

**FOUNDATION COURSE**  
**ENVIRONMENTAL STUDIES**  
 Common for BA/BCom/BSc/BBA/BCA Programmes  
**II SEMESTER – W.E.F. 2015-16**

**Unit-I : Natural Resources**

The Multidisciplinary nature of Environmental Studies. Definition, scope and importance. Need for public awareness. Renewable and non-renewable resources: Natural resources and associated problems

- Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people
- Water resources: use and over – utilization of surface and ground water, floods, drought, conflicts over water, dams- benefits and problems
- Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies
- Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer- pesticide problems, water logging, salinity, case studies
- Energy resources Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies
- Land resources: Land as resources, land degradation, man induced landslides, soil erosion and desertification
  - a. Role of an individual in conservation of natural resources
  - b. Equitable use of resources for sustainable lifestyles

**Unit-II : Ecosystems, Biodiversity and its conservation**

- Concept of an ecosystem
- Structure and function of an ecosystem
- Producers, consumers and decomposers
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids
- Introduction, types, characteristic features, structure and function of the following ecosystem:- Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)
- Introduction – Definition genetic, species and ecosystem diversity
- Biogeographically classification of India
- Value of biodiversity: Consumptive use, productive use, social, ethical aesthetic and option values
- Biodiversity at global, National and local levels

- India as a mega – diversity nation
- Hot-spots of biodiversity
- Threats to biodiversity habits loss, poaching of wildlife, man wildlife conflicts
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

### **Unit-III : Environmental Pollution**

- Definition
- Causes, effects and control measures of :-
  - a. Air pollution
  - b. Water pollution
  - c. Soil pollution
  - d. Marine pollution
  - e. Noise pollution
  - f. Thermal pollution
  - g. Nuclear pollution
- Solid waste management: Causes, effects and control measures of urban and industrial wastes
- Role of individual in prevention of pollution
- Disaster management: floods, earthquake, cyclone and landslides

### **Unit-IV : Social Issues and the Environment**

- From Unsustainable to Sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns  
Case studies
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
- Wasteland reclamation, Consumerism and waste products
- Environment protection Act
- Air (Prevention and control of Pollution) Act
- Water (Prevention and control of Pollution) Act
- Wildlife Protection Act, Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

### **Unit-V : Human Population and the Environment**

Population growth , variation among nations

- Population explosion- Family welfare Programme
- Environment and human health
- Human Rights
- Value Education
- HIV/AIDS
- Women and Child Welfare
- Role of Information Technology in Environment and human health



## REFERENCE BOOKS :

1. Environmental Studies (for Non-Engineering Students) by Prof. B.Sudhakara Reddy, Prof. T.Shivaji Rao, Prof. U.Tataji and Prof. K.Purushotham Reddy, published by Maruthi Publications, Guntur. (prescribed by APSCHE)
2. Environmental Studies by Dr.M.Satyanarayana, Dr.M.V.R.K.Narasimhacharyulu, Dr.G.Rambabu and Dr.V.Viveka Vardhani, Published by Telugu Academy, Hyderabad.
3. Environmental Studies by R.C.Sharma, Gurbir Sangha, published by Kalyani Publishers.
4. Environmental Studies by Purnima Smarath, published by Kalyani Publishers.

**SRI VENKATESWARA UNIVERSITY : TIRUPATI**

**ENVIRONMENTAL STUDIES  
II - SEMESTER  
MODEL QUESTION PAPER 2015-16**

**Answer ALL questions choosing one from each unit  
Each question carries TEN marks**

**Time : 2 hrs  
Marks : 5 x 10 = 50**

**UNIT - I**

1.

(OR)

2.

**UNIT - II**

3.

(OR)

4

**UNIT - III**

5.

(OR)

6

**UNIT - IV**

7.

(OR)

8.

**UNIT - V**

9.

(OR)

10