

VALUE ADDED COURSES (VAC)

- 4 Environmental Conservation-promises and actions: A.Ghosh
 - 5 River Water sharing-Transboundary conflict and cooperation in India:
N.S.Mohan;
- i. Graduate Attributes
- I. Course Objective:
 - The course objective is to develop an understanding of the basic concepts of environmental significances of natural resources. It also aims to make the students understand about the risks factors associated with natural resource extraction and uses.
 - II. Learning Outcome:
 - Natural resources represent a potentially transformational opportunity to support development, but they are ultimately finite. So, by this course attempts have been made to teach the students about the complex and interwoven aspects of natural resources and to make the learners committed to harnessing the transformational impacts of the natural resource with sustainability aspects.
- j. Theory Credit: **2**
- k. No. of Required Classes: **60**
- l. No. of Contact Classes: **45**
- m. No. of Non-Contact Classes: **15**
- n. Particulars of Course Designer :

Environmental Studies

Total marks: 50

Course level:100-199

No. of Credits: 2

No. of hours: 30

Unit1: Introduction to Environmental Studies

5 lectures

- Multidisciplinary nature of environmental studies;
- Scope and importance;
- Basic concepts: Renewable resources, no renewable resources, Common Property resources, Tragedy of commons, Climate change, global warming
- Concept of sustainable development

Unit 2: Ecosystems

10 lectures

- What is an ecosystem? Difference between ecology and ecosystem. Structure and function of ecosystem: Energy flow in an ecosystem: food chains, food web and

ecological succession.

- Case studies on any one of the following
 - a) Forest ecosystem
 - b) Grassland ecosystem
 - c) Aquatic ecosystems (ponds, streams, lakes, rivers)
 - d) Mountain ecosystem

Unit 5: Environmental Pollution and laws

15 lectures

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Solid waste management: Control measures of urban and industrial waste.
- Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements, policies and treaties

Suggested Readings:

1. Bharucha Erach : Text book on Environmental Studies, UGC, New Delhi
2. Carson, R 2002. Silent Spring. Houghton Mifflin Harcourt.
3. De A.K.: Environmental Chemistry, Wiley Eastern Ltd.
4. Kaushik Anubha and C.P.Kaushik : Perspective in Environmental Studies, New Age International
5. Rajagopalan, R. (2018). Environmental Studies. (3rd Edition) Oxford University Press
6. S. C. Santra (2011): Environmental Science, New Central Book Agency

Graduate Attributes

I. Course Objective:

The course objective is to develop an understanding of the basic concepts of environmental studies. This course will help to know the environment around us. It also gives an idea of various laws to protect environment.

II. Learning Outcome:

- After going through this course students can visualize the importance of environment for human mankind. This course will help to make an understanding of the various concepts which are frequently used by us. This course also enable students to know the problems of a particular environmental event through case studies and also help them to go through the various available laws that can minimize the environmental problems.

Theory Credit: **2**

No. of Required Classes: **30**

No. of Contact Classes: **30**

No. of Non-Contact Classes: **0**