

AHL-110-A	ENVIRONMENTAL STUDIES	L	T	P	Cr.
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(Common for B.Tech, Integrated M.Tech, Dual Degree MBA)

SECTION-A

UNIT-I

The Multidisciplinary Nature of Environmental studies: – Nature, scope and importance, need for public awareness.

UNIT-II

Natural resources: – Renewable and non-renewable resources, natural resources and associated problems:

- (a) **Forest resource:** Use and over-exploitation, deformation and case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) **Water resources:** Use and overutilization of surface and ground water, flood, drought, conflicts over water, dams-benefit and problem.
- (c) **Mineral resources:** Use and exploitation, environmental effects of extracting and using mineral resources.
- (d) **Food resources:** World food problems, changes caused by agriculture and over-grazing, effects of modern agriculture, fertilizer-pesticide problem, water logging, salinity.
- (e) **Land resource:** Land as a resource, land degradation, man induced landslides, soil erosion and desertification.

UNIT-III

Ecosystems :– Concept, structure and function of an ecosystem; energy flow in the ecosystem; ecological succession; food chains, food webs and ecological pyramids; types of ecosystem – forest ecosystem, grassland ecosystem, aquatic ecosystems.

SECTION-B

UNIT-IV

Environmental Pollution: – Definition, cause, effects and control measures of different types of pollutions – air pollution, water pollution, soil pollution, marine pollution, noise pollution, thermal pollution, nuclear hazards; solid waste management- causes, effects and control measures of urban and industrial wastes; role of an individual in prevention of pollution.

UNIT-V

Social issues and environment:– Urban problems related to energy, water conservation, rain water harvesting, resettlement and rehabilitation of people

and its problems; global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust.

UNIT-VI

Human population and environment :-Population growth, variation among nation, population explosion-family welfare programme, environment and human health, Human rights, HIV/AIDS, woman and child welfare.

SUGGESTED READINGS:

1. Rajagopalan R, Environmental Studies, Oxford University Press, New Delhi
2. Kaushik Anubha, C.P. Kaushik, Perspective in Environmental Studies, New Age International (P) Ltd. Publishers
3. Joseph Benny, Environmental Studies, Tata McGraw Hill Publishing Company Ltd., New Delhi
4. Ubaroi, N.K., Environment Management, Excel Books, New Delhi