

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

Lecture Plan

Faculty Name: -Sidharth Gandhi Subject Name: - Air And Noise

Pollution Engg. Branch/Semester: -ME - 7thSEM

Subject Code:-MEO-411A

Sr No.	Lecture No.	Topics To Be Covered	Planned on	ICT Mode
1	L 1	Concept of unpolluted air, gaseous and vapour pollutants in atmosphere, scales of air pollution	2/09/2021	Ppt
2	L 2	primary and secondary pollutants, ambient air quality	3/09/2021	Ppt
3	L 3	monitoring of pollutants (SO ₂ , NO ₂ , O ₃ , PAN, particulates, hydrocarbons, PAH's) and their health effects	8/09/2021	Ppt
4	L 4	stack monitoring for SO _x , NO _x , CO, CO ₂ , Hydrocarbons, Fluorides, Ammonia, VOCs, effects of air pollution on vegetation	9/09/2021	Ppt
5	L 5	materials and structures, stack monitoring for thermal power plant, oil refinery industry	10/09/2021	Ppt
6	L 6	fertilizer industry, non-ferrous metal industry. recent techniques of online stack monitoring	16/09/2021	Ppt
7	L 7	emission inventory, trends of AAQ in urban, rural and Industrial areas.	17/09/2021	Ppt
8	L 8	UNIT-II Air quality: National and International air emission standards	22/09/2021	Ppt
9	L 9	AAQ guidelines, indoor air quality, averaging time, air pollution system, alternative control strategies	23/09/2021	Ppt
10	L 10	GLC estimates for multiple sources using standard software (e.g., EPA's ISC model)	29/09/2021	Ppt

11	L 11	determination of effective stack height.	30/09/2021	Ppt
12	L 12	UNIT-III Emission Standards and Particulate matter: Distribution and sources of particulate matter	01/10/2021	Ppt
13	L 13	emission reduction by fuel changes	06/10/2021	Ppt
14	L 14	emission reduction by engine design changes	07/10/2021	Ppt
15	L 15	flue gas control methods for NO _x ,emission standards for automobiles	08/10/2021	Ppt
16	L16	origin of exhaust emissions from gasoline	20/10/2021	Ppt
17	L 17	diesel, CNG and LPG engines,	21/10/2021	Ppt
18	L 18	crankcase and evaporative emissions	22/10/2021	Ppt
19	L 19	emission reduction by engine design changes	27/10/2021	Ppt
20	L 20	catalytic converters	28/10/2021	Ppt
21	L 21	diesel engine emissions	29/10/2021	Ppt
22	L 22	Noise: Characteristics	10/11/2021	Ppt
23	L 23	Noise: sources	11/11/2021	Ppt
24	L 24	Noise: types of noise	12/11/2021	Ppt
25	L 25	Noise: impact of noise	1/12/2021	Ppt
26	L 26	Physics of sound- Speed of sound	2/12/2021	Ppt
27	L 27	Physics of sound- sound pressure, frequency	3/12/2021	Ppt
28	L 28	wavelength, RMS sound pressure, sound pressure level	8/12/2021	Ppt
29	L 29	loudness, sound power level and sound energy density	9/12/2021	Ppt
30	L 30	sound propagation, wind and temperature	10/12/2021	Ppt

		gradient.		
31	L 31	Enclosures and Barriers: Lead as a noise barrier	16/12/2021	Ppt
32	L 32	plenum barriers, barrier around pipe, wires	17/12/2021	Ppt
33	L 33	rectangular ductwork, high transmission loss ceilings	22/12/2021	Ppt
34	L 34	acoustical foams, nylon in noise reduction	23/12/2021	Ppt
35	L 35	damping compounds.	24/12/2021	Ppt
36	L 36	Noise measuring equipments: Sound level meter	29/12/2021	Ppt
37	L 37	octave band analyzer, statistical analyzer and noise average meter	30/12/2021	Ppt

Signature