

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

SUBJECT CODE: BY/PE/EB13

M. Sc. DEGREE EXAMINATION, NOVEMBER 2010
BIOTECHNOLOGY
FIRST SEMESTER

COURSE : ELECTIVE
PAPER : ENVIRONMENTAL BIOTECHNOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS:

(20 x 1 = 20)

1. Anand Chakrabarty's Superbug.
2. Recalcitrant compounds.
3. *Rhodospirillum rubrum*
4. LC50
5. Teratogens.
6. Organic composting.
7. Heap leaching.
8. Jatropha.
9. Biostimulation.
10. Megabiodiversity countries.
11. Red Data Book.
12. Acute and chronic exposure.
13. DDE
14. Sustainable development.
15. Life cycle Analysis.
16. Methanogens.
17. PHB
18. Bioventing and Biosparging
19. *Deinococcus radiodurans*
20. NAH plasmid.

SECTION – B**ANSWER ANY FOUR QUESTIONS:****(4 x 10 = 40)**

21. Write notes on classification of pesticides and its biodegradation.
22. What are siderophores?
23. Explain the role of biosensors in environmental analysis.
24. Discuss the various steps involved in biomining.
25. Highlight the role of Friends of farmer's role in the degradation of organic waste.
26. Define Global warming and list the activities responsible for it.

SECTION – C**ANSWER ANY TWO QUESTIONS: DRAW DIAGRAMS WHEREVER
NECESSARY:****(2 X 20 = 40)**

27. Elaborate the role of genetically modified organisms in the biotransformation of toxicants and list the degradative plasmid involved in it with emphasis to pWW0.
28. How do you derive biofuels from algal and bacterial systems?
29. List the vehicular emissions of a metropolitan city and discuss the various strategies to alleviate the problem.
30. What are the hazardous and medical wastes? Explain its management.
