

ENVIRONMENTAL STUDIES
(Compulsory Foundation Course)

Course-I/FC/EVS-IV Credit-5

UNIT I:INTRODUCTION

- Scope and Importance multidisciplinary nature of environmental studies
- Ecology – concept, types, classification and ecological levels of organization
- Ecosystem – concept, types, classification and components of ecosystem
- Structure and function of an ecosystem

UNIT II: NATURAL RESOURCES

- Introduction, classification of natural resources
- Basics of renewable resources
- Basics of non-renewable resources
- Causes for depletion and conservation measures of natural resources

UNIT III: BIODIVERSITY AND CONSERVATION

- Definition, pattern and levels of biodiversity
- Concept of mega-diversity and hot-spots of biodiversity
- Causes and consequence of biodiversity loss.
- Conservation of biodiversity- *In-situ* and *Ex-situ*

UNIT IV: ENVIRONMENTAL POLLUTION

- Basic concept and types of environmental pollution
- Sources and causes of environmental pollution (air, water, soil, noise)
- Effects and control of environmental pollution (air, water, soil, noise)
- Climate change – global warming, ozone layer depletion, acid rain and impact on human communities and agriculture

UNIT V: SOCIAL ISSUES, DEVELOPMENT AND THE ENVIRONMENT

- Goals, objectives and guiding principals of environmental education
- Environmental movements- Chipko, Appiko, Silent valley projects
- Role of NGOs in environmental development.
- Concept sustainable development

Suggested Readings:

1. Asthana, D.K. and
Asthana, M, (2010) : *A Textbook of Environmental Studies*,
S.Chand and Company, New Delhi
2. Bahrucho, E. (2013) : *Textbook of Environmental Studies*,
University Press (India) Pvt. Ltd, Hyderabad
3. Daniel, D.C., (2010) : *Environmental Science*, Jones and Barlett Publishers, London
4. Dara, S.S., (2004) : *A Textbook of Environmental Studies and Pollution Control*,
S.Chand and Company, New Delhi
5. Gupta A., Dey, M. and
Bhattacharjee, P.R., (2001): *Our Environment*, Assam University, Silchar
6. Joshi, P.C., (2012) : *A Textbook of Environmental Science*,
APH Publishing Corporation, New Delhi
7. Kanakasabai, T., (2010) : *Environmental Studies*,
PHI Learning Private Limited, New Delhi
8. Khopkar, S.M., (2007) : *Environmental Control and Monitoring*,
Newage International Pvt. Ltd. Mumbai
9. Purohit, S.S., (2011) : *Environmental Pollution: Causes, Effects and Control*,
Vatsal Enterprise, New Delhi.
10. Kaushik, Anubha and
Kaushik, C.P. (2012) : *Perspective in Environmental Studies*,
New Age International Publishers, New Delhi

