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| AR123 | Environmental Studies | HR 3-0-0 | CR-3 |
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Objective

To enable the student to understand the ecosystem, effect of pollution, environmental degradation and eco sustainable development.

Module 1

INTRODUCTION TO ECOSYSTEMS AND ENVIRONMENT, ENVIRONMENTAL RESOURCES

Fundamentals of Ecosystem, our earth's Environment. Types of ecosystems, characteristics features, structure and functions of Ecosystems – Forest, Grassland, Desert, Aquatic (lakes, rivers and estuaries).

Module 2

RESOURCES AND ENVIRONMENT: LAND, FOREST, WATER AND ENERGY AS ENVIRONMENTAL RESOURCES. HUMAN IMPACT ON ENVIRONMENT AND POLLUTION:

Local and Global Issues, Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Urban and Industrial wastes, Recycling and Re-use, Global warming, Acid rain and Ozone layer depletion.

Loss of wet lands, mangroves, increasing desert areas, Social issues and the environment

Module 3

INSTITUTION AND GOVERNANCE

Institutional arrangement, Environmental legislation, Introduction to Government regulations, Introduction to Environmental Acts, (eg, Water Conservation and Control of Pollution Act, Air pollution control act, Environmental Protection Act, Wild life protection Act, Forest Conservation Act, etc.)

Module 4

ENVIRONMENTAL MANAGEMENT

Introduction to principles of sustainable development, Environmental quality and indicators, Management of environment, Introduction to Solid waste management.

Module 5

Conduct case studies and prepare report on relevant areas.

References

1. Ecology/ Principles and application ; J.L Chapman & M.J Press; Cambridge
2. Environmental Economics; Charles. D Kolstad: Oxford University Press
3. The hidden connection; F.Capra , Harper and Collins
4. Agarwal, K. C. (2001). Environmental Biology. Bikaner : Nidhi Publications Ltd.
5. Benny, J. (2005). Environmental Studies. New Delhi : Tata McGraw Hill.
6. Bharucha, E. (2005). Text book of environmental studies for undergraduates courses. New Delhi : Universities Press, UGC. .
7. Brunner, R.C. (1989). Hazardous Waste Incineration. New Delhi : McGraw Hill.
8. Kaushik, A. and Kaushik, C. P. (2010). Basics of Environment and Ecology. New Delhi : New Age International Publishers.