

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

January / February 2025 Semester End Main Examinations**Programme: B.E.****Semester: V****Branch: Civil Engineering****Duration: 3 hrs.****Course Code: 23CV5PEAPC****Max Marks: 100****Course: Air Pollution and Control**

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			UNIT - I	CO	PO	Marks
	1	a)	Explain the effects of air pollution on Materials and vegetation	CO1	PO1	10
		b)	Briefly explain how air pollution has affected Global warming	CO1	PO1	10
			OR			
	2	a)	Explain the sources and consequence of air pollutants for the following (i) Sulphur-di-oxide (ii) Ozone (iii) Dust (iv) Fumes	CO1	PO1	10
		b)	Define air pollution. Explain primary and secondary air pollutants	CO1	PO1	10
			UNIT - II			
	3	a)	Explain in detail Temperature Lapse Rate and Atmospheric Stability.	CO1	PO1	10
		b)	With neat sketch explain wind rose diagram	CO1	PO1	10
			OR			
	4	a)	Explain Gaussian dispersion model and write the assumptions of the model	CO2	PO1	10
		b)	Define plume rise. Explain the Equations for estimation of plume rise.	CO2	PO1	10
			UNIT - III			
	5	a)	With the neat sketch explain the working principle of Electro static precipitator	CO3	PO1	10
		b)	Explain the gaseous pollutant control by adsorption and absorption	CO3	PO1	10
			OR			

	6	a)	Briefly explain the particulate matter removal by gravity settler with the neat sketch.	<i>CO3</i>	<i>PO1</i>	10
		b)	Explain how air pollution control is adopted for major industries	<i>CO3</i>	<i>PO1</i>	10
			UNIT - IV			
	7	a)	What are the key laws and enforcement mechanisms implemented by governments to control air pollution and ensure compliance	<i>CO3</i>	<i>PO1</i>	10
		b)	How does Environmental Impact Assessment (EIA) address air pollution, and what are its key components in evaluating and mitigating the environmental effects of proposed projects	<i>CO3</i>	<i>PO1</i>	10
			OR			
	8	a)	Explain the preventive measures adopted to control the air pollution	<i>CO3</i>	<i>PO1</i>	10
		b)	Explain air quality monitoring	<i>CO3</i>	<i>PO1</i>	10
			UNIT - V			
	9	a)	Write a note on causes and effects of indoor air pollution	<i>CO3</i>	<i>PO1</i>	10
		b)	Explain the control guide line s adopted for reduction of indoor air pollution	<i>CO3</i>	<i>PO1</i>	10
			OR			
	10	a)	Write a note on causes and effects of Noise pollution	<i>CO3</i>	<i>PO1</i>	10
		b)	Explain the legal aspects and standards adopted to reduce Noise pollution	<i>CO3</i>	<i>PO1</i>	10
