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Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2014**

(CUCSS)

Environmental Science

ES 3C 09—ENVIRONMENTAL TOXICOLOGY AND BIOCHEMISTRY

Time : Three Hours

Maximum : 36 Weightage

**Part A**

*Answer all questions.*

*Each question carries 1 weightage.*

1. What is dose ?
2. Name two botanical insecticides.
3. What is biotransformation ?
4. What is accumulative poison ?
5. Enlist four toxic heavy metals.
6. What is chronic toxicity ?
7. What are essential amino acids ?
8. Write the significance of bioassay tests.
9. What are cofactors ?
10. Mention the sources of hydrogen sulfide in the atmosphere.
11. What is noise pollution ?
12. What are phospholipids ?
13. What is antagonism ?
14. Mention the toxicological effects of PAN on humans.

(14 × 1 = 14 weightage)

**Part B**

*Answer any seven questions.*

*Each question carries 2 weightage.*

15. What is biomagnification and why is it important in toxicology ?
16. What are the factors which influence the rate and extent of distribution of toxicants ?
17. How are toxicity tests classified ?

**Turn over**

18. Mention the biochemical role of nucleic acids.
19. Differentiate lethal concentration and lethal dose.
20. Give an account of mycotoxins.
21. How does plasma concentration determine the distribution of toxicants ?
22. How can you relate dose and toxic response by graphical method ?
23. Describe the major pathways in carbohydrate synthesis.
24. Write a note on occupational pollutants.

(7 × 2 = 14 weig

### Part C

*Answer any two questions.  
Each question carries 4 weightage.*

25. Write an essay on storage depots of toxicants.
26. Explain the mechanism of enzyme action and factors affecting enzyme activity.
27. Describe the metabolism of toxic substances by plants.
28. Classify lipids and mention the properties of triacylglycerol.

(2 × 4 = 8 weig