discuss the structure and function of nephron with a neat diagram.
22. Explain the disorders associated with pituitary gland.

