ENVIRONMENTAL STUDIES I - SEMESTER 2017 - 18

(Total 30 Hours)

Unit - I: Natural Resources:

6 Hrs

Definition, scope and importance. Need for public awareness:

- a. Forest resources: Uses and over-exploitation. Deforestation, mining and construction of dams.
- b. Water resources: Uses and over-utilization. Effects of over utilization of surface and ground (sub- surface) water.
- c. Mineral resources: Uses and exploitation, environmental effects of extraction and use of mineral resources.
- d. Food resources: World food problems, Effects of modern agriculture: by using fertilizers and pesticides.
- e. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.

Unit - II: Ecosystems and Biodiversity

6 Hrs

- a. Concept of an ecosystem
- b. Structure and functions of an ecosystem
- c. Producers, consumers and decomposers
- d. Food chain, food webs and ecological pyramids
- e. Characteristic features of the following ecosystems
 Forest ecosystems, Desert ecosystem, Aquatic ecosystems.
- f. Value of biodiversity: Consumptive use and productive use.

Unit - III: Environmental Pollution

6 Hrs

- a. Definition
- b. Causes, effects and control measures for
 - i. Air pollution
 - ii. Water pollution
 - iii. Soil pollution
 - iv. Noise pollution
- c. Role of individual in prevention of pollution

Unit - IV: Social Issues and the Environment

6 Hrs

- a. Water conservation, rain water harvesting and watershed management.
- b. Global warming and Ozone layer depletion.
- c. Environmental protection Act

(P T O)

- a. Population explosion and its impact on environment.
- b. Environmental and human health
- c. Women and Child Welfare
- d. Role of Information Technology in Environmental and human health.

Reference Books :

- 1. 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.
- 2. Environmental Studies by R.C. Sharma, Gurbir Sangha published by Kalyani Publishers.
- 3. Environmental Studies by Purnima Smarath published by Kalyani Publishers.

SRI VENKATESWARA UNIVERSITY: TIRUPATI ENVIRONMENTAL STUDIES I - SEMESTER MODEL QUESTION PAPER 2017-18

Answer ALL questions choosing one from each unit Time : 2 hrs

Each question carries TEN marks $Marks : 5 \times 10 = 50$

UNIT - I

1. Write a short note on Forest resources and its importance

(OR)

2. Explain the importance of renewable energy and its applications.

UNIT - II

3. Explain the term "Biodiversity" and discuss its importance.

(OR)

4. Write note on structure of ecosystems. Explain the significance of Forest ecosystems with suitable example.

UNIT - III

5. Define water pollution and control measures to be adopted.

(OR)

6. Explain the causes and effects of air pollution.

UNIT - IV

7. Write a note on global warming.

(OR)

8. What is Environmental Protection Act. Explain its importance.

UNIT - V

9. Discuss the population explosion and its impact on environment.

(OR)

10. How do you predict the environmental changes by the use of Information Technology.