

- Q.26 Describe elements of a measuring system.
 Q.27 Explain Potentiometer type Accelerometer.
 Q.28 Discuss measurement of effective Resistance by reactance variation method.
 Q.29 Describe Photo Transistors.
 Q.30 Explain ultrasonic Flow meter.
 Q.31 Write a short note on Radiometric Filtering.
 Q.32 Describe Displacement measurement technique using Ultrasonic Transducer.
 Q.33 Write a short note on measurement of selectivity of Radio Receiver.
 Q.34 Discuss Opto Electronic measurement.
 Q.35 Describe Resonance methods.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Discuss construction & working principle Piezo-electric Accelerometer.
 Q.37 Explain parallel T-network with suitable diagram.
 Q.38 Describe Photo conductor with its characteristics.

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Roll No.

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Instrumentation & Control

Subject:- Advanced Measurement Techniques

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Unit of Inductance is _____.
 a) Henery b) Farad
 c) watt d) Hertz
 Q.2 Photo conductive cell may be called as _____.
 a) Photo Resistive cell
 b) Photo resistor
 c) Light dependant resistor
 d) All of these
 Q.3 Bridge T-network are used for measurement of _____
 a) Inductance b) Capacitance
 c) Resistance d) All of these
 Q.4 _____ is the basic unit of Photometry.
 a) Watt b) Lumen
 c) Candela d) None of these

- Q.5 What is the unit of length.
a) Meter b) Kilogram
c) Kelvin d) None of these
- Q.6 During vibrations, speed of motion is _____.
a) Constant b) Variable
c) Both a & b d) None of these
- Q.7 The Accelerometer measures _____.
a) Mass b) Acceleration
c) Velocity d) Distance
- Q.8 Photo conductive transducer produces output _____.
a) Due to change in inductance
b) Due to change in light
c) Due to change in Resistance
d) Due to change in Temperature
- Q.9 Vibrations are _____.
a) Desirable b) undesirable
c) Both a & b d) None of these
- Q.10 _____ is the unit of capacitance.
a) Farad b) Henery
c) Hertz d) None of these

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Expand RVDT.

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- Q.12 LEDs are small in size. (True/False)
Q.13 Vibrations are measured by _____.
Q.14 T-network employs Null Technique. (True/False)
Q.15 Photometry refers to measurement of light.
(True/False)
Q.16 Define Transducer.
Q.17 Expand LED.
- Q.18 Resonance methods are used for measurement of capacitance. (True/False)
Q.19 Radiometric Filtering is used for _____.
Q.20 Direct Measurement are commonly used in engineering applications. (True/False)

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Discuss methods of correction for interfering and modifying inputs.
Q.22 Explain LVDT Accelerometer.
Q.23 Describe measurement of Capacitance for a Resonance circuit.
Q.24 Write a short note on Photo Diode.
Q.25 Explain Ultrasonic Thickness measurement technique.

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