Max. Marks: 60

# **B.Sc. DEGREE END SEMESTER EXAMINATIONS - MARCH 2020**

# SEMESTER – 6: ZOOLOGY (CORE COURSE)

# COURSE: 15U6CRZOO11: MICROBIOLOGY AND IMMUNOLOGY

(Common for Regular 2017 Admission & Supplementary 2016 /2015 Admissions)

Time: Three Hours

### PART A

# Answer all questions. Each question carries 1 mark

- 1. What is MAC?
- 2. What are plasma cells?
- 3. Define adjuvants.
- 4. What are monoclonal antibodies?
- 5. Define septicemia?
- 6. Which is pasteurization?
- 7. What is biomining?
- 8. Define endospores.

### PART B

### Answer any six. Each question carries 2 marks

- 9. Describe the types of antigens.
- 10. Differentiate between B and T lymphocytes.
- 11. Explain streak plating technique.
- 12. List out the types of bacteria based on their shape.
- 13. Comment on the structure of a bacterial flagellum.
- 14. Comment on Bergey's manual.
- 15. Write a note on Coomb's test.
- 16. What do you mean by serum sickness?

### PART C

# Answer any four. Each question carries 5 marks

- 17. Describe the basic structure of immunoglobulin.
- 18. Differentiate between live attenuated vaccines and inactivated vaccines.
- 19. Explain the bacterial culture techniques in detail.
- 20. Give an account on the scope of microbiology.
- 21. Explain the principle and applications of ELISA.
- 22. What are carriers? Add a note on different types of carriers in microbial infection. (5 x 4 = 20)

# PART D

# Answer any two. Each question carries 10 marks

- 23. Explain the structure of a bacterial cell and describe all parts using a neat diagram.
- 24. Write an essay on various types of hypersensitivity.
- 25. Explain in detail about the cultivation of virus.
- 26. Write an essay on complement pathways. Describe the functions. (10 x 2 = 20)

#### \*\*\*\*\*\*

#### Sacred Heart College (Autonomous) Thevara Page 1 of 1

(1 x 8 = 8)

 $(2 \times 6 = 12)$