M.Sc. Final Year (Environmental Science) Degree Examination,
August/September 2008
Directorate of Correspondence Course
Paper – V : ENVIRONMENTAL POLLUTION AND MONITORING

Time : 3 Hours | Max. Marks : 75

Notes : Answer questions from all Parts.

PART – A
(Short answer type)

Answer **any SEVEN** of the following : **(7×3=21)**

1) Soil organisms
2) Ambient Noise
3) Hazardous waste
4) Landfill gas
5) Air Quality Index (AQI)
6) Ozone layer depletion
7) Water sampling instruments
8) Air samples
9) Effects of acid rain
10) Pollutants and contaminants.

PART – B

Answer **any FOUR** of the following : **(4×6=24)**

1) Give an account of monitoring air pollution.
2) Write a note on noise exposure levels and standards.

P.T.O.

3) What are the effects of radioactive pollution ?

4) Illustrate sources of heavy metal and its effect on biological systems.

5) Discuss Marine pollution.

6) Explain the Chemistry of air pollutants.

PART – C
(Essay Type)

Answer **any TWO** of the following : **(2×15=30)**

1) What is soil pollution ? Add a note on sources of heavy metal pollutants and their effect on biological systems.

2) Why source reduction is preferred than recycling and reusing ? Discuss.

3) Explain in detail the principles of water quality monitoring and methods of water sampling.

DPB – 520 ENV

M.Sc. Final Year (Environmental Science) Degree Examination,
August/September 2008
Directorate of Correspondence Course
Paper – VI : ENVIRONMENTAL TOXICOLOGY AND BIOSTATISTICS

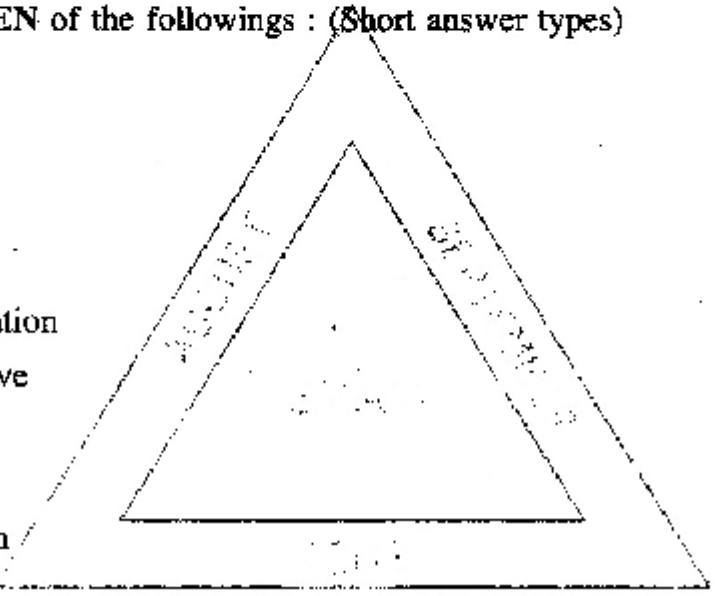
Time : 3 Hours Max. Marks : 75

Notes : Answer questions from all Parts.

PART – A

Answer **any SEVEN** of the followings : (Short answer types) **(7×3=21)**

1. Gerital warts
2. LC_{50}
3. Prostatitis
4. Data
5. Standard deviation
6. Frequency curve
7. Metal toxicity
8. Teritogenecity
9. Bioremediation
10. Detoxification



PART – B

Answer **any FOUR** of the following : **(4×6=24)**

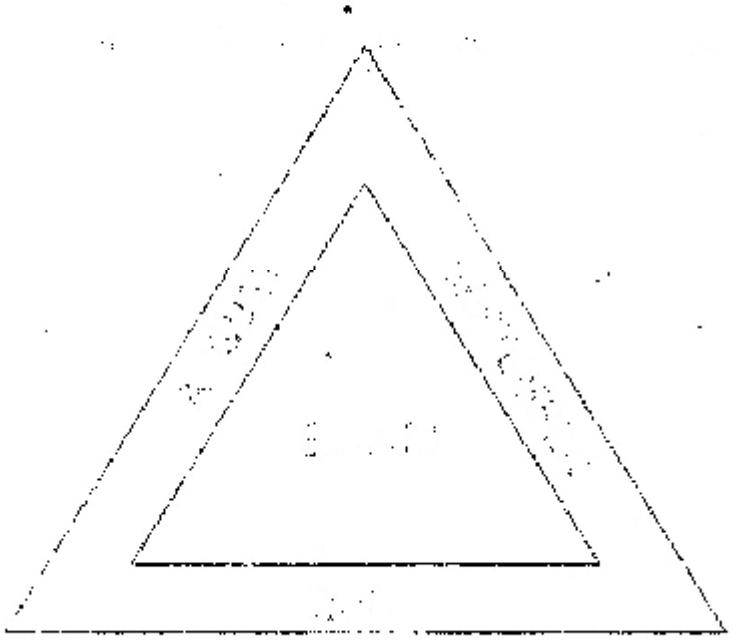
11. Differentiate acute and chronic toxicity.
12. Write the process of chemical hazard assessment.
13. What is environmental health management ?
14. Give an account on diagrammatic and graphic representation of data.
15. Describe the concepts of probability.
16. What is a regression analysis ?

P.T.O.

PART – C

Answer **any TWO** of the following : (Essay type) **(2×15=30)**

17. Write an essay on AIDS and add note on sexually transmitted diseases.
18. Give an account of effect of pollutants on plant communities.
19. Write a detailed note on practical problems in toxicity testing.



DPB – 530 ENV

M.Sc. Final Year Examination, August/September 2008

Directorate of Correspondence Course

ENVIRONMENTAL SCIENCE

Paper – VII : Environmental Engineering and Biotechnology

Time : 3 Hours Max. Marks : 75

PART – A

Answer **any SEVEN** of the following : **(7×3=21)**

1. Xenobiotics
2. Biofilteration
3. Indoor Air Quality
4. Septic Tank
5. Trickling Filter
6. Composting
7. Biomineralization
8. Anaerobic treatment
9. Biomining
10. Reverse Osmosis.

PART – B

Answer **any FOUR** of the following : **(4×6=24)**

1. Write various steps involved in sewage treatment.
2. What is demineralization ? Explain the methods.
3. Explain the causes and control of microbial pathogens in human health.
4. What is the composition of biogas ? Mention it's uses and the explain the role of microbes in biogas production.
5. Explain the ozonation and chemosteralization in water treatment.
6. Explain causes, ill effects and recovery of oil spills.

PART – C

Answer **any TWO** of the following : **(15×2=30)**

1. Write note on :
   a) Solar passive house
   b) Solar green house technology
   c) Solar desalinization.
2. What is environmental biotechnology ? Write an application of immunofilteration and DNA probing methods for detection of microbial pathogens in aquatic environment.
3. Describe the microbes and their genetic engineering for degradation of pollutants.

DPB – 540 ENV

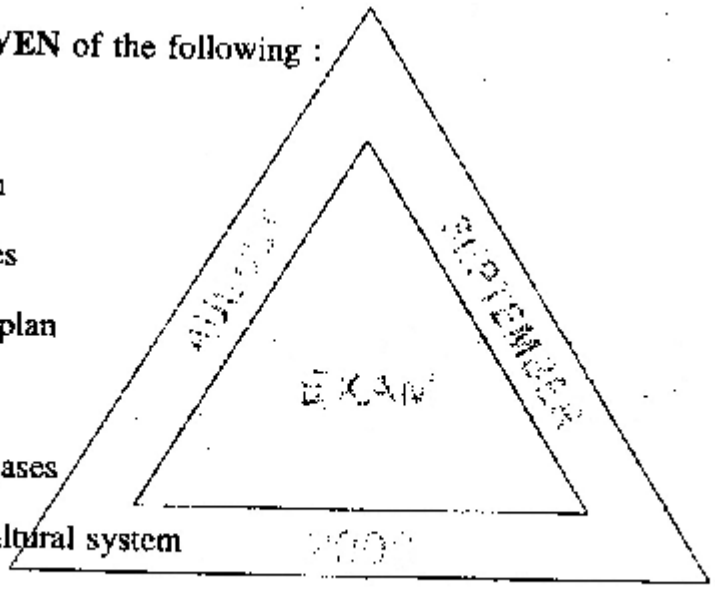
M.Sc. Final Year Examination, August/September 2008
Directorate of Correspondence Course
ENVIRONMENTAL SCIENCE
Paper – VIII : Global Environmental Changes, Natural Hazards and Impact Assessment

Time : 3 Hours

Max. Marks : 75

PART – A

Answer **any SEVEN** of the following : **(7×3=21)**



1. Atmosphere
2. Desertification
3. Energy sources
4. Ganga action plan
5. Floods
6. Green house gases
7. Modern agricultural system
8. Eco-tourism
9. Environmental risk assessment
10. Ozone chemistry.

PART – B

Answer **any FOUR** of the following : **(4×6=24)**

1. List the sources of lead in air environment.
2. What is EL.nino ? Explain its impact.
3. Explain the impacts of ozone depletion on plants.

P.T.O.

4. What are the techniques involved in predict natural hazards ?
5. What is environmental economics ? Explain the importance in environmental management.
6. Write a note on Bhopal gas incident.
7. Write the sources of Ganga water pollution.

PART – C

Answer **any TWO** of the following : **(2×15=30)**

1. Write notes on :
   a) Chernobyl accident
   b) Volcanoes
   c) Earth Quake.
2. Write the procedures of environmental impact analysis.
3. Discuss the environmental impact of modern agricultural practices.