

## ENVIRONMENTAL STUDIES

### COURSE OUTCOME

**Unit I:** The Multidisciplinary nature of environmental studies.

With this unit, the students have brief idea regarding the

- a) Definition, scope and importance of environmental studies.
- b) Need for public awareness.
- c) Institutions in environment both the government and non-government organizations that are working towards environmental protection.
- d) People in environmental, who made their contribution towards the betterment of environment.

**Unit II:** Natural Resources:

With this unit, the students have the knowledge regarding the

- a) Renewable and non renewable resources.
- b) Problems associated with natural resources such as forest, water, food, minerals, energy and land resources.
- c) Role of an individual in conservation of natural resources.
- d) Equitable use of resources for sustainable lifestyles.

**Unit III:** Ecosystem

With this unit, the students are understanding the

- a) Concept of an ecosystem, its degradation and resource utilization.
- b) Structure and function of an ecosystem.
- c) Energy flow in the ecosystem such as water cycle, carbon cycle, oxygen cycle, nitrogen cycle, energy cycle and integration of cycle in nature.
- d) Ecological Succession.
- e) Food chain, food web and ecological pyramid.
- f) Introduction, types, characteristic features, structure and functional such as forest ecosystem, grassland ecosystem, desert ecosystem and aquatic ecosystem.

#### **Unit IV: Biodiversity**

With this unit, the students are understanding the

- a) Introduction to genetic, species and ecosystem diversity.
- b) Biographic classification of India.
- c) Values of biodiversity with relate to consumptive use value, productive use value, social values, ethical and moral values, aesthetic value and option value.
- d) Biodiversity at global, national and local levels.
- e) India as a mega –diversity nation.
- f) Hotspots of biodiversity.
- g) Threats to biodiversity such as habitat loss, poaching of wild life and man-wild life conflicts.
- h) Endangered and endemic species of India.
- i) Conservation of biodiversity with the in-situ and ex-situ conservation.

#### **Unit V: Pollution**

With this unit, the students are understanding the

- a) Definition, causes, effects and control measures of pollution with regards to air, water, soil, marine, noise, thermal pollution and nuclear hazards.
- b) Solid waste management –its causes, effects control measures of urban and industrial waste.
- c) Role of an individual in prevention of pollution.
- d) Pollution case studies.
- e) Disaster management with regards to foods, earthquakes, cyclones and landslides.

#### **Unit VI: Social Issues and the Environment.**

With this unit, the students are understanding the

- a) Sustainable development.
- b) Water conservation, rainwater harvesting and watershed management.
- c) Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust.

- d) Waste reclamation.
- e) Consumerism and waste products.
- f) The Environment (Protection) Act. , The air (prevention and control of Pollution) Act. , Water (prevention and control of Pollution) Act. , The wildlife Protection Act. , Forest Conservation Act.
- g) Issues involve in enforcement of environment legislation such as environmental Impact Assessment (EIA) and citizens and actions groups.
- h) Public awareness.

**Unit VII: Human population and Environment.**

With this unit, the students have idea of

- a) Population growth and variation among nations.
- b) Population explosion and family welfare program.
- c) Environment and human health.
- d) Human rights.
- e) Value education regarding environment values, valuing nature, valuing cultures, social justice, human heritage, equitable use of resources, common property resources and ecological degradation.
- f) HIV/AIDS.
- g) Woman and child welfare.
- h) Role of information technology in environment and human health.