

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER- VI (Old) EXAMINATION – WINTER 2019****Subject Code: 160905****Date: 06/12/2019****Subject Name: Electrical & Electronic Measurement****Time: 02:30 PM TO 05:00 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)** Define following terms **07**
(1) Accuracy (2) precision (3) precision index (4) sensitivity (5) Resolution
(6) Drift (7) Linearity
- Q.2 (a)** Explain Maxwell's bridge with vector diagram. **07**
(b) Explain Owen's bridge with advantages and disadvantages. **07**
OR
- (b)** Explain Hay's bridge. **07**
- Q.3 (a)** Explain the difficulties with measurement of high resistance. **07**
(b) Write short note on Megger. **07**
OR
- Q.3 (a)** Explain Wheatstone bridge. **07**
(b) Explain measurement of resistance by substitution method. **07**
- Q.4 (a)** Describe the method for determination of B-H curve of magnetic material. **07**
(b) Discuss the continuity test conducted on long length cables. **07**
OR
- Q.4 (a)** Discuss principle and working of digital LCR meter. **07**
(b) Describe the varley loop test for localization of ground and short circuit fault in cables. **07**
- Q.5 (a)** Discuss applications of spectrum analyzer. **07**
(b) Explain frequency selective wave analyzer with block diagram. **07**
OR
- Q.5 (a)** Explain any one method of CT testing. **07**
(b) Explain construction of CVT. **07**
