

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 130903

Date: 09/06/2017

Subject Name: Electrical and Electronics Measuring Instruments

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) Explain PMMC instrument with neat sketches. **07**
(b) Explain 1-phase Induction type Watt hour meter with neat sketches. **07**
- Q.2** (a) Discuss construction & working of Galvanometer. **07**
(b) Define true value, accuracy, precision, error, sensitivity, resolution & creeping. **07**
- OR**
- (b) Explain Resistance standards. **07**
- Q.3** (a) Explain Moving iron instrument with neat sketches. **07**
(b) Discuss power factor meter. **07**
- OR**
- Q.3** (a) Discuss Synchroscope & it's applications. **07**
(b) Explain Differential amplifier type of Electronic Voltmeter. **07**
- Q.4** (a) Explain Electrodynamometer type instrument with neat sketches. **07**
(b) Discuss Extension of range of instruments. **07**
- OR**
- Q.4** (a) Explain construction & operation of Hot wire instruments. **07**
(b) Explain Electrostatic type instrument with neat sketches. **07**
- Q.5** (a) Explain Drysdale polar A.C. potentiometer with neat sketches. **07**
(b) Discuss applications of DC potentiometer. **07**
- OR**
- Q.5** (a) Discuss frequency meter. **07**
(b) Explain Measurement of power in three-phase circuits by 2-wattmeter method. **07**
