

Sub :- Environmental pollution & control, 1625503

Sem :- 5th, Mechanical Engg.

Faculty :- Ajay Kumar Singh

Unit	Name of the Topic	Lecture
Unit-1	Detailed discussion on syllabus of EPC and introduction of Environment classification of environment	L-01
	Segments of environment & ecosystem	L-02
	Classification of pollution & pollutants	L-03
	Environment & pollution control acts ISO 14000 standards	L-04
	Kyoto protocol, Carbon Unit	L-05
Unit-2	Sources & classification of Air pollution	L-06
	Effect of air pollution on health	L-07
	Effect of air pollution on Economy	L-08
	photochemical smog	L-09
	Air pollution effect by major industrial operation e.g. Fertilizer industries, All manufacturing plants, Acid plants, cement industries, coal & gas industries, paper industries, Refinery & petrochemical industries	L-10
		L-11, L-12
		L-13
	Air pollution due to Automobile design and operating parameters	L-14
	Methods of control of Air pollution in Automobile industry	L-15

Unit	Name of the Topic	Lecture
Unit-2	Air pollution due to S.I engine design & operating parameters	L-16
	Methods of pollution control in S.I engine	L-17
	Air pollution due to C.I engine design and operating parameters	L-18
	Methods of pollution control in C.I engine	L-19
	Air quality & emission standard of India and Europe	L-20
	Air pollution in indian metro cities	L-21
<u>Unit-03</u>	Sources of water pollution	L-22
	Effects of water pollution	L-22
	Water pollution analysis	L-23
	① Physical examination of water	L-23
	② Chemical characteristics of water	L-24
	③ Biological investigation of water	L-25
	Definition of Dissolved O ₂ , COD, BOD, TOD, Total solids, Total suspended particles,	L-26
	TDS, Turbidity, Alkalinity, Acidity	L-27
	Water quality standards, steps in water treatment	L-28
	Sampling & Analysis of water pollution	L-29

Unit	Name of the Topic	Lecture
unit-04	Definition of noise, sources of noise Types of noise - Impulsive & sonic noise Effects of noise on health Noise measurement & mapping	L-30 L-31 L-32 L-33
unit-05	solid waste, Classification of solid waste solid waste management Methods of solid waste disposal Reuse, Recycling & recovery of materials from refuse Soil pollution, chemistry of soil Soil irrigation by effluents Agricultural pollution Sources & effects of Radiation pollution Radiation exposure standards Radiation protection & Treatment & disposal of radiation waste Global pollution, Green house effect Acid rain ozone depletion problem Convention for minimising pollution like - Rotterdam convention, Cartagena protocol, Basel convention etc	L-34 L-35 L-36 L-37 L-38 L-39 L-40 L-41 L-42 L-43 L-44 L-45 L-46 L-47, L-48