

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)
M.E DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025

Second Semester

Environmental Engineering

PEVT2422 - Air and Noise Pollution Control Engineering

Regulations - 2024

Duration : 3 Hrs

Maximum : 100 Marks

PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BLT	CO	Marks
1.	Recall the effects of air pollutants on the atmosphere.	L1	1	2
2.	List out different air pollution indices.	L1	1	2
3.	Define the term atmospheric stability.	L1	2	2
4.	Recall about “Air Pollution Climatology”.	L2	2	2
5.	Identify any four principles by which particulates removal is carried out.	L1	3	2
6.	List out the physical criteria design consideration of wet scrubbing.	L1	3	2
7.	Distinguish between Adsorption and Absorption.	L2	4	2
8.	State the mechanisms of controlling gaseous pollutants.	L1	4	2
9.	How do automobiles contribute to air pollution?	L1	5	2
10.	What are the effects of noise on human health?	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a Discuss in detail about the effects of air pollution on human beings and vegetation.	L2	1	16
	Or			
	b Appraise the ambient air quality and emission standards in India.	L2	1	16
12.	a Explain in detail how ambient air and stack sampling are used to analyze particulate matter and gaseous pollutants.	L2	2	16
	Or			
	b i Describe the Gaussian plume model, including the assumptions made and its limitations.	L2	2	08
	ii Explain how wind affects the scattering of air pollution.	L2	2	08
13.	a Demonstrate the working of cyclone separator for air pollution	L2	3	16

control with neat sketch.

Or

	b	Enumerate the working of electrostatic precipitator to control air pollution.	L2	3	16
14.	a	Discuss in detail about Incineration process with suitable sketches.	L2	4	16
		Or			
	b i	Demonstrate how bio-scrubbers function in controlling air pollution.	L3	4	08
	ii	Illustrate how emerging trends are being implemented to control gaseous pollutants.	L3	4	08
15.	a	Describe the health and environmental impacts of carbon monoxide and nitrous oxide emissions from vehicles.	L4	5	16
		Or			
	b i	State the importance of noise rating system in India.	L4	5	08
	ii	Explain in detail about LN and Leq concept in noise rating.	L4	5	08