



QP CODE: 19102067



19102067

Reg No :

Name :

B.Sc. DEGREE (CBCS) EXAMINATION, OCTOBER 2019

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

800F63EA

Maximum Marks: 60

Time: 3 Hours

Part A

*Answer any **ten** questions.*

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

1. What is autotrophy?
2. What is the condition termed Asphyxia?
3. Mention the function of thrombocytes.
4. Define hemostasis.
5. What causes the disease Hemophilia ?
6. What are medullary nephrons?
7. What is Renin?
8. What is EEG?
9. Name the proteins present in thin filament.
10. Define hypervariable regions present in the immunoglobulin.
11. How many classes of immunoglobulins are present and which are they?
12. Distinguish between B and T lymphocytes.

(10×1=10)





Part B

*Answer any **six** questions.*

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

13. What are the different types of nutrients required by our body? State their building blocks and function in the body.
14. Describe the transport of carbon dioxide in blood. Add a note on chloride shift.
15. Draw a neatly labeled diagram of the Synapse. Explain the different types of Synapses
16. Give reason for the following questions in your own words.
 - a). We will have severe pain in our muscles on the following days, after heavy physical activity like, taking part in a marathon or playing a game like football, without regular practice.
 - b). Why do we continue to breath at a faster rate, even after we stop running.
17. Describe the structure of the hypophysis and list out its hormones giving one function each.
18. Compare Ig G and Ig M.
19. Write a note on the clinical applications of antigen-antibody reactions.
20. Give an account on monoclonal antibodies production.
21. What is a vaccine? How does it function in the immune system? Explain the mechanism with the help of Polio vaccine.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Describe the physiological roles of different vitamins, it's sources and deficiency disorders in Man.
23. With the help of a neat labeled diagram, explain the structure of a Nephron. Add a note on the mechanism of urine formation.
24. Describe the physiological role of hormones of Islet of Langerhans and Adrenal glands.
Give an account of the disorders of these two endocrine glands caused due to its deficiency.
Why is Pancreas called a Mixed gland?
25. What do you understand by the term immunity? Describe the mechanisms of innate immunity.

(2×10=20)

