



B.E DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Fifth Semester

ELECTRONICS AND INSTRUMENTATION ENGINEERING

EIE105: Electronic Instrumentation

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. For large measurement of impedance by Q meter _____ method should be used
 - a) Series Substitution
 - b) Parallel Substitution
 - c) Shunt Substitution
 - d) Series-Shunt Substitution
2. Multirange ammeters are used for ranges upto _____.
 - a) 50A
 - b) 60A
 - c) 75A
 - d) 100A
3. What is the major component of frequency synthesized sine wave generator?
 - a) Phase Detector
 - b) Attenuator
 - c) Schmitt Trigger
 - d) Synchronous Circuit
4. _____ is a logic element that divides the frequency of the VCO, by an integer that can be entered via programming switches, a microprocessor, or other methods.
 - a) Phase Detector
 - b) Voltage Controlled Oscillator
 - c) Programmable Divider
 - d) Loop Filter
5. CRT requires a heater voltage of _____ volts AC.
 - a) 5.3
 - b) 6.3
 - c) 4.3
 - d) 8.3
6. _____ probe is used to provide an efficient method of coupling high frequency to the CRO.
 - a) Direct Probe
 - b) Active Probe
 - c) Current Probe
 - d) Isolation Probe
7. DVM is capable of measuring _____.
 - a) DC voltages
 - b) AC voltages
 - c) Analog DC voltages
 - d) Analog AC voltages

24. a) i) Infer the operation of digital frequency meters with appropriate sketch. (7)
ii) Outline the operation of basic digital multimeter. (7)
- (OR)**
- b) With neat diagrams, discuss the operation of any two types of digital voltmeters.
25. a) State the different elements of a data logger and explain the functions of each block.
- (OR)**
- b) i) Compare the working principle of LCD and Dot Matrix Display. (7)
ii) Write short note on XY recorders with neat sketch. (7)
