



DOON UNIVERSITY, DEHRADUN

School of Environment & Natural Resources

Mid-term Exam- Third Semester, 2014

M. Sc. (Environmental Science)

Course: EES – 518: Environmental Toxicology

Time Allowed: 2 Hours

Maximum Marks: 30

Section: A (Answer in about 25-50 words).

Attempt any EIGHT Questions

(Marks: 1.25 x 8 = 10)

1. Define environmental toxicology.
2. Define acute and chronic toxicity.
3. Who is the author of famous book “*Silent Spring*”
4. Write the names of national and international regulatory agencies responsible for setting environmental standards and regulations/guidelines.
5. Define heavy metals. Also give example of any three heavy metals of toxicity importance.
6. Partition coefficient and its role in toxicity assessment.
7. What are the major modes of xenobiotic intake and elimination in biological system?
8. Give suitable example of any three conjugants involved in Phase-II process of detoxification mechanism.
9. Write names of any two mixed functions oxidases involved in detoxification mechanism.
10. What is biomagnification? Also discuss the role of biomagnifications in ecosystem toxicity.

Section: B (Answer in about 250 words).

Attempt THREE Questions.

(Marks: 4 x 3 = 12)

1. Illustrate the role of environmental toxicology in ecological risk assessment.
2. Write comment on following
 - a. Interaction of a xenobiotic with the ecosystem
 - b. Three functions of environmental toxicology
3. Discuss the role of environmental toxicology in the management of ecological systems.
4. Write a short note on liver detoxification pathways.

