STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2011 – 12 & thereafter)

SUBJECT CODE: 11BY/PC/MI14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2012
BIOTECHNOLOGY
FIRST SEMESTER

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

SECTION – A

ANSWER ALL QUESTIONS: **20 x 1 = 20**

DEFINE / EXPLAIN THE FOLLOWING.

1) Archaebacteria.
2) Aspergillosis.
3) Biosurfactants.
4) Broad spectrum antibiotics.
5) Eosin methylene blue.
6) Glutamic acid.
7) Gram staining.
8) Industrial microbiology.
9) Lyophilisation.
10) Pathogenesis.
11) Peplomers.
12) Phage typing.
13) Phenetic classification system.
14) Pilus.
15) Prions.
16) Probiotics.
17) Ribotyping.
18) Serology.
19) Stationary phase.
20) Viral latency.

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SECTION – B

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

21) Give a detailed note on the ultrastructure of a prokaryotic cell.

22) Explain the microbial growth curve.

23) Enumerate upon citric acid production.

24) Explain structure of viruses.

25) Give an outline on industrial use of microbes.

26) Explain the pathophysiology of fungal pneumonia with its cause, diagnosis and treatment.

SECTION – C

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

27) Explain lytic and lysogenic phases of viral replication and point out the differences between them.

28) Give a detailed account of classification of microbes.

29) Explain in detail the factors affecting bacterial growth.

30) Give a detailed note on biochemical characterisation of bacteria.

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