

UEVS21 -ENVIRONMENTAL STUDIES

Objectives:

- 1) To develop knowledge base of students about the demographic and environmental factors affecting Business.
- 2) To make the students aware of environmental problems related to Business and Commerce.
- 3) To inculcate values of Environmental ethics amongst the students.
- 4) To build knowledge about the environment which is helpful to the society.

Semester II

No. of Credits – 2

UNIT I

Environmental Studies: Definition – Multidisciplinary nature – Scope and importance – Need for public awareness. Natural Resources : Forest resources: Use and over- exploitation – Deforestation – Timber extraction – Mining – Dams and their effects on forests and tribal people – Water Resources: Use and over utilization of surface and ground water – Flood – Drought – Conflicts over water – Dams- Benefits and problems – Mineral resources: Use and exploitation – Environmental effects of extracting and using mineral resources – Food resources: World food problems – changes caused by agriculture and overgrazing – Effects of modern agriculture – Fertilizer and pesticides problems – Water logging – Salinity – Energy Resources: Growing energy needs – Renewable and non-renewable energy sources – Use of alternate energy sources – Land Resources: Land as a resource – Land degradation – Man induced landslides – soil erosion- Desertification – Case studies – Role of individual in conservation of natural resources – Equitable use of resources for sustainable lifestyles.

UNIT II

Ecosystems: Concept – Structure and function – producers, consumers and decomposers – Energy flow – Ecological system – Food chains, food webs and ecological pyramids – Introduction, characteristics, Types, structure and function of Forest ecosystem – Grassland ecosystem – Desert ecosystem – Aquatic ecosystem (ponds, streams, lakes, rivers, oceans, estuaries).

UNIT III

Biodiversity and its Conservation: Definition, Genetic, species and ecosystem diversity – Bio-geographical 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: Habitat loss – Poaching of wild life, man wildlife conflicts – Endangered and endemic species of India – Conservation of biodiversity: In-Situ and Ex-Situ conservation of biodiversity.

UNIT IV

Environmental Pollution: Definition- Causes, effects and control measures of Air, Water, Soil, Marine, Noise, Thermal pollution and Nuclear hazards – Solid waste management; Causes, effects and control measures of urban and industrial wastes- Disaster management: Floods, earthquakes, cyclone and landslides – Role of individual in prevention of pollution – Case studies.

UNIT V

Social Issues and the Environment: From unsustainable to sustainable development – Urban problems related to energy – water conservation, rainwater harvesting, watershed management – Resettlement and rehabilitation of people – Its problems and concerns – Environmental ethics; Issues and solutions – Climate change, Global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust – Wasteland reclamation – Consumerism and waste products – Environment Protection Act – Air (Prevention and Control of Pollution) Act – Wildlife Protection Act – Forest Conservation Act – Issues involved in enforcement of environment legislation – Public awareness.

Human population and the Environment: Population growth – variation among nations – Population explosion – Family welfare program – Environment any human health – Human rights – value education – HIV/AIDS – Women and child welfare – Role of Information Technology in environment and human health – Case studies.

Field Work (25 marks)

- Visit to a local area to document environmental assets – River, Forest, grassland, hill, mountain.
- Visit to a local polluted site -Urban, rural, industrial, Agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill slopes etc.,

Text & Reference:

1. Arul P, (2008) “A Textbook of Environmental Studies” Selvi Publications.
2. Miller T.G. “Environmental Science: Wadsworth Publishing Co.

3. Townsend C, Harper J and Michael Gagon "Essentials of Ecology", Blackwell Science.
4. Trivedi R.K and Goel P.K "Introduction to Air Pollution", Techno-Science Publication.
5. Jadhav, H &Bhosafe, V.M (1995) "Environmental Protection and Laws", Himalaya Publishing house.