

BA I 2015

ENVIRONMENTAL STUDIES

SYLLABUS

UNIT 1: The Multi-disciplinary Nature of Environmental studies : Definition, scope and importance: Need for public awareness.

UNIT 2: Natural Resources : Renewal and non-renewable resources: Natural Resources and associated problems.

- (a) Forest resources: Use and over-exploitation, deforestation, mining and their effects on forest and tribal people.
- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using minerals resources.
- (d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.
- (f) Land resource: Land as a resource, land degradation, soil erosion and desertification.

Conservation of natural resources

Equitable use of resources for sustainable Development

UNIT3: Ecosystem

Concept of an ecosystem

Structure and function of an ecosystem

Producers, consumers and decomposers

Energy flow in the ecosystem

Food chains, food webs and ecological pyramids

Introduction, types, characteristics features, structure and function of the following ecosystems:

- a. Forest ecosystem
- b. Desert ecosystem
- c. Aquatic ecosystem(Ponds, streams, lakes, rivers, oceans, estuaries)

UNIT 4: Biodiversity and its conservation

Introduction- Definition: Genetics, species and ecosystem diversity. Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values.

Biodiversity at global national and local levels.

Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts.

Important Endangered and endemic species of India

UNIT 5: Environmental Pollution:

Definition:

Causes, effects and control measures of:

- a. Air Pollution
- b. Water Pollution;
- c. Soil Pollution;
- d. Noise Pollution;
- e. Thermal Pollution;
- f. Nuclear hazards

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

Role of an individual in prevention of pollution

Role of NGOs.

UNIT 6: Legal Issue and the Environment

Socio-Urban problems related to energy

Water conservation, rain water harvesting, watershed management

Resettlement and rehabilitation of people: its problem and concerns.

Environmental ethics: Issues and possible solution

Climatic change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust

Environment Protection Act.

Air (prevention and Control of Pollution) Act/Bare knowledge of Basic Salient provisions.

Water (Prevention and control of pollution) Act.

Wild life protection Act

Forest conservation Act

Public awareness and role of NGOs and civil society
role of UN.

UNIT 7: Human Population and the Environment

Population growth, variation among nations

Population explosion family welfare programme

Environment and human health

Human Rights

Value Education

Women and Child Welfare

Note: The Examination question paper may be from all seven units and students may be given choice to attend any five units.