STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2006 – 07 & thereafter)

SUBJECT CODE: BY/PC/MI14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2007 BIOTECHNOLOGY FIRST SEMESTER

COURSE : **CORE**

PAPER : MICROBIOLOGY

TIME : 3 HOURS MAX. MARKS: 100

SECTION - A

Answer all questions: $20 \times 1 = 20$

- 1. Biosafety
- 2. BOD and COD
- 3. Chemolithotrophs
- 4. Mycoplasma
- 5. Potable water
- 6. Prions
- 7. Halophiles
- 8. Mycorrhiza
- 9. <u>Acetobacter aceti</u>
- 10. Lockjaw
- 11. Tinea capitis
- 12. Enterotoxin
- 13. Water borne Hepatitis
- 14. Trophozoite and cyst
- 15. Reverse transcriptase
- 16. Pasteurization
- 17. Chemostat
- 18. Acid fast bacteria
- 19. Viroids
- 20. Icosahedral symmetry.

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SECTION - B

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

- 21. Give an account of the industrial production of Penicillin.
- 22. Discuss the role of microbes in the treatment of sewage.
- 23. List out the steps involved in the production of SCP. Add a note on the advantages of SCP in nutrition.
- 24. Explain the industial production of wine.
- 25. Name any 3 antimicrobial drugs and mention their uses in the Control of microbial growth.
- 26. Outline any TWO methods employed in the cultivation of Viruses.

SECTION - C

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

- 27. Explain the cause, symptoms and control of any three of the following diseases:
 - a) Tuberculosis b) Rabies
- c) Amoebiasis
- d) Dental caries
- 28. Discuss the importance of Bergey's Manual of Systematic Bacteriology in the Classification of Bacteria.
- 29. Support the role of microbes in the decomposition of biodegradable waste with special reference to the recycling of carbon, nitrogen and sulphur.
- 30. Microbes provide a wide variety of foods for human consumption Elaborate the statement with reference to cheese and Yoghurt.
