

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VI(NEW) EXAMINATION – WINTER 2022****Subject Code:3163511****Date:14-12-2022****Subject Name:Air Pollution Control - II****Time:02:30 PM TO 05:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
<b>Q.1</b>	(a) Describe photochemical modelling.	<b>03</b>
	(b) Describe lean mixture.	<b>04</b>
	(c) Explain Significant features of AERMOD.	<b>07</b>
<b>Q.2</b>	(a) How Cl <sub>2</sub> can be controlled?	<b>03</b>
	(b) Describe significant features of ISCST3.	<b>04</b>
	(c) Explain in detail Alkalized Alumina Process.	<b>07</b>
	<b>OR</b>	
	(c) Explain significance of CALINE4.	<b>07</b>
<b>Q.3</b>	(a) Describe Receptor Modelling.	<b>03</b>
	(b) Describe control of CO.	<b>04</b>
	(c) Explain in detail Statistical and Physical Models.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Brief ISCST3.	<b>03</b>
	(b) Describe rich mixture.	<b>04</b>
	(c) Explain in detail working mechanism of Venturi Scrubber.	<b>07</b>
<b>Q.4</b>	(a) Explain Significant features of CALINE.	<b>03</b>
	(b) What is Rotary Combustion Engine?	<b>04</b>
	(c) How emissions can be reduced by changing fuel?	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Brief CALPUF.	<b>03</b>
	(b) How VOC'S can be controlled?	<b>04</b>
	(c) Explain in detail adsorption tower.	<b>07</b>
<b>Q.5</b>	(a) Brief Gaussian Plume Modelling.	<b>03</b>
	(b) Describe Catalytic Converter.	<b>04</b>
	(c) Explain in detail Absorption Tower.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) What is IC Engine?	<b>03</b>
	(b) Describe Stratified Charge Engine.	<b>04</b>
	(c) How emissions can be reduced by process change?	<b>07</b>

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