

B.COM.
SEMESTER II
Environmental Studies - II
(50 Marks - 30 Lectures)

UNIT I. Environmental Pollution

(15 Marks – 8 Lectures)

a) Definition a) Air pollution b) Water pollution c) Soil pollution d) Marine pollution e) Noise pollution f) Thermal pollution g) Nuclear hazards

Solid waste Management: Causes, effects and control measures of urban and industrial wastes.

Role of an individual in prevention of pollution.

Pollution case studies.

Disaster management: floods, earthquake, cyclone and landslides.

II. Social Issues and the Environment

(15 Marks -8 Lectures)

From Unsustainable to Sustainable development

Urban problems related to energy

Water conservation, rain water harvesting, watershed management.

Resettlement and rehabilitation of people; its problems and concerns. Case studies.

Environmental ethics: Issues and possible solutions.

Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.

Wasteland reclamation.

Consumerism and waste products.

Environment Protection Act.

Air (Prevention and Control of Pollution) Act.

Water (Prevention and control of Pollution) Act

Wildlife Protection Act

Forest Conservation Act

Issues involved in enforcement of environmental legislation.

Public awareness

III. Human Population and the Environment

(15 Marks – 8 Lectures)

Population growth, variation among nations.

Population explosion - Family Welfare Programme.

Environment and human health.

Human Rights.

Value Education.

HIV; AIDS.

Women and Child Welfare.

Role of information Technology in Environment and human health.

Case Studies

IV. Field work

(05 Marks - 06 Lectures)

Visit to a local area to document environmental assets-river /forest/

Grassland/ hill/ mountain Visit to a local polluted site - Urban! Rural Industrial Agricultural

Study of common plants, insects, birds.
Study of simple ecosystems-pond, river, hill slopes, etc.

Weightage: . ISA: 10 + S.E.E: 40 Total= 50.

Instructions:

- 1 Maximum thrust may be given to local regional and national examples.
 - 2 Q. No. 1 being objective it should include questions from all units of the term.
 3. Questions should be set with due weightage to all the units as specified
- Pedagogic suggestion: The Current topic of Regional & National interest have to be updated by referring to subject journals - Down to Earth, Current Science, Yojna and Other relevant materials.

References:

1. Agarwal, K.C.2001 Environmental Biology, Nidi Pub!. Ltd. Bikaner.
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd. , Ahmedabad - 380013, India, Email: mapin@icenet.net (R)
3. Brunner RC., 1989, Hazardous Waste Incineration, McGraw Hill Inc.480p
4. Clark RS., Marine Pollution, Clanderson Press Oxford (TB)
5. Cunningham, W.P.Cooper, TH.Gorhani, E & Hepworth, M.T2001, Environmental Encyclopedia, Jaico Pub!. House, Mumbai, 1196p
6. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
7. Down to Earth, Centre for Science and Environment(R)
8. Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute. Oxford Univ. Press. 473p
9. Hawkins R.E, Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
10. Heywood, VH & Watson, R.T. 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
11. Jadhav, H & Bhosale, VM. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
12. Mckinney, M.L. & SchocJ', R.M. 1996. Environmental Science systems & Solutions, Web enhanced edition. 639p.
13. Mhaskar A.K, Matter Hazardous, Techno-Science Publications (TB)
14. Miller TG. Jr., Environmental Science, Wadsworth Publishing Co. (TB)
15. Odum, E.P. 1971. Fundamentals of Ecology. W.B.Saunders Co. USA, 574p
16. Rao M N.& Datta, A.K. 1987. Waste Water treatment. Oxford & IBH Pub!. Co. Pvt.Ltd.
17. Sharma B.K., 2001. Environmental Chemistry. Goel Pub!. House, Meerut
18. Survey of the Environment, The Hindu (M)
19. Townsend C. , Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science ('TB)
20. Trivedi R.K., Handbook of Environmental Laws, Rules, Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R)
21. Trivedi R.K. and P.K.Goel, Introduction to air pollution, Techno-Science Publications (TB)
22. Wagner K.D.,1998. Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p

(M) Magazine (R)Reference (TB) Text book