

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 2019
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. What is differential staining?
2. Name any two characteristic features of Archaea bacteria.
3. Distinguish between Viroids and Prions.
4. What are Plasmids?
5. What is an antibiotic? Give an example.
6. What is a log phase in the growth curve of bacteria?
7. How is swine flu caused?
8. What is nosocomial infection? Give an example.
9. Comment on probiotics.
10. Name any three microorganisms that cause damage to natural fabrics.

SECTION B

ANSWER ANY FIVE QUESTIONS

(5x6=30)

11. Explain Whittaker's five kingdom classification of microbes.
12. Discuss briefly the methods of recombination in bacteria.
13. Describe the cell wall of Gram positive bacteris.
14. Describe the nutritional classification of bacteria.
15. Describe any two air borne diseases.
16. Write about the causes of food spoilage and add a note on botulism.
17. Write about the types of culture media based on composition.

SECTION C

ANSWER ANY TWO QUESTIONS

(2x20 = 40)

18. Draw a Prokaryotic and Eukaryotic cell and explain their characteristic features.
19. Explain the reproduction and physical conditions required for the growth of bacteria.
20. Explain in detail the structure and multiplication of T₄ Phage.
21. Explain the role of micro-organisms in soil fertility and explain nitrogen cycle.
