CK Environmental Education / Studies Draft syllabus

2 credits – Sem I / Sem II

1 Understanding the Environment

Environment: Concept, importance and physical and anthropogenic components
Ecosystem: Concept, structure and function; Ecology and ecosystem Abiotic Factors Biotic Factor food chain, food web, dynamism in ecosystem
Concept and objectives: Environmental education, environmental ethics
Central Pollution Control Board of India: Standard, Activities, Function of Laboratories

2 Natural Resources and Environmental Management

Natural Resources: Renewable and non-renewable
Natural resource and solid waste management: Individual, community and government level
Air, water and soil pollution: Causes, effects and control
Conservation methods and efforts in water, minerals, fuels, air.
Climate change: Global warming impact, adoption and mitigation

3 Environment and Sustainable Development

Biodiversity : concept, levels, hots spots and values
Environmental issues: Local, regional and global
Environmental treaties and legalization, net zero policy & economic policies
Importance of Indian Traditional knowledge on environment
CSR and SDGs association

4 Human Communities and Environment

Human population growth: Impacts on environment, human health and welfare. Resettlement and rehabilitation of project affected persons, case studies.
Disaster management: floods, earthquakes, cyclones and landslides.
Environmental movements: Chipko, Silent valley, and Bishnois of Rajasthan.
Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
Environmental communication and public awareness, case studies.
Community participation for sustainable ecosystem services
Environmental education – need- methods.

5 Environmental Pollution and Control Measures and Policies

Definition of Pollution, Types of Pollution
Air Pollution-Meaning, Sources, effects of air pollution, Air Pollution Act
Water Pollution – Meaning, Sources, Effects of Water pollution, Water Pollution Act
Noise Pollution – Meaning, Sources, Effect of Noise Pollution
Solid Waste Pollution – Meaning, sources, Effect of Waste Pollution
Environment Protection Act – Air (Prevention and control of Pollution) Act, Water Act (Prevention and control of Pollution) Act , Noise pollution act, Solid waste Pollution Act, hazardous waste act in India
International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).

6 Global Environmental Issues and Sustainable Solutions

Global Warming and Climate Change: Greenhouse gases, effects, mitigation. Loss of Biodiversity: Habitat destruction, conservation efforts. Sustainable Development Goals (SDGs): Overview, importance for global sustainability.
Environment Social Governance (ESG), Green Finance and Environmental Economics.