

1.7 Environmental Studies (Skill Enhancement Course)

Unit – I

Ecosystem, Biodiversity & Natural Resources

1. Definition, Scope & Importance of Environmental Studies.
2. Structure of Ecosystem – Abiotic – Biotic components Producers, Consumers, Decomposers, food chains, Food webs, ecological Pyramids
3. Function of an Ecosystem: Energy flow in the Ecosystem (single channel energy flow model)
4. Definition of Biodiversity, Genetic, Species & Ecosystem diversity, Hot-Spots of Biodiversity, Threats to Biodiversity, Conservation of Biodiversity (Insitu&Exsitu)
5. Renewable & non – renewable resources, Brief account of Forest, Mineral & Energy (Solar Energy & Geothermal Energy) resources
6. Water Conservation, Rain water Harvesting & Watershed Management.

Unit – II

Environmental Pollution, Global Issues & Legislation

1. Causes, Effects & Control measures of Air Pollution, Water Pollution
2. Solid Waste Management
3. Global Warming & Ozone layer depletion.
4. Ill – effects of Fire – works
5. Disaster Management – floods, earthquakes & cyclones\
6. Environmental legislation:-
 - a) Wild life Protection Act
 - b) Forest Act
 - c) Water Act
 - d) Air Act
7. Human Rights
8. Women and Child welfare
9. Role of Information Technology in environment and human health

• Field Study:

1. Pond Ecosystem
2. Forest Ecosystem

References:

1. Environmental Studies– from crisis to cure – by R. Rajagopalan (Third Edition) Oxford University Press.
2. Text Book of Environmental Studies for undergraduate courses (Second edition) by ErachBharucha
3. A text of Environmental Studies by D. K. Asthana and Dr.Meera Asthana.