STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2009 – 10)

SUBJECT CODE: BY/PC/MI14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2009
BIOTECHNOLOGY
FIRST SEMESTER

COURSE : CORE
PAPER : MICROBIOLOGY
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

Answer all questions: **20 x 1 = 20**

1. Vaccination
2. Archaebacteria
3. Flow cytometry
4. G + C ratio
5. Mixotrophs
6. Mean growth rate constant
7. Turbidostat
8. Lyophilization
9. Secondary metabolites
10. Biosensors
11. Use of amylases
12. Importance of glutamic acid
13. Pandemic
14. Pneumonia-Pathogen and symptoms
15. Amoebic dysentery
16. Candidiasis
17. Protomers
18. Virion
19. HIV
20. Neoplasia

..2

SECTION – B

ANSWER ANY FOUR QUESTIONS EACH ANSWER NOT EXCEEDING 800 WORDS : 4 X 10 = 40

21. Describe the ultrastucture of a typical bacterial cell.
22. Discuss any TWO methods of isolation of pure cultures of bacteria.
23. Give an account of biofertilizers and their significance.
24. Enumerate the various modes of disease transmission with suitable examples.
25. Explain the cultivation of viruses.
26. Write notes on:

    a) Koch's postulates b) Phenols c) SCP

    d) Causal organism & symptoms of Leptospirosis e) Prions

SECTION – C

ANSWER ANY TWO QUESTIONS EACH ANSWER NOT EXCEEDING 1500 WORDS : 2 X 20 = 40

27. Describe the various methods of physical control of microbes.
28. Give an account of the industrial production of streptomycin.
29. Discuss the morphology, cultural and staining properties of the causal organism of TB. Add a note on symptoms and control measures.
30. Explain the morphology, multiplication and transmission of plant viruses.

******