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

SUBJECT CODE: 15BY/PC/MI14

### M. Sc. DEGREE EXAMINATION, NOVEMBER 2018 **BIOTECHNOLOGY** FIRST SEMESTER

**COURSE** : CORE

**PAPER** : MICROBIOLOGY

TIME : 3 HOURS MAX. MARKS: 100

#### SECTION - A

#### **ANSWER ALL QUESTIONS:**

 $20 \times 1 = 20$ 

- 1. What is Binary fission?
- 2. What is Autotrophic bacteria?
- 3. Define differential culture media.
- 4. What is Sauerkraut?
- 5. What is Botulism?
- 6. What is stock culture?
- 7. Define indicator media
- 8. What is immunoprophylaxis?
- 9. What is brewing?
- 10. Give 2 uses of amylase.
- 11. Give 2 organisms that produce vitamin B12
- 12. What are condiospores?
- 13. What is probiotics?
- 14. Give the significance of  $H_1N_1$ .
- 15. What are virions?
- 16. What is Aspergillosis?
- 17. Write the significance of Herpes virus.
- 18. What is Gastroenteritis?
- 19. What is Candidiasis?
- 20. Mention any 2 Plant viruses.

#### SECTION - B

# ANSWER ANY FOUR QUESTIONS EACH ANSWER NOT EXCEEDING 800 WORDS:

 $4 \times 10 = 40$ 

- 21. Explain the reproduction and classification of fungi.
- 22. Mention the various types of culture media.
- 23. Explain the general properties of animal viruses.
- 24. Explain the production of streptomycin.
- 25. Briefly explain the pathogenesis, symptoms, prevention and control of tuberculosis.
- 26. Write the causes, symptoms, preventive and control measures for syphilis.
- 27. Explain the lytic cycle of viruses.

#### SECTION - C

# ANSWER ANY TWO QUESTIONS EACH ANSWER NOT EXCEEDING 1500 WORDS:

 $2 \times 20 = 40$ 

- 28. Explain the ultrastructure and classification of bacteria.
- 29. Elaborate on the physical and chemical methods of microbial control.
- 30. Write an account on the production of citric acid.
- 31. Explain the structure, pathogenesis, symptoms, prevention and control of HIV and Ebola virus.

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