



**QP CODE: 21100507**

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

**Name** : .....

**B.Sc DEGREE (CBCS) EXAMINATION, MARCH 2021**

**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

53B1591B

Time: 3 Hours

Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

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

1. Name any two fat soluble Vitamins.
2. Which vitamin is called Tocopherol?
3. Write notes on Bohr effect.
4. Define Hypercapnia.
5. What is diapedesis ?
6. What are medullary nephrons?
7. What is Micturition?
8. What is aldosterone?
9. What is a synapse?
10. Name the different classes of Immunoglobulins.
11. What is agglutination test?





12. What are antigen presenting cells?

(10×1=10)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain different types of nutrition.

14. Explain the intrinsic and extrinsic path way in the activation of prothrombin, which leads to the formation of blood clot to prevent blood loss.

15. Give an account of Neuronal disorders.

16. Differentiate between the different types of Muscle.

17. Give a detailed account on the mechanism of action of protein hormones.

18. What are antigens and antibodies. Give and account of antigen-antibody reaction ?

19. Define Immunoglobulin and give an account of the different types.

20. How are monoclonal antibodies synthesized using hybridoma technology?

21. What is Autoimmunity? Explain autoimmune diseases using two example.

(6×5=30)

**Part C**

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Mention the important functions of blood and briefly discuss the disorders of circulatory system.

23. Explain the structure of a muscle fibre and coorelate the physiological events that occurs during the muscle contraction.

24. Classify hormones and give a detailed account of the various hormones of the endocrine glands stating its function.

25. Illustrate the structure of Immunoglobulin with the help of a neatly labeled diagram. List out the different classes of immunoglobulins and state their functions.

(2×10=20)

