

## **B.A. (Hons.) Syllabi for the Subsidiary Papers on Environmental Studies**

### **Semester -I**

#### **Paper -I** **Introduction to Environmental Studies**

##### **Part-I: Ecosystem and Economy**

Definition, types and Functions of Ecosystem, Linkage between Economy and Ecosystem, Degradation of Ecosystem, Need for Conservation of Ecosystems, Present state of Eco-systems with special reference to India.

##### **Part-II: Natural Resources**

I) Definition, classification and types of Renewable and Non- Renewable Natural resources: Forest Resources, Water resources, Mineral resources, Land resources, Energy resources; II) Common Property resources (CPRs), Destruction of CPRs and its Impact on Human Welfare; III) Scarcity of Natural Resources, Concept and Management.

##### **Part-III: Environmental Pollution**

I) Concept and Classification; II) types of Environmental Pollution: Air Pollution, Water Pollution, Soil Pollution, Marine Pollution, Noise Pollution, Nuclear Pollution, Thermal Pollution; III) Causes of Pollution and Measures of Pollution Control.

##### **Basic Reading List:**

1-Anindita Basak, (2009), "Environmental Studies" Dorling Kindersley (India) Private Limited, New Delhi, ISBN:978-81-317-2188-6.

2-Bhattacharya, Rabindra N. (2001), "Environmental Economics- An India Perspective", Oxford University Press, New Delhi,

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5-N.K. Uberoi, (2010), "Environmental Studies", Excel Publication, New Delhi, ISBN:978-81-7446-886-4.

6- R.C. Das & D.K. Beliera, (2008), Environmental Science Principles and Practice", Prentice-Hall of India Private Limited, New Delhi, ISBN: 978-81-203-3330-7.

7- S.N. Prasad, (2011), "environmental Economics", Pointer Publishers, Jaipur, India, ISBN:81-7132-391-X.

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## **Semester -II**

### **Paper -II**

### **Environmental Thought and Environmentalism**

#### **UNIT-I: Evolution of Environmental Thought and Environmentalism**

Introduction to Environmental thought, the origin of modern environmental thought, Evolution of Environmentalism in the West, Western Environmentalism, Environmentalism in Developing Countries.

#### **UNIT-II: History of Environmentalism in India**

Environmentalism- Definition, Major Environmental Ideology, Indian Environmental Movements-Chipko Movement, Gandhian Environmentalism; Current State of Environment: Biodiversity, Forest, Water, Air.

#### **UNIT-III: Environmental Regulatory Bodies and Important Legislations/ Policies in India**

Role of Ministry of Environment and Forest (MoEF), Government of India; Central Pollution Control Board (CPCB); Environmental Legislations/ Policies: National Environmental Policy (NEP)-2006; Indian Forest Act-1865; Wildlife Protection Act-1972; Environment (Protection) Act-1986; Biological Diversities Act-2002.

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### **Semester -III**

#### **Paper -III**

#### **Environmental and Economics Development**

##### **Part-I: Basic Theory of Environmental Economics**

Brief Introduction of: Capital Theory, Public Goods, Externality, Market Failure, Property Rights, Information Asymmetry.

##### **Part-II: Economics of Pollution Control**

Instruments of Pollution Control: Command and Control Measures Vs Market Based Instruments; Taxes Vs Permits; Direct and Indirect Instruments of Pollution Control; Pollution Control System and Policy Measures in Indian context Concept of Optimum Pollution.

##### **Part-III: Economics of Sustainable Development**

Definition and Concepts of Sustainable Development, Indicators of Sustainable Development, Environmental Kuznets Hypothesis (EKH) and Millennium Development Goals (MDGs)

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### **Semester-III**

#### **Paper-V**

#### **International Environmental Issues and Challenges**

##### **UNIT-1: Global Environmental Issues**

Climate Change: Reasons for Climate Change, Historical Trends, Climate Change and Its Effect on: Agriculture, Availability of Fresh Water and Change of River Ecosystem, Sea-Level Rising and Loss of Human Interest, Ozon Layer Depletion, Deforestation and Desertification.

##### **UNIT-II: Climate Change and Policy Adapted**

Causes, Consequences and Solution of Climate Change, Determinants of Climate Change, Major Indicator of Climate Change, Policy adapted by the International Community to cope up with the Climate Change, Role of states, civil society and international organization to come out with the problem of climate change.

##### **UNIT-3: Loss of Biodiversity**

Definition, Types and Value of Biodiversity, Loss of Biodiversity and Its Major Causes, Mega-Diversity Countries, IUCN Red List, Needs for Conservation of Biodiversity.

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12-www.wwf.org

13-www.ramsar.org

14-www.ipcc.ch

## **Semester-IV**

### **Paper-IV**

#### **Human Environment Relationship and Economic Valuation**

##### **1- A Brief History of Human and Environment Relationship**

Historical Progress, Adaptation, Ecosystem- Concepts, Structure and Functions, Environmental Problems in Tropical, Temperate and Polar Ecosystems, Environmental Programmes and Policies- Global, National and Local Levels.

##### **2-Distribution of Various Environmental Resources**

Problems of Distribution, Utilisation, and Management of Environmental Resources, Appraisal and Conservation of Natural Resources.

### **3-Methods for Valuation of Environment**

Economic Values of Environment-A Brief Introduction of, Use Value (UV) and Non-Use Value (NUV), Direct and Indirect Methods of Valuation, Environmental Valuation Using Contingent Valuation Method (CVM) and Travel Cost Method (TCM).

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## **Semester -IV**

### **Paper -VI**

#### **International Environmental Institutions and Negotiation/Agreement**

#### **Part-I: Major International Environmental Negotiation/Agreement**

Agenda 21, Earth Summit, Convention on Biological Diversity (CBD), Ramsar Convention, Kyoto Protocol, Bali Road Map

## **Part-II: Global/Regional Environmental Organisation**

- (a) IUCN-International Union for the Conservation of Nature
- (b) UNEP-United Nations Environment Programme
- (c) WWF-World Wide Fund
- (d) IPCC-International Panel on Climate Change
- (e) Ramsar Convention on Wetlands of International Importance

## **Part-III: International Environmental Law**

A Brief History of International Law, Distinguishing National Law from International Law, Means of Implementing and Enforcing International Environmental Law, Distinguishing between Hard and Soft International Law, Jurisdiction for Disputes: Courts, Parties and Enforcement

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