Uka Tarsadia University (Diwaliba Polytechnic)Diploma in Environmental EngineeringAssignment (Ecology and Environmental Pollution -EV1005)

Unit-1 Introduction

- 1. Define: Ecology, Autecology, Synecology.
- 2. What are the objective of ecological studies ?
- 3. Define : Grass land ecology, Marine ecology, Biotic components
- 4. Define: Abiotic components, Producers, Consumers.
- 5. Define: Decomposers, Detrivors, Autocrops.
- 6. What is the scope of ecological studies?
- 7. Write steps for environmental conservation.
- 8. Write role of Individual in protection of environment.

Unit-2 Ecosystem

- 1. Explain food web with example.
- 2. Write a factors affecting on ecosystem.
- 3. Define energy and discuss the energy flow within the ecosystem.
- 4. Define ecosystem. How many kinds of ecosystems are known to you?
- 5. Explain with sketch Ecosystem Model in detail.
- 6. Write functions of ecosystem and give common characteristics of most of the ecosystem.

Unit-3 Ecological Pyramids and Tropic Structures

- 1. What is food chain and food web?
- 2. List the common words used with food chain with their meaning.
- 3. Define ecological pyramid.
- 4. What is pyramid of biomass?
- 5. Explain ecological pyramids in details
- 6. Explain pyramid of number in detail.
- 7. Explain the concepts of energy flow in an eco-system.
- 8. Explain with sketch inverted pyramid of tree ecosystem.

Unit-4 Bio-Geo-Chemical Cycles

- 1. Write a sources of carbon in carbon cycle.
- 2. What is bio geo chemical cycles? Explain with the help of two suitable examples.
- 3. Draw the Diagram of water cycle and explain its importance.
- 4. Write a human impact on hydrological cycle.
- 5. Draw neat sketch of carbon cycle and explain it.
- 6. Draw neat sketch of Nitrogen cycle and explain it.
- 7. Draw neat sketch of Sulphur cycle and explain it.
- 8. Draw neat sketch of phosphorus cycle and explain it.
- 9. Explain phosphorus cycle in detail.
- 10. Discuss the role of Sulphur cycle in acid rain.

Unit-5 Environmental Pollution

- 1. State pollutants responsible for polluting environment.
- 2. What is noise and sound?
- 3. State and explain the various sources of radioactivity in the environment.
- 4. What is biodegradable organic matter, and how its presence in water is measured?
- 5. Write short notes on disposal of radioactive wastes into sea.
- 6. Write short notes on disposal of radioactive wastes into sea.
- 7. Classify the radioactive wastes and their disposal depending upon their radioactive levels of radioactivity and explain any one.
- 8. How are soils polluted? Explain the various sources which pollute the soils.
- 9. Discuss in detail the various sources of noise and their typical noise levels, in a modern society.
- 10. Write a sources of water pollution in detail.
- 11. Write drinking water quality standard.
- 12. Write a water quality characteristic and their sources.
- 13. How to control water pollution?

Unit-6 Global Environmental Problems

- 1. What is climate change?
- 2. Write a sources of greenhouse gases.
- 3. What is ozone layer depletion ?
- 4. What is climate change? Explain what you understand by global warming.
- 5. Enlist physical and social impacts of climate change and explain any one.
- 6. Define El nino and write in detail causes of occurrence of El nino.
- 7. Why ozone depletion occur? Describe in detail on Health hazards of ozone depletion.
- 8. Express your view on Global climate change in detail.
- 9. Write your views on deforestation and Water Crisis.