



22100567

**QP CODE: 22100567**

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

**Name** : .....

**B.Sc DEGREE ( CBCS ) REGULAR / REAPPEARANCE EXAMINATIONS,  
APRIL 2022**

**Third Semester**

**COMPLEMENTARY COURSE - ZY3CMT03 - ZOOLOGY - PHYSIOLOGY AND  
IMMUNOLOGY**

(Common to B.Sc Biological Techniques and Specimen Preparation Model III, B.Sc Botany and Biotechnology Model III Double Main, B.Sc Botany Model I, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany Model II Plant Biotechnology, B.Sc Family & Community Science Model I, B.Sc Food Science & Quality Control Model III, B.Sc Food Technology & Quality Assurance)

2017 Admission Onwards

5DB89A06

Time: 3 Hours

Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Which vitamin is called Tocopherol?
2. What are the phases of respiration?
3. Define Hypoxia.
4. Give the average normal count of RBC and WBC in human blood per cu mm.
5. Distinguish between clot and thrombus.
6. Name the important parts of nephron.
7. What are the constituents of abnormal urine?
8. Name any two proteins present in the thin filament.
9. What is rigor mortis?





10. Who coined the term 'vaccination'?
11. Expand ELISA.
12. What is an immunodeficiency disease?

(10×1=10)

### Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain different types of nutrition.
14. Explain the following terms:
  - a). Anticoagulant with an example. (2 marks)
  - b). Hemophilia (1 mark)
  - c). Arteriosclerosis (1 mark)
  - d). thrombosis. (1 mark)
15. Discuss any two kidney disorders. Explain the procedure employed to overcome the condition.
16. Give an account of Neuronal disorders.
17. Give an account on thyroid hormones and mention its hormonal disorders.
18. Define Immunoglobulin and give an account of the different types.
19. Compare Ig G and Ig M
20. a). State in your own words how the antibodies produced by the cells of the immune system differ from the monoclonal antibodies prepared by the hybridoma technology. (2 marks)  
b). Give a brief account of the hybridoma technology for the production of monoclonal antibodies. (3 marks)
21. Define immunodeficiency and give an account of AIDS.

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **10** marks.





22. Write an essay on the nutritional requirements of human body.
23. Explain the method of urine concentration by counter current mechanism and list out the composition of urine. Give an account of the hormonal control of renal function.
24. Write an essay on the major endocrine glands, their secretions and physiological role in man.
25. Describe in detail the types of antigen-antibody reaction and state its applications.

(2×10=20)

