

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI –600 086**  
(For candidates admitted during the academic year 2008-09 & thereafter)

**SUBJECT CODE: BY/PC/EB25**

**M. Sc. DEGREE EXAMINATION, APRIL 2009**  
**BIOTECHNOLOGY**  
**SECOND SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : ENVIRONMENTAL BIOTECHNOLOGY**  
**TIME : 3 HOURS**

**MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL THE QUESTIONS**

**(20 x 1 = 20)**

1. Recalcitrant.
2. Gasohol.
3. Bioventing.
4. Marsh Gas.
5. Nitrous oxide.
6. Land fills.
7. Phycoremediation.
8. Genotoxicity test.
9. Transducers.
10. Thiobacillus ferrooxidans
11. Acid Rain.
12. Biomarker.
13. BTEX
14. Trans esterification.
15. COD.
16. Mutagens
17. Phytochelatins
18. Dinitrophenols.
19. GEM's
20. Organic composting.

**SECTION – B**

**ANSWER ANY 4 QUESTIONS IN ABOUT 600 WORDS**

**(4 x 10 = 40)**

21. What are biosensors? Describe their role in environmental monitoring and pollution control.
22. Discuss the efforts being made to use non-conventional sources of energy from waste.
23. Justify the statement - Plants as hyperaccumulator of heavy metals.
24. What are aerosols? Discuss the problems associated with aerosol accumulation in the atmosphere
25. How are the persistent pesticides decomposed & eliminated from the environment?
26. Describe how GEM's are used for the removal of specific pollutants.

**SECTION – C**

**ANSWER ANY TWO QUESTIONS IN ABOUT 1500 WORDS**

**(2 x 20 = 40)**

27. What are mining and processing waste? Describe the methods associated with leachates.
28. Discuss the problem associated with solid wastes. How would you manage & dispose off these wastes.
29. Describe the methods to simplify environmental toxicants.
30. "Vermicomposting is an effective way to recycle agricultural waste" – Explain.

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