

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI(OLD) – EXAMINATION – SUMMER 2019

Subject Code:161701

Date:18/05/2019

Subject Name: Instrumentation System

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) Sketch loop wiring diagram and Explain it in detail. **07**
(b) Draw and Explain control room layout. **07**
- Q.2** (a) Explain air supply system in detail. **07**
(b) Explain electric safety and explain about hazardous area. **07**
- OR**
- (b) Explain checklist for good installation practice. **07**
- Q.3** (a) Explain different communication methods used in plant control room. **07**
(b) Explain different types of control panel in detail. **07**
- OR**
- Q.3** (a) Explain various types of dryers and functions. **07**
(b) Explain plant startup procedure. **07**
- Q.4** (a) Write a short note on capacitive type level measurement. **07**
(b) Give the details of Diaphragm operated control valve. **07**
- OR**
- Q.4** (a) Explain typical control valve checkout procedure. **07**
(b) Prepare the specification sheet for pressure transmitter. **07**
- Q.5** (a) Explain role and responsibilities of project manager. **07**
(b) Describe the selection of measurement method for flow. **07**
- OR**
- Q.5** (a) Give the checklist for good installation of temperature transmitter. **07**
(b) Describe electrical power system for control room. **07**
