

Roll No.

24236

B. Tech. 5th Sem. (ECE)

Examination – December, 2016

ELECTRONIC MEASUREMENT & INSTRUMENTATION

Paper : EE-303-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in total. Question No. 1 is *compulsory*. Attempt *four* more questions by selecting *one* question from each Section. All questions carry equal marks.

1. (a) Why we need CRO ? Explain it briefly. 5
- (b) Explain the instrument for measurement of voltage. 5
- (c) Explain the working principle of function generator. 5
- (d) Write down on DC signal conditioning system. 5

SECTION – A

2. Explain high frequency CRO, consideration measurement of phase and frequency. 20
3. Write short notes on : 10 + 10 = 20
- (a) Storage oscilloscope
 - (b) Sampling

SECTION – B

4. Explain R. F. power measurement in details. 20
5. Write short notes on : 10 + 10 = 20
- (a) Digital meter
 - (b) Chopper amplifier

SECTION – C

6. Write short notes on : 10 + 10 = 20
- (a) Distortion analyser
 - (b) FFT analyser
7. What do you mean by universal counter ? Explain them. 20

SECTION – D

8. (a) What do you mean by strain ? Derive the expression of gauge factor. 10
- (b) Explain LVDT with its characteristics. 10
9. Explain in details data acquisition and conversion system. 20
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