

1st SEMESTER
ABILITY ENHANCEMENT COMPULSORY COURSE (AECC)

**Prescribed for all streams of B.Sc./BBA/BCA/BMMMC/BAENGLISH/ B. Sc. IT/BA
FAZILA / OC&MIL (GENERAL/HONOURS) PROGRAMMES**

EVS120A: ENVIRONMENTAL STUDIES

Credits: 04

UNIT I: UNDERSTANDING ENVIRONMENTAL

1. Environment: Concepts and importance;
2. Component of environment: Physical, biological and social;
3. Eco-system definition, structure and function: producers, consumers and decomposers, food chains, food webs and ecological pyramids, energy flow in an ecosystem;
4. Eco-system services: ecological, economic, social, aesthetic and informational value.

UNIT II: NATURAL RESOURCES

1. Land resources: global land use patterns, concept land degradation and desertification;
2. Forest resources: use and consequences of over-exploitation;
3. Water resources: use and consequences of over-utilization, concept of water harvesting and water shed management, water conflicts; energy resources;
4. Renewable and non-renewable energy sources, growing energy needs and alternate energy sources.

UNIT III: BIO DIVERSITY AND ITS CONSERVATION

Bio Diversity: definition, levels and values (commercial, ecological, social and aesthetic);
Threats to bio diversity: habitat loss, poaching of wild life, man-wildlife conflicts, biological invasions; Concept of endemism and hot-spots of bio-diversity;
Conservation of Bio-diversity: In-Situ and Ex-Situ concepts.

UNIT IV: ENVIRONMENTAL ISSUES, POLICIES AND PRACTICES

Causes, effects and control measures of: air, water, soil, noise and solid waste pollution;
Concept of natural disasters and global environmental issues: increase in greenhouse gases, climate change, acid rain and stratospheric ozone layer depletion; salient features of: water (prevention and control of pollution) Act, 1974, air (prevention and control of pollution) Act, 1981, environment protection Act, 1986; Environmental education, environmental movements (Chipko, silent valley) and environmental ethics.

SUGGESTED READINGS:

1. Bharucha, Erach, 2005. Text Book of Environmental Studies, Universities Press (India), Hyderabad.
2. Joseph, Benny, 2005. Environmental Studies, McGraw Hill companies.
3. De, Anil Kumar and De, Arnab Kumar, 2nd edition. New Age International Publishers.
4. Kanagasabai, S. 2010. Text Book on Environmental Studies. PHI Learning.
5. Sharma, P. D. 2015. Ecology and Environment.
6. Chauhan, B. S. 2008, Environmental Studies. University Science Press.
7. Kaushak and Kaushak. 2016. Perspectives in Environmental Studies.
8. Jaiswal, P.S.2007.Environmental Law. Pioneer Publications, Delhi.
9. Ghosh, G.K.1992. Environmental Pollution. Ashiah Publication, Delhi.