

Government Polytechnic Asthawan, Nalanda(Bihar)

(Department of Mechanical Engineering)

Lecture Plan

Name of the Faculty	BRAJESH KISHOR			
Email-id and Mobile Number	brajeshkishor78@gmail.com 7903691718			
Semester / Branch	5th / Mechanical Engineering			
Subject Name(Subject Code)	Environmental Pollution and Control (1625503)			
Lecture / Week	3 Periods / Week			
<i>THEORY</i>				
Units	Week	Lectures Day	Topics	Methods of Teaching
1 Introduction	1	1	Environment, Ecosystem	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Classification of pollution & pollutant	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Environment & pollution control acts	Google Classroom/ What's App Group/ Hand Written Notes/

				PDF/ YouTube Video Link
	2	1	ISO 14000 standards, Kyoto treaty / protocol, carbon units.	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Assignment/ Quiz for Unit 1	Google Classroom/ Google Form/ What's App Group
		3	Sources of air pollution	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
2 Air Pollution PART - A	3	1	Classification of air pollution	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Effects of air pollution on human health	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Effects of air pollution on economy	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	4	1	Photochemical air pollution	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link

		2	Air pollution from major Industrial operations e.g. Fertilizer industries aluminum manufacturing plants	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Air pollution from major Industrial operations e.g. Acid plants, Cement industries	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	5	1	Air pollution from major Industrial operations e.g. Coal & tar industries	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Air pollution from major Industrial operations e.g. paper industries	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Air pollution from major Industrial operations e.g. Refinery & petrochemical industries	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	6	1	Assignment/ Quiz for Unit 1	Google Classroom/ Google Form/

			PART - A	What's App Group
PART - B		2	Air pollution due to Automobiles-design	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Air pollution due to operating parameters	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	7	1	Air pollution due to Automobiles-design and operating parameters and methods of control	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Pollution due to S. I. Engines. Design	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Pollution due to S. I. Engines. operating parameters responsible for emission	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	8	1	Pollution due to S. I. Engines. Design & operating	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link

			parameters responsible for emission and methods of pollution control.	
		2	Pollution due to C. I. Engines. Design & operating parameters responsible for emission	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Pollution due to C. I. Engines. Design & operating parameters responsible for emission and methods of pollution control.	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	9	1	Air quality & emission standards of India	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Air quality & emission standards of Europe	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Air pollution in Indian metro	Google Classroom/

			cities- Delhi,	What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	10	1	Air pollution in Indian metro cities- Mumbai	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Air pollution in Indian metro cities- Chennai	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Air pollution in Indian metro cities- Kolkata	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	11	1	Assignment/ Quiz for Unit 1 PART - B	Google Classroom/ Google Form/ What's App Group
3 Water Pollution		2	Sources of water pollution and Effects of water pollution.	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Water pollution analysis <ul style="list-style-type: none"> • Physical examination of water • Chemical characteristics of water 	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link

			• Biological investigation of water	
	12	1	Definitions of Important terms used in water pollution – Dissolved O₂, Chemical O₂ demand, Biological O₂ demand, Theoretical O₂ demand, Total solids, Total suspended solids, Total dissolved solids, Turbidity, Alkalinity, Acidity.	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Water quality standards	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Steps in Water treatment	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	13	1	Sampling & analysis of water pollution	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube

				Video Link
		2	Assignment/ Quiz for Unit 3	Google Classroom/ Google Form/ What's App Group
4 Noise Pollution		3	Definition of noise	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	14	1	Sources of noise and Types of noise – Impulsive & sonic noise	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Effects of noise on health	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Noise measurement and Noise mapping	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	15	1	Assignment/ Quiz for Unit 4	Google Classroom/ Google Form/ What's App Group
5 Other Types Of Pollution		2	Solid waste • Classification of solids • Solid waste management	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Method of solid waste disposal	Google Classroom/ What's App Group/ Hand Written Notes/

				PDF/ YouTube Video Link
	16	1	Reuse, Recycling & recovery of materials from refuse	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Soil pollution • Chemistry of soil	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Soil irrigation by effluents and Agricultural pollution	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	17	1	Radiation pollution and Sources & effects of radiation	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		2	Radiation exposure standards and Radiation protection	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Treatment & disposal of radiation waste	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
	18	1	Global pollution and Greenhouse effect	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube

				Video Link
		2	Acid rain and Ozone depletion problem	Google Classroom/ What's App Group/ Hand Written Notes/ PDF/ YouTube Video Link
		3	Assignment/ Quiz for Unit 5	Google Classroom/ Google Form/ What's App Group