AMCE18 ENVIRONMENTAL ENGINEERING

UNIT-1 MAN, ENVIRONMENT, ECOSYSTEMS & THEIR INTER RELATIONSHIP

1.1 Introduction, Effects Of Pollutants On Living System,

1.2 Some Pollution Syndromes

UNIT-2 TYPES OF ENVIORONMENT POLLUTATANTS AND THEIR SOURCE OF EFFECTS

2.1 Natural Pollution, Agricultural Pollution, Mining Pollution, Municipal Pollution, Industrial Pollution, Classification Of Pollution And Pollutants,

2.2 Devising Technological Abatement Processes, Effects Of Pollutants On Living System, Fire Management, Rangelands, Parks And Nature Preserves,

2.3 Case Study Reintroducing Wolves To Yellowstone, World Parks And Preserves

UNIT-3. INDOOR POLLUTION, AIR POLLUTION, SOURCE & THEIR EFFECTS AND CONTROL TECHNOLOGIES

3.1 Introduction, Air Pollution Episodes, Air Pollution And Its Abatement, Effects Of Air Pollution , National Air Pollution Control Administration,

3.2 Air Pollution Control, Clean Air Legislation, Sources Of Air Pollution, Control Of Air Pollution, Types Of Gas Changing Device

UNIT-4 NOISE POLLUTION & ITS ABATEMENT

4.1 Introduction, Noise Pollution Sources,

4.2 Effect of Noise On Physical Health, Noise Control

UNIT-5 INDUSTRIAL WASTE TREATEMENT AND DISPOSAL

5.1 Pollution Characteristics Of Wastes, Physical Characteristics, Chemical Characteristics, Biological Characteristics, Treatment Of Industrial Effluents, Physical Treatment,

5.2 Chemical Treatment, Biological Treatment, Disposal Of Industrial Effluents, Treatment Of Industrial Effluents, Physical Treatment, Air Pollution Problems In Industry,

5.3 Nuclear Wastes, Health And Environmental Effects, Refinery And Fuel Fabrication Wastes, Biomedical Wastes, Control Of Biomedical Wastes,

5.4 Identifying A Hazardous Waste, Role Of The Wastes Exchange, Treatment And Disposal Of Chemical Wastes

UNIT-6 SOLID WASTE DISPOSAL

6.1 Introduction, Characteristics of Solid Wastes, Characteristics, Considerations In Solid Waste Management, Collection Systems

UNIT-7 ENVIRONMENTAL IMPACT ASSESSMENT AND AUDITING

7.1 Historical Perspective, Elements Of The Environmental Impact, Project Design And Construction, Project Operations, Site Characteristics,

7.2 Institutional And Sociopolitical Framework, Possible Impacts, Socioeconomic Analysis, Alternatives Availability Of Information, Availability Of Resources,
7.3 Environmental Pollution And Its Control In The Pulp And Paper Industry, NEPA And EIS, Introduction, Sustainable Development, Environment Impact Assessment,
7.4 Project Operations, Site Characteristics, Institutional And Sociopolitical Framework, Socioeconomic Analysis, Alternatives, Availability Of Information,
7.5 Availability Of E-sources

UNIT-8 INTRODUCTION TO ENVIORONMENTAL LAWS AND POLICIES

8.1 Environmental Policy, NEPA and EIS,
8.2 Environmental Law, International Treaties and Conventions

UNIT-9 GLOBAL ISSUES

9.1 Best Practicable Means (BPM), Devising Technological Abatement Processes, Environmental Standards, State Of World Environment, International Treaties And Conventions,
9.2 Dispute Resolution And Community-Based Planning, The Dilemma Of Industrialization And Urbanization

Reference Books:

1. Environmental engineering dictionary by edited by C. C. Lee
2. Handbook of chemical and environmental engineering calculations by edited by Joesph P. Reynolds, John S. Jeris, and Louis Theodore
3. Handbook of Chemical Technology and Pollution Control by Martin B. Hocking

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