

**TB214640W**

**Reg. No : .....**

**Name : .....**

**B.Sc. DEGREE (C.B.C.S.) EXAMINATION, MARCH 2023**  
**(2021 Admissions Regular, 2020 Admissions Supplementary / Improvement)**  
**SEMESTER IV - COMPLEMENTARY COURSE 2 (NUTRITION AND DIETETICS)**  
**ND4C08B20 - HUMAN ANATOMY AND PHYSIOLOGY IV**

**Time : 3 Hours**

**Maximum Marks : 80**

**Part A**

**I. Answer any Ten questions. Each question carries 2 marks**

**(10x2=20)**

1. Explain cataract.
2. Describe Eustachian tube.
3. Discuss the protective role of skin against UV rays.
4. Distinguish osteoblast and osteoclast.
5. Discuss on patella.
6. Comment on spongy bones.
7. Explain the changes in blood pressure during exercise.
8. Describe chemoreceptor.
9. Describe the changes in heart size and muscle size during exercise.
10. List out warning signs of heat exhaustion.
11. Describe on positive G-force.
12. Enumerate on heat exhaustion.

**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. Describe dermis and its layers.
14. Discuss the physiology of equilibrium.
15. Explain factors affecting bone formation.
16. Discuss about clavicle and scapula.
17. Discuss the classifications of bones.
18. Explain cardiovascular adaptation to exercise.
19. Explain the hormones which increases the blood pressure.
20. Discuss chemical regulation as well as the other factors involved in the regulation of heart rate.
21. Elaborate on accommodation and acclimatization related to physiological changes in high altitude.

**Part C**

**III. Answer any Two questions. Each question carries 15 marks**

**(2x15=30)**

22. Explain diseases and disorders associated with eyes.
23. Discuss about different aspects of bones in human body.
24. Explain neuromuscular and cardiovascular adaptations during exercise.
25. Discuss the effect of cold and heat conditions in human body.