Sea	ıt No.:	GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VI • EXAMINATION – WINTER • 2014	
Subject Code: 161302 Date: 28-11-26 Subject Name: Fundamentals of Air Pollution			
Ti	me: 0 tructio	2:30 pm - 05:00 pm Total Marks: 70	
	2. 3.	Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Define Air Pollution and give classification of Air pollutants Explain in detail the sources of air pollutants	07 07
Q.2	(a) (b)	Write a short note: Wind rose diagram Explain the effects of hydrocarbons, oxides of nitrogen, photochemical oxidants, asbestos and metals on materials and health OR	07 07
	(b)	The exhaust gas from an automobile contains 1.5 percent by volume of carbon monoxide. What is the concentration of CO in milligrams per cubic meter (mg/m³) at 25 °C and 1 atm pressure?	07
Q.3	(a) (b)	Explain in detail: Solar radiation What is inversion? Explain in detail with the neat plots OR	07 07
Q.3	(a) (b)	Derive an expression for the dry adiabatic lapse rate What do you mean by the term MMD? Explain in brief radiosonde measurements	07 07
Q.4	(a)	along with the plume shape.	07
	(b)	Write a short note: Calculation of effective stack height OR	07
Q.4	(a) (b)	Explain the Gaussian Dispersion Model Explain in brief: Construction and Working of a High Volume Sampler	07 07
Q.5	(a) (b)	Explain physical properties of odorous substances Write a short note: Nature and Characteristics of Noise	07 07
Q.5	(a) (b)	Explain odor control methods Explain the effects of noise pollution	07 07
