

Babu Banarasi Das -National Institute of Technology & Management, Lucknow
B. Tech Second Year (Third Semester) 2018-19
Department of Civil Engineering

Environment and Ecology (RAS- 302)
Assignment: I (Unit 1)

Short and Long questions: Attempt All questions.

1. Discuss Importance and scope of environmental studies.
2. Explain the multidisciplinary nature of environmental studies.
3. What is environment and segments of environment with proper diagram?
4. Write different zone of the atmosphere in detail.
5. What is ecosystem? What is structure of an ecosystem?
6. What are functions of an ecosystem?
7. Describe energy flow in an ecosystem.
8. What are ecological pyramids?
9. What is food chain? Name types of food chains with suitable examples.
10. What is Sustainable Development? Discuss the concept of sustainable development.
11. What is Environment Impact Assessment? Write about the process in detail.
12. What are the effects of agriculture activity on environment?
13. What is the effect of mining activity on environment?
14. What are ecological effects of industry activity on environment?

Short Notes:

- 15. Briefly define the following:**
- i. Lithosphere and its ecological significance
 - ii. Importance of shelter and economic security
 - iii. Global Challenges to Food security
 - iv. Components of Balanced Ecosystem
 - v. Feed Back Mechanism
 - vi. Food Chain vs. Food Web
 - vii. Synecology vs. Autecology
 - viii. Environmental Lapse Rate
 - ix. Role of Atmosphere
 - x. Acid drainage
 - xi. EIS

Babu Banarasi Das -National Institute of Technology & Management, Lucknow
B. Tech Second Year (Third Semester) 2018-19
Department of Civil Engineering

Environment and Ecology (RAS- 302)
Assignment: III (Unit 3)

Short and Long questions: Attempt All questions.

1. Write sources, effects and control measures for air pollution.
2. Write sources, effects and control measures for water pollution.
3. Write sources, effects and control measures for noise pollution.
4. Write sources, effects and control measures for soil pollution.
5. What is acid rain effect on environment?
6. What is green house effect on environment?
7. What is ozone effect on environment?
8. Write population explosion? What is method for control population explosion?
9. What do you understand by the term 'solid waste'?
10. Discuss the methods used for the disposal of solid waste.

Short Notes:

11. Briefly define the following:

- i. Electronic waste management
- ii. 'J' shaped Population Growth Curve
- iii. Urbanization
- iv. Effects of Automobile pollution
- v. 'S' shaped Population Growth Curve
- vi. Importance of Animal Husbandry
- vii. Incineration
- viii. Land filling vs. Sanitary Land filling
- ix. GHG Vs Global Warming
- x. Air Scrubbers

Babu Banarasi Das -National Institute of Technology & Management, Lucknow
B. Tech Second Year (Third Semester) 2018-19
Department of Civil Engineering

Environment and Ecology (RAS- 302)
Assignment: III (Unit II)

Short and Long questions: Attempt All questions.

1. Define the characteristics of EMR radiations?
2. What are biogeochemical cycles? Describe Nitrogen cycle in detail.
3. Difference between water borne and induced diseases.
4. Discuss about the fluoride problem in India.
5. Describe Sulphur cycle in detail.
6. Discuss the adverse effect urbanization and industrialization and suggest suitable remedial measures.
7. What is water harvesting? Discuss the role roof water harvesting in water conservation.
8. Explain the concept of sustainable development.
9. What are various energy problem related to urban mass? Suggest measures to minimize them.
10. What do you mean by fossils and fossil fuel? What are the different types of fossil fuel based energy? Briefly explain them.
11. What is geothermal energy? Discuss its merits and demerits.
12. What is solar collector? Enumerate the application of solar energy in modern days.

Short Notes:

13. Briefly define the following:

- i. Bio-magnification
- ii. Eutrophication vs. Algal blooming
- iii. Soil erosion
- iv. UNEP & UNDP
- v. Bio-diesel as Bio-fuel
- vi. Blue Baby Syndrome
- vii. Arsenicosis
- viii. Skeletal fluorosis
- ix. Conventional and Non-Conventional sources
- x. Acid drainage
- xi. Nitrifying Vs Denitrifying bacteria

Babu Banarasi Das -National Institute of Technology & Management, Lucknow
B. Tech Second Year (Third Semester) 2018-19
Department of Civil Engineering

Environment and Ecology (RAS- 302)

Assignment: IV (Unit 1V)

Short and Long questions: Attempt all questions.

1. Discuss the role of women in Environmental Protection with suitable examples.
2. What do you understand by Environmental Education and its importance?
3. What is role of individual in environment pollution and protection?
4. Discuss the role of NGOs in Environmental Protection.
5. Discuss the Air Act, 1981 for environment protection
6. Describe Water Act, 1974 for environment protection.
7. Give the name of any five acts working in environment protection.
8. Describe some major legal initiatives by government to protect environment.

Short Notes:

9. Briefly define the following:

- i. Eco-mark
- ii. Green Peace
- iii. Swacch Bharat Mission
- iv. Chipko Movement
- v. Van Mahotsava
- vi. Silent Valley Movement
- vii. Environment Protection Act
- viii. Clean Ganga Movement
- ix. Vienna Convention
- x. Kyoto Protocol
- xi. Paris Conference/COP
