### STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 86

(For candidates admitted from the academic year 2019 - 2020)

# **B.Sc. DEGREE EXAMINATION, NOVEMBER - 2021**

## Branch V (A) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

**SUBJECT CODE: 19BT/MC/MB 54** 

COURSE: MAJOR CORE TIME: 3 HOURS
PAPER : MICROBIOLOGY MAX,MARKS: 100

#### SECTION - A

ANSWER ALL THE QUESTIC	NS	,
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I. Fill in the blanks:		$(9 \times 1 = 9 \text{ Marks})$
1. Mad Cow disease is caused by		
2. Rod shaped bacteria in chains are called	•	
3. Peptidoglycan layer is multilayered in	_ bacteria.	
4. The causal organism of Little Leaf of Brinjal is _	·	
5. Nutrient agar medium is used to isolate	•	
6. Conversion of Nitrite to Nitrate is called as	•	
7. Oxidation pond is used in the purification of	·	
8. Viruses can be cultivated in		
9. Germ Theory of disease was proposed by	·	
III. Answer any <u>THREE</u> each with 50 words		$(3 \times 3 = 9 \text{ Marks})$
10. BOD		
11. Differential media		

- 12. Prions
- 13. Vaccina

## **SECTION - B**

Answer any  $\underline{TWO}$  of the following questions. Each answer should not exceed 200 words. (Draw diagrams wherever necessary) (2 x 6= 12 Marks)

- 14. List the different types of media used for isolation of bacteria and explain the phases in a bacterial growth curve.
- 15. Explain the role of Bacteria, Fungi and Actinomycetes in the process of Composting.
- 16. What are the causal organisms, symptoms and control measures of Root gall disease and Little leaf of Brinjal

#### **SECTION - C**

Answer any <u>ONE</u> of the following question. Each answer should not exceed 1000 words. (Draw diagrams wherever necessary) (1 x 20= 20 Marks)

- 17. Explain in detail the structure and replication of Bacteriophages and Retroviruses
- 18. Enumerate the steps involved in Small scale and Large Scale sewage treatment and disposal.