#### KAKATIYA UNIVERSITY

# B.A./B.Com./BBAIYEAR SEMESTER - II Ability Enhancement Compulsory Course (AECC)

## ENVIRONMENTAL STUDIES

(2 hrs./week)

Credits - 2

#### UNIT - I: Ecosystem, Biodiversity & Natural Resources

(15 hrs.)

- 1. Definition, Scope & Importance of Environmental Studies.
- 2. Structure of Ecosystem Abiotic & Biotic components Producers, Consumers, Decomposers, Food chains, Food webs, Ecological pyramids)
- 3. Function of an Ecosystem: Energy flow in the Ecosystem (Single channel energy flow model)
- 4. Definition of Biodiversity, Genetic, Species & Ecosystem diversity, Hot-spots of Biodiversity, Threats to Biodiversity, Conservation of Biodiversity (Insitu & Exsitu)
- 5. Renewable & Non renewable resources, Brief account of Forest, Mineral & Energy (Solar Energy & Geothermal Energy) resources
- 6. Water Conservation, Rain water harvesting & Watershed management.

## UNIT - II: Environmental Pollution, Global Issues & Legislation

(15 hrs.)

- 1. Causes, Effects & Control measures of Air Pollution, Water Pollution
- 2. Solid Waste Management
- 3. Global Warming & Ozone layer depletion.
- 4. Ill effects of Fire- works
- 5. Disaster management floods, earthquakes & cyclones
- 6. Environmental legislation:-
- (a) Wild life Protection Act (b) Forest Act (c) Water Act (d) Air Act
- 7. Human Rights
- 8. Women and Child welfare
- 9. Role of Information technology in environment and human health

#### ❖ Field Study:

(5 hours)

- Pond Ecosystem
- Forest Ecosystem

#### REFERENCES:

- Environmental Studies from crisis to cure by R. Rajagopalan (Third edition) Oxford
   University Press.
- Text book of Environmental Studies for undergraduate courses (second edition) by Erach Bharucha
- A text book of Environmental Studies by Dr.D.K. Asthana and Dr. Meera Asthana

Chairperson
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