

- Q.16 Explain the working Principle of Digital Wattmeter.
- Q.17 Explain the construction of Induction type energy meter with the help of diagram.
- Q.18 Draw the block diagram of Digital Multimeter.
- Q.19 Difference between CRO and DSO.
- Q.20 Classified the different types of Transducer.
- Q.21 Explain the working principle of the photovoltaic cell.
- Q.22 Differentiate between thermistor and RTD.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Explain the Principle and working of thermocouple with the help of diagram.
- Q.24 Explain how power can be measurement in three phase circuit by two wattmeter method.
- Q.25 Write a short note on any two:-
- a) Strain Gauge
  - b) Tong tester
  - c) Pyrometer

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#### 3rd Sem / Eleterical

**Subject : Electrical Measurement and Instrumentation**

Time : 3 Hrs.

M.M. : 60

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 An ammeter is a
- a) Secondary instrument
  - b) Absolute instrument
  - c) Recording instrument
  - d) Integrating instrument
- Q.2 The energy meter is an
- a) Recording instrument
  - b) Integrating instrument
  - c) Indicating instrument
  - d) None of the above

- Q.3 Digital multimeter is used for\_\_\_\_\_
- Measuring ac and dc current, voltage and resistance
  - Measuring ac current and voltage
  - Measuring dc current and resistance
  - Measuring ac voltage and resistance
- Q.4 LVDT is\_\_\_\_\_ type of transducer.
- Resistive
  - Capacitive
  - Inductive
  - Optical
- Q.5 Full form of RTD is
- Resistance thermistor detector
  - Resistance temperature Detector
  - Round Temperature Detector
  - Resistance Thermometer
- Q.6 The instrument used for the measurement of pressure is/are
- Bellows
  - Diaphragms
  - Both (a) and (b)
  - None of the above

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## SECTION-B

- Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)
- Q.7 Eddy current damping is more efficient than other damping. (True/False)
- Q.8 In a two wattmeter method for the measurement of power, if  $W_1=W_2$ , then power factor is zero. (True/False)
- Q.9 Potential transformer is used to measure low voltage in ac circuit. (True/False)
- Q.10 CRO stand for\_\_\_\_\_. (True/False)
- Q.11 Piezoelectric transducer is self generating. (True/False)
- Q.12 Temperature coefficient of thermistor is\_\_\_\_\_.

## SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 Write the different types of error.
- Q.14 Differentiate between indicating instruments and integrating instruments.
- Q.15 Compare the attraction type and repulsion type moving iron instrument.

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