Reg. No	Name
B. Sc. DEGREE END SEMESTER EXAMINATIONS - MARCH 2019	
SEMESTER	– 6: ZOOLOGY (CORE COURSE)
COURSE: 15U6CRZOO	11 : MICROBIOLOGY AND IMMUNOLOGY
(Common for Regular - 2016 Adn	nission / Supplementary-Improvement 2015 Admission)
Time: Three Hours	Max. Marks: 60
	Part A
Answer all ques	tions. Each question carries one mark
1. What is lyophilization?	
2. What are the functions of pili?	
3. Define viroids.	
4. What do you mean by nosocomial in	fection?
5. What is candidiasis?	
6. Which are the cardinal signs of inflan	nmation?
7. What are haptens?	
8. Define MHC	$(1 \times 8 = 8)$
	PART B
Answer any si	ix. Each question carries two marks.
9. Explain the structure of a bacterioph	age.
10. Compare the cell wall of gram positive	ve and gram negative bacteria.

- 11. Explain how viruses differ from other microorganisms.
- 12. Briefly explain immunology of erythroblastosis foetalis.
- 13. Comment on the functions of immunoglobulins.
- 14. What are monoclonal antibodies?
- 15. Write a note on different types of grafts.
- 16. Discuss Koch's postulates.

 $(2 \times 6 = 12)$

PART C

Answer any four. Each question carries five marks

- 17. Describe primary lymphoid organs.
- 18. What is autoimmunity? Give an account on autoimmune diseases.
- 19. Explain the bacterial growth curve in detail.
- 20. What are the various sterilization methods used in microbiology?
- 21. Differentiate between innate and acquired immunity.
- 22. What are carriers? Add a note on different types of carriers in microbial infection. $(5 \times 4 = 20)$

PART D

Answer any two. Each question carries ten marks

- 23. Explain the structure of a bacterial cell and describe all parts using a neat diagram.
- 24. Write an essay on the clinical applications of various types of antigen-antibody reactions.
- 25. Write an essay on the types of vaccines. Cite suitable examples.
- 26. Write an essay on the epidemiology and symptoms of various bacterial and viral diseases.

 $(10 \times 2 = 20)$
