Reg. No	Name	23U642
16g. 110	Name	23007

# B. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023 SEMESTER 6 : ZOOLOGY

COURSE: 19U6CRZOO11: MICROBIOLOGY AND IMMUNOLOGY

(For Regular - 2020 Admission and Supplementary - 2019 Admission)

Time: Three Hours Max. Marks: 60

## **PART A**

# Answer All (1 mark each)

- 1. Comment on the contributions of Bergey as a microbiologist.
- 2. Comment on the role of Robert Hooke as a microbiologist.
- 3. What is viral envelope made up of?
- 4. Define endemic disease.
- 5. What are toxoids?
- 6. Who developed immunization against small pox using cow pox virus?
- 7. Define an antigen.
- 8. Name two lymphocytes.

 $(1 \times 8 = 8)$ 

## **PART B**

# Answer any 6 (2 marks each)

- 9. Comment on nutrient agar.
- 10. Comment on autoclave.
- 11. Comment on continous culture.
- 12. Differentiate primary and secondary infections.
- 13. What are the preventive measures to be taken for polio?
- 14. Comment on dermatophytoses.
- 15. Briefly explain MALT.
- 16. Discuss the immunology of blood transfusion.

 $(2 \times 6 = 12)$ 

## **PART C**

#### Answer any 4 (4 marks each)

- 17. Briefly expalin different types of culture media based on texture.
- 18. Brief on the different techniques used for microbial culture preservation.
- 19. List out and brief on the different modes of disease transmission.
- 20. Briefly explain the different types of adaptive immunity.
- 21. Briefly explain the various mechanisms involved in innate immunity.
- 22. Briefly explain the primary lymphoid organs in man.

 $(4 \times 4 = 16)$ 

# PART D Answer any 2 (12 marks each)

- 23. Elaborate on physical methods of steriliszation.
- 24. Explain the role played by microbes in various field of our life.

- 25. Expalin the different categories of immune disorders giving one example each.
- 26. With the help of a digram explain the basic structure of antibody. Also add a note on the different classes of immunoglobulins.

 $(12 \times 2 = 24)$