

I. FUNDAMENTALS OF ENVIRONMENT

The basic concern is “our existence in the future.” Basic concepts on Environment, ecology, environmental degradation and ecological imbalance; Sustainable development, ecological footprint. Ecosystems - types, structural and functional aspects. Ecological Succession and Biome in brief. The need and urgency for studying environmental studies, meaning & scope.

II. GLOBAL ENVIRONMENTAL ISSUES, IMPACTS AND REMEDIAL MEASURES

Lithosphere: Geogenic and anthropogenic sources of environmental degradations, Case Studies. Impacts of modern agriculture. Causes of soil pollution; Effects of pesticides on soil components and food chain special reference to bio-magnification and bio-accumulation; **Atmosphere: (Troposphere):** Global warming & climate change, Acid rain and photochemical smog; their impacts on the environment and human beings and remedial measures. **Stratosphere:** Ozone layer depletion/hole formation.

III. BIODIVERSITY CONSERVATION

Biodiversity and Wildlife, present scenario, Ecosystem services of biodiversity, threats and impacts of biodiversity loss; Conservation measures, UN Initiatives. GMO- advantages and disadvantages;

IV. ENVIRONMENTAL POLICIES, LAW AND MANAGEMENT

Environmental Policies and Strategies: Evolution of environmental policy, UN Initiatives; (IUCN, TRIPS, UNESCO etc.) National and international conventions and agreements.

Environmental legislations: Evolution and development of International and Indian Environmental laws; Constitutional Provision; The Umbrella Act - **The Environment (Protection) Act (1986)**, The Manufacture, Storage, and Import of Hazardous Rules (1989, - - The Public Liability Insurance Act, (1991) and Rules, - The National Environmental Tribunal Act (1995), - The National Environment Appellate Authority Act (1997), - The Biological Diversity Act(2002); Merits and demerits of Environmental Legislations

V. Environmental Management

Disaster Management, ISO standards, QMS and EMS. Green options technologies; Green concepts, Green Politics, Green Building technologies, ECOMARK, Rain water Harvesting (RWH). **ENVIRONMENTAL IMPACT ASSESSMENT (EIA)** Definition, objectives, Origin and development of EIA; Structural and functional components of EIA; Advantages and disadvantages in EIA; Guidelines for EIA in India.

REFERENCE

1. **Basu, R.N**, Environment, University of Calcutta, 2000.
2. **Anubha Kaushik and CP Kaushik**, Perspective in Environmental Studies, New Age International Publishers, (4th Multi-colour Edition), 2014.
3. **Misra, SP and Pande, SN**, Essential Environmental Studies (3rd Edition), Ane Books Pvt. Ltd., 2011.
4. **Eldon Enger and Bradley Smith**, Environmental Science: A Study of Interrelationships, Publisher: McGraw-Hill Higher Education; 12th edition, 2010.
5. **Daniel D. Chiras**, Environmental Science: Creating a Sustainable Future, Jones & Bartlett Publishers; 6th edition, 2001.
6. **Karpagam, M and Geetha Jaikumar**, Green Management, Theory and Applications, Ane Books Pvt. Ltd., 2010.
7. **Bala Krishnamoorthy**, Environmental Management, PHI learning PVT Ltd, 2012.