Seat No.:	Enrolment No
-----------	--------------

GUJARAT TECHNOLOGICAL UNIVERSITY ME SEMESTER II EXAMINATION – SUMMER 2017

WE SEMESTER II EXAMINATION - SUMMER 2017

Subject Code: 2721710 Dat	e:25/05/2017
---------------------------	--------------

Subject Name: Air and Noise Pollution Control

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.

Q.1	(a)	Discuss the meteorological parameters that influence the air pollution.	U/	
	(b)	Describe various plume behaviors with diagrams.	07	
Q.2	(a)	Define noise pollution and explain sources & effects of noise pollution.	07	
	(b)	Explain sampling procedure for ambient air monitoring. OR	07	
	(b)	Describe the importance of stack sampling techniques. Explain isokinetic sampling with neat sketch.	07	
Q.3	(a)	Define criteria pollutants and explain its effect on environment.	07	
	(b)	Discuss various pollutants emitted from automobiles. Also explain its impacts on human health and environment.	07	
0.2	(-)	Define and describe the cumulative air pollution index in detail.	07	
Q.3	(a) (b)	How automobile emission can be controlled? Explain various methods for it.	07	
Q.4	(a)	Write a short note on: (i) Adsorption Isotherm (ii) Design requirement for Adsorption Equipment	07	
	(b)	Write a short note about Gaussian Plume Dispersion Model with its assumptions made in.	07	
		OR		
0.4	(0)	Write a short note on:	07	
Q.4	(a)	(i) Windrose diagram and its applications (ii) Types of Inversion		
	(b)	Differentiate between Dispersion modeling and Receptor modeling.	07	
Q.5	(a)	Enlist air pollution control equipments and explain working principal of wet scrubber with neat sketch.	07	
	(b)	Write a short note on "Bag Filter with Pulse Jet Cleaning Mechanisms".	07	
	(0)	OR		
Q.5	(a)	Explain working of single cyclone separator with neat sketch.	07	
2.3	(b)	Write a short note on Electro Static Precipitator.	07	
	` '			