

B. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022**SEMESTER 3 : COMPLEMENTARY ZOOLOGY FOR B Sc BOTANY****COURSE : 19U3CPZ003 : HUMAN PHYSIOLOGY AND IMMUNOLOGY***(For Regular - 2021 Admission and Improvement / Supplementary - 2020 / 2019 Admissions)*

Time : Three Hours

Max. Marks: 60

PART A**Answer All (1 mark each)**

1. Define phasic muscle .
2. Define dendron
3. State the function of β cells of the pancreas.
4. What is passive immunity?
5. Comment on cardiac muscle.
6. What is the pH of human blood?
7. Define Troponin
8. Name the hormone that helps you to increase the reabsorption of water from the kidney tubules
(1 x 8 = 8)

PART B**Answer any 6 (2 marks each)**

9. Comment on tubular secretion
10. How does hypoxia cause cell damage?
11. Differentiate between EEG and ECG.
12. What is Hamburger phenomenon?
13. Name the hormone secreted by the *islets of Langerhans*.
14. What is cerebral thrombosis?
15. What is saltatory conduction?
16. Why is urine yellow in colour ?
(2 x 6 = 12)

PART C**Answer any 4 (4 marks each)**

17. Write an account on different types of antigens
18. Describe the Ultrastructure of Sarcomere with diagram.
19. Give a note on pituitary gland secretions
20. Explain types of Vaccines
21. Write a note on the abnormal constituents of urine
22. Compare and contrast the granulocytes with diagrams
(4 x 4 = 16)

PART D**Answer any 2 (12 marks each)**

23. Elucidate the process of formation of action potential and resting potential in synaptic transmission. Use neat diagrams
24. Describe and illustrate the basic structure of Immunoglobulins. Compare and Contrast the different classes of immunoglobulins
25. Give an account on cells of the immune system.
26. Explain the mechanism of blood clotting. Mention the significance of blood clotting
(12 x 2 = 24)