

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)**

**CLASS: B.TECH
BRANCH: CIVIL ENGINEERING**

**SEMESTER : VII
SESSION : MO/2025**

SUBJECT: CE420 AIR POLLUTION AND CONTROL

TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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Q.1(a)	Explain the causes of indoor air pollution.	[2] 1	2
Q.1(b)	Discuss the dynamic behavior of smog.	[3] 1	2
Q.2(a)	The maximum one-hour Carbon Monoxide levels in Kolkata reach 35 ppm. Calculate the equivalent concentration at 25°C and 1 atm.	[2] 1	5
Q.2(b)	Discuss different scales of air pollutants.	[3] 1	2
Q.3(a)	Explain the collection of particulate pollutant using Dustfall Jar.	[2] 2	1
Q.3(b)	Discuss the methods for the determination of air pollution indices.	[3] 2	2
Q.4(a)	Where do the traverse points are located in the circular stack. Discuss with the help of diagram.	[2] 2	4
Q.4(b)	Discuss analysis of Carbon monoxide using NDIR Technique.	[3] 2	2
Q.5(a)	Differentiate between superadiabatic and subadiabatic.	[2] 3	2
Q.5(b)	Discuss the plume behavior of Trapping with the variation in ELR and ALR.	[3] 3	4

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