

QP CODE: 18103367



Reg No :

Name :

B.Sc. DEGREE (CBCS) EXAMINATION, NOVEMBER 2018

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

ACDFC491

Maximum Marks: 60

Time: 3 Hours

Part A

Answer any **ten** questions.

Each question carries **1** mark.

1. What is meant by heterotrophy?
2. What is meant by oxygenation of hemoglobin ?
3. Give the average normal count of platelets in human blood per cu mm
4. How is a platelet plug formed ?
5. What is Arteriosclerosis ?
6. What is vasa recti?
7. What is meant by telodendria?
8. What is resting membrane potential?
9. Who proposed the sliding filament theory?
10. Name the type of immunity acquired by a foetus from mother.
11. What is the use of WIDAL test?
12. Distinguish between B and T lymphocytes.

(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Give an account of the role of Minerals in our diet.





14. a) State one advantage for athletes, if they practice at higher altitudes before national and international level competitions. (2marks)
b). Define the terms :
(1 mark each)
- i). Hypoxia.
 - ii). Hypercapnia.
 - iii). Asphyxia.
15. What is urine? Write a note on the composition of urine.
16. Explain EEG and brain waves.
17. Give an account of parathyroid gland and mention its hormonal disorders.
18. Compare Ig G and Ig A.
19. Name the different types of antigen-antibody reactions and explain each types.
20. Give an account on immunodeficiency disease
21. What are vaccines? Explain their role in immune response with an example

(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. With a neat labeled diagram, illustrate the ultra structure of striated muscle. State why the theory of muscle contraction is named as 'sliding filament theory' and explain the mechanism in detail.
24. Write an essay on the major endocrine glands, their secretions and physiological role in man.
25. Delineate the basic structure of Immunoglobulin and mention the different classes of immunoglobulins, stating their functions briefly.

(2×10=20)

