

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2008 – 2009 & thereafter)

SUBJECT CODE: ZL/MC/EB64

B. Sc. DEGREE EXAMINATION APRIL 2012
BRANCH VI.A. ADVANCED ZOOLOGY & BIOTECHNOLOGY
SIXTH SEMESTER

COURSE : MAJOR CORE
PAPER : ENVIRONMENTAL BIOTECHNOLOGY
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

ANSWER ALL QUESTIONS : **(10 X 3 = 30)**

1. Mention the characteristics of biodegradable organic materials.
2. What are bioindicators? Give two examples.
3. Differentiate precipitation from leaching.
4. Mention any two physicochemical properties of industrial waste.
5. What are xenobiotics?
6. Expand (a) DDT (b) BHC
7. What are biofertilizers? Give two examples.
8. Mention the importance of carbon capture.
9. What are biosensors?
10. Match the following

Cytotoxicity	-	Coal
Organotoxicity	-	Cancer
Hepatotoxicity	-	Chromosome
Physical toxicant	-	Cell
Carcinogen	-	Liver
Genotoxicity	-	Organs

SECTION – B

ANSWER ANY FIVE QUESTIONS :

(5 X 6 = 30)

11. Write an account on sampling methods for Environmental Monitoring.
12. Write a brief account on anaerobic digestion of sludge.
13. Explain the nature and types of agricultural waste.
14. Explain the types of inorganic wastes in environment.
15. Enumerate points on metal bioremediation.
16. Explain the advantages of biopesticides.
17. Write an account on microbial polymers.

SECTION – C

ANSWER ANY TWO QUESTIONS :

(2 X 20 = 40)

18. Write an essay on sewage treatment methods.
19. Discuss elaborately the Ex-situ and In-situ bioremediation techniques.
20. Write an essay on tannery and dairy effluent treatment methods.
21. Discuss recent trends in oil recovery.
