

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2016

Subject Code:2161711

Date:17/05/2016

Subject Name: Environmental Instrumentation

Time: 10:30 AM to 01:00 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) How Portable Instruments are Differ from Stationary Instruments **07**
(b) What is Sedimentation? Explain Different Types of Sedimentation in Detail. **07**

- Q.2** (a) Why Hydrocarbon Detection is Necessary? Explain Hydrocarbon Detector in Detail. **07**
(b) Explain Photo Ionization In Detail. **07**

OR

- (b) Explain TCD Detectors In Detail. **07**

- Q.3** (a) Describe Opacity Monitors In Detail. **07**
(b) Explain Flame Ionization Detector in Detail **07**

OR

- Q.3** (a) Explain HPLC In Detail **07**
(b) Explain Air Flow Measurement in Detail **07**

- Q.4** (a) Explain the different concentrations of pollutants that affect the quality of air. **07**
(b) Explain Soap bubble meter. **07**

OR

- Q.4** (a) Explain the measurement technique for Co and NOX. **07**
(b) Describe Hot wire Anemometer for Gas flow. **07**

- Q.5** (a) Explain Rain Water Harvesting. **07**
(b) Describe Vane Anemometer. **07**

OR

- Q.5** (a) Explain Role Of Different Organization for Environment Instrumentation. **07**
(b) Explain Latest Methods of Waste Water Treatment Plants. **07**
