

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2015 – 2016 & thereafter)

SUBJECT CODE: 15ZL/MC/MB44

B. Sc. DEGREE EXAMINATION, APRIL 2018
BRANCH VI.A. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
FOURTH SEMESTER

COURSE : MAJOR – CORE
PAPER : MICROBIOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION A

ANSWER ALL THE QUESTIONS.

(10x3 =30)

1. Differentiate between Gram positive and Gram negative bacteria.
2. Mention the different types of Culture media.
3. How are bacteria classified based on shape?
4. What are the ways to measure bacterial growth?
5. List three characteristic features of Archaea.
6. What are Sub-viral particles?
7. Highlight the importance of microbiota in the intestine.
8. Comment on Ebola.
9. Explain the significance of Probiotics.
10. Define Pasteurization and mention the types.

SECTION B

ANSWER ANY FIVE QUESTIONS

(5x6=30)

11. Explain the various staining techniques used to visualize bacteria.
12. Write a short note on plasmids.
13. With a neat diagram describe the structure of T₄ bacteriophage.
14. What are Antibiotics? Add a note on their importance.
15. Write a short note on Zoonoses
16. Explain briefly about STD.
17. What is the role of various microorganisms in Nitrogen cycle?

SECTION C

ANSWER ANY TWO QUESTIONS

(2x20 = 40)

18. Write an essay on the structure of a bacterium.
19. Explain the process of Recombination in bacteria.
20. What are the various diseases spread through food and water? What are their causative organism, symptoms and preventive measures?
21. Write an essay on the various dairy products which use microorganisms for their production.
