

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

**SUBJECT CODE: 11BY/PE/EB34**

**M. Sc. DEGREE EXAMINATION, NOVEMBER 2013**  
**BIOTECHNOLOGY**  
**THIRD SEMESTER**

**COURSE : ELECTIVE**

**PAPER : ENVIRONMENTAL BIOTECHNOLOGY**

**TIME : 3 HOURS**

**MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL QUESTIONS.**

**20x 1 = 20**

**DEFINE / WRITE A NOTE ON THE FOLLOWING.**

1. Ozone hole
2. Acid Rain
3. Melting of glaciers
4. Biodiversity
5. Environment Impact Assessment
6. Biofuels
7. MPN
8. Solar energy
9. Two denitrifying bacteria
10. Incineration
11. Vermicomposting
12. Sludge
13. Mutagen
14. Biomagnification
15. Glucose oxidase
16. Bioindicators
17. *Pseudomonas putida*
18. Xenobiont
19. Phytoremediation
20. Biosensors

**SECTION – B**

**ANSWER ANY FOUR QUESTIONS, EACH WITHIN 600 WORDS. (4 x 10 = 40)**

21. Write a note on effects of radioactivity on environment
22. Explain the concept of bioenergy from waste
23. Discuss the restoration of land degraded by industrial waste
24. Which are the different carcinogens and what are its effects?
25. Describe the extraction of metals and the effect biomining
26. What is environmental pollution?

**SECTION – C**

**ANSWER ANY TWO QUESTIONS, EACH WITHIN 1500 WORDS. (2 x 20 = 40)**

27a. Write in detail about the waste water treatment

OR

b. Give an account on the green house effect

28a. Explain the degradation of recalcitrant molecules in environment

OR

b. Discuss the production of non conventional fuels

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