## **GUJARAT TECHNOLOGICAL UNIVERSITY** PDDC - SEMESTER-VII • EXAMINATION – SUMMER • 2015

## Subject Code:X70604 Date: 14/05/2015 Subject Name: AIR POLLUTION CONTROL (DEPARTMENT ELECTIVE -I **Total Marks: 70** Time:02:30 pm - 05:00 pm Instructions: 1. Attempt all questions. Make suitable assumptions wherever necessary. 2. Figures to the right indicate full marks. 3. Define "Air Pollution" Explain Aerosols as Ai Pollutant. Q.1 07 (a) Defining "Wind Rose", Explain with neat figure. **(b)** 07 Discuss Plum Behavior under different atmospheric conditions. 07 Q.2 **(a)** Write explanatory notes on (i) Dispersion models and (ii)Estimation of Plum ise. **(b)** 07 OR Explain the cause and effects of Inversion of atmosphere. **(b)** 07 (i)State the prime factors as regards to polluted air affecting Human health Q.3 07 **(a)** (ii) List the health effects by air pollutants. **(b)** State the air pollutants affecting animals and discuss any one. 07 OR Q.3 Explain Green House effect 07 **(a)** Discuss Automobile pollution sources and control **(b)** 07 **O.4** (i)What information are needed to select the air pollution control equipment? 07 **(a)** (ii) state the objectives of using air pollution control equipments. List the types of particulate collection equipment. What are the advantages of 07 **(b)** using collectors in series? OR Write short note on construction and working of Cyclone **Q.4** 07 **(a) (b)** State the types of filters used for collection of particulates from air. 07 Discuss Fabric Filter. State the categories of Air polluting Industries as per section 19-26 of The Air( Q.5 07 **(a)** Prevention and control of Pollution ) act 1981. Discuss any one. List the industries specified in the schedule under Air Act 1981. **(b)** 07 OR Give the classification of sampling methods used for the study of air pollution. Q.5 **(a)** 07 What difficulties are encountered in sampling? **(b)** Discuss chemical methods of analysis of atmospheric samples 07

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