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

**SUBJECT CODE: BY/PE/EB13** 

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

**COURSE** : ELECTIVE

PAPER : ENVIRONMENTAL BIOTECHNOLOGY

TIME : 3 HOURS MAX. MARKS: 100

#### **SECTION - A**

### **ANSWER ALL QUESTIONS:**

 $(20 \times 1 = 20)$ 

- 1. Bioleaching
- 2. BOD
- 3. Corrotion
- 4. Stoichiometry
- 5. Pyrogen
- 6. Green technology
- 7. Aerosols
- 8. Xenobiotic
- 9. Waste stabilization
- 10. SOTE
- 11. Mutagen
- 12. Phytoremidiation
- 13. Biosensor
- 14. Anaerobes
- 15. Biofuel
- 16. Plasmid vector
- 17. Vermicomposting
- 18. Bioaugmentation
- 19. Processed solid waste.
- 20. Biomining

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#### **SECTION - B**

#### **ANSWER ANY FOUR QUESTIONS:**

 $(4 \times 10 = 40)$ 

- 21. How can biosensors help in environmental analysis?
- 22. What are the various methods of testing toxicity due to pollutants?
- 23. Discuss the methods involved in hazardous waste management.
- 24. Define plasmid and explain in brief about degradative plasmids
- 25. Write a note on metal leaching.
- 26. Explain in brief about the waste water treatment by biological filters.

#### **SECTION - C**

# ANSWER ANY TWO QUESTIONS: DRAW DIAGRAMS WHEREVER NECESSARY: $(2 \times 20 = 40)$

- 27. Is it possible to biomonitor toxic materials? If so, Explain.
- 28. How are metals recovered by the use of microbes?
- 29. Write the detailed account on degradation of organic waste by earthworm
- 30. Explain the following
  - a) Ozone hole.
  - b) Acid rain.

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