LESSON PLAN

Name of the Faculty: Dr. Sushma
Discipline: BA-JMC/ BA-Social Work
Semester: First
Subject: Environmental Science-I
Lesson plan duration: 14 weeks

Week	Theory	
	Lecture day	Topic
1	1	Humans as hunter gatherers, Mastery of Fire, Origin of Agriculture
	2	Emergence of city-states, Great ancient civilizations and the environment.
2	3	Indic Knowledge and Culture of sustainability
	4	Middle Ages and Renaissance; Industrial revolution and its impact on the environment
3	5	Population growth and natural resource exploitation; Global environmental change
	6	Anthropocentric and eco-centric perspectives (Major thinkers); The Club of Rome- Limits to Growth
4	7	UN Conference on Human Environment 1972
	8	World Commission on Environment and Development and the concept of sustainable development; Rio Summit and subsequent international efforts
5	9	Definition of resource; Classification of natural resources- biotic andabiotic, renewable and non-renewable.
	10	Major type of biotic resources- forests, grasslands, wetlands, wildlife and aquatic(fresh water and marine); Microbes as a resource; Status and challenges.
6	11	Types of water resources- fresh water and marine resources; Availability and use of water resources
	12	Environmental impact of over-exploitation, issues and challenges; Water scarcity and stress; Conflicts over water
7	13	Important minerals; Mineral exploitation; Environmental problems due to extraction of minerals and use, Soil as a resource and its degradation
	14	Sources of energy and their classification, renewable and non-renewable sources ofenergy; Conventional energy sources- coal, oil, natural gas, nuclear energy
8	15	Non-conventional energy sources- solar, wind, tidal, hydro, wave, ocean thermal
	16	Non-conventional energy sources- geothermal, biomass, hydrogen and fuel cells;Implications of energy use on the environment
9	17	Sustainable Development Goals (SDGs)- targets andindicators, challenges and strategies for SDGs
	18	Concepts of micro-, meso-, synoptic and planetary scales; Temporal and spatial extents of local, regional, and global phenomena, Impact of sectoral processes on Environment

10	19	Types of Pollution- air, noise, water, soil,
	20	Types of Pollution- thermal, radioactive; municipal solid waste, hazardous waste; transboundary air pollution; acid rain; smog
11	21	Land degradation, deforestation, desertification, urbanization
	22	Ozone layer depletion; Climate change. Disasters – Natural and Man-made Biodiversity as a natural resource; Levels and types
12	23	Biodiversity in India and the world; Biodiversity hotspots, Threats to biodiversity and ecosystems-Land use and land cover change; Commercial exploitation of species; Invasive species; Fire, disasters and climate change
	24	Major ecosystem types in India and their basic characteristics- forests, wetlands, grasslands, agriculture, coastal and marine, Ecosystem services-classification and significance, In-situ and ex-situ conservation;
13	25	Major protected areas; Biosphere reserves; Ecologically Sensitive Areas Coastal Regulation Zone; the role of traditional knowledge for biodiversity
	26	Convention on Biological Diversity (CBD), Cartagena Protocol on Biosafety; United Nations Convention to Combat Desertification (UNCCD)
14	27	Nagoya Protocol on Access and Benefit-sharing Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), Ramsar Convention on Wetlands of International Importance;