

V.S.M. COLLEGE (AUTONOMOUS)
Re-accredited by NAAC with 'B' Grade at 2.69 CGPA
RAMACHANDRAPURAM

Foundation Course – 2 : ENVIRONMENTAL STUDIES
(For all I B.A./B.Com./B.Sc. Programmes)

SYLLABUS FOR I SEMESTER

PAPER CODE: 1610202

No. of Credits : 2

No. of h/w : 2

ENVIRONMENTAL STUDIES

UNIT-I :

6 Hrs

Natural Resources:

Definition, scope and importance. Need for public awareness.

Brief description of :

i) Forest resources:

Use and over-exploitation. Deforestation, timber extraction, mining, dams, effect of deforestation, environment and tribal people

ii) Water resources: Use and over-utilization, effects of over utilisation of surface and ground water, floods, drought.

iii) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

iv) Food resources: World food problems, effects of modern agriculture, fertilizer- pesticide, salinity problems.

v) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.

vi) Land resources: Land as resource, land degradation, man induced landslides, soil erosion and desertification.

UNIT-II :

Ecosystems, Biodiversity and its conservation

6 Hrs

i) Concept of an ecosystem

ii) Structure and function of an ecosystem

iii) Producers, consumers and decomposers

iv) Food chains, food webs and ecological pyramids

v) Characteristic features of the following ecosystems:-

Forest ecosystem, Desert ecosystem, Aquatic ecosystem.

vi) Value of biodiversity: Consumptive use, productive use. Biodiversity in India.

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

viii) Endangered and endemic species of India

ix) Conservation of biodiversity

UNIT-III :

Environmental Pollution

6 Hrs

i) Definition

ii) Causes, effects and control measures of :-

a) Air pollution

b) Water pollution

c) Soil pollution

d) Noise pollution

iii) Solid waste management; Measures for safe urban and industrial waste disposal

iv) Role of individual in prevention of pollution

v) Disaster management: Drought, floods and cyclones

UNIT-IV :

Social Issues and the Environment

6 Hrs

i) From Unsustainable to Sustainable development

ii) Water conservation, rain water harvesting, watershed management.

iii) Climate change, global warming, ozone layer depletion,

iv) Environment protection Act

v) Wildlife Protection Act, Forest Conservation Act

UNIT-V :

Human Population and the Environment

6 Hrs

i) Population explosion, impact on environment.

ii) Family welfare Programme

iii) Environment and human health

iv) Women and Child Welfare

v) Value Education

vi) Role of Information Technology in Environment and human health.

BOOKS FOR REFERENCE

1. **Environmental Studies** by Dr. M. Satyanarayana, Dr. M.V.R.K. Narasimhacharyulu, Dr. G. Rambabu and Dr.V. VivekaVardhani, Published by Telugu Academy, Hyderabad.
2. **Environmental Studies** by R.C. Sharma, Gurbir Sangha, Kalyani Publishers.
3. **Environmental Studies** by Purnima Smarath, Kalyani Publishers.