

- Q.24 What is photo transistor and explain its working?
 - Q.25 Discuss about seismic transducer.
 - Q.26 Write a note on measurement of pH.
 - Q.27 Write a short note on micrometer.
 - Q.28 Discuss about measurement of viscosity and explain any one method,
 - Q.29 Draw the functional elements of measuring system.
 - Q.30 Explain about LDR.
 - Q.31 Define variable reluctance type tachnogenerator.
 - Q.32 Write a short note on strain gauge.
 - Q.33 Discuss about the various light modulating techniques.
 - Q.34 Input output configuration of instrumentation system.
 - Q.35 Explain about the dial bevel protector and why it is used?

SECTION-D

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

- Q.36 What is LVDT and explain its working and applications also.

Q.37 Define pH and various techniques to measure the pH value.

Q.38 Define the strain gauge & explain its working.

No. of Printed Pages : 4
Roll No.

181563B/121563B

6th Sem / Branch : IC
Sub.: Advanced Measurement Techniques

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 For alkaline solution the pH. Value lies between

 - a) 7 to 14
 - b) 0 to 7
 - c) 0 to 14
 - d) None of the above

Q.2 A measuring systems consists of _____

 - a) Sensor
 - b) Variable conversion element
 - c) Signal Processing element
 - d) All of these

Q.3 Force = ?

 - a) Acceleration/Mass
 - b) Velocity X time
 - c) Mass x Acceleration
 - d) Velocity /Time

Q.4 Unit of capacitor

 - a) Hertz
 - b) Farad
 - c) Henry
 - d) Ohm

Q.5 LDR stands for

- a) Light dependent resonance
- b) Linear dependent resister
- c) Light differential resister
- d) Light dependent resistor

Q.6 Which device is used to measure the speed of an object?

- a) Thermometer b) Odometer
- c) Potentiometer d) Galvanometer

Q.7 The viscosity is measured by _____

- a) Hydrometer b) Accelerometer
- c) Viscometer d) None of these

Q.8 Which transducer an active transducer

- a) LVDT
- b) STRAIN GAUGE
- c) Piezo electric crystal
- d) None of these

Q.9 The last stage of a measuring system is also known as

- a) Detector transducer stage
- b) Intermediate stage
- c) Terminating stage
- d) None of these

Q.10 Unit of frequency _____

- a) Farad
- b) No of cycle per second (Hertz)
- c) Ohm
- d) All of these

SECTION-B

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

Q.11 Define measurement.

Q.12 Function of actuator of a measuring system.

Q.13 What do you mean by Accuracy in measurement?

Q.14 Differentiate between accuracy and precision.

Q.15 Define instrumentation?

Q.16 Define velocity.

Q.17 SI unit of force.

Q.18 What is resolution?

Q.19 Define about tachometer?

Q.20 Define sensitivity.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Define stroboscope for angular velocity measurement.

Q.22 Write a short note on stroboscope.

Q.23 What is opto-isolator?