

B.Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024
SEMESTER 3 : COMPLEMENTARY ZOOLOGY FOR BOTANY
COURSE : 19U3CPZ003 : HUMAN PHYSIOLOGY AND IMMUNOLOGY

(For Regular 2023 Admission and Improvement/Supplementary 2022/2021/2020/2019 Admissions)

Time : Three Hours

Max. Marks: 60

PART A

Answer All (1 mark each)

1. What is hypercarbia?
2. Define dwarfism.
3. Name the three regions of renal tubule.
4. What is Coombs test?
5. Name the two hormones are secreted by the posterior pituitary.
6. What is nerve impulse?
7. Name any two non-protein organic components of blood plasma.
8. Define TONIC muscle .

(1 x 8 = 8)

PART B

Answer any 6 (2 marks each)

9. Differentiate haptens and complete antigens.
10. What is precipitation?
11. What is Asphyxia?
12. Give the significance of blood clotting.
13. what is Parkinson's disease?
14. What is Rigor Mortis?
15. Describe on night blindness.
16. Comment on GFR.

(2 x 6 = 12)

PART C

Answer any 4 (4 marks each)

17. Define active and passive immunity.
18. Explain antigen – antibody reactions.
19. Explain the functions of blood.
20. Comment on Non-striated and Cardiac muscles.
21. Give a note on pituitary gland secretions.
22. Give an account of the counter current multiplier system of kidney.

(4 x 4 = 16)

PART D

Answer any 2 (12 marks each)

23. Evaluate on the composition of blood. Mention the functions of each component.
24. Elucidate the process of formation of action potential and resting potential in synaptic transmission. Use neat diagrams.

25. Describe and illustrate the basic structure of Immunoglobulins. Compare and Contrast the different classes of immunoglobulins.
26. Explain the mechanism of innate immunity.

(12 x 2 = 24)