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 techogenerator.

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 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.

Roll No. .....

6th Sem / Branch : Instrumentation & Control Engg

Subject:- Advanced Measurement Techniques

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 For acidic 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 system consists of :-

a) Sensor

b) Variable conversion element

c) Signal processing element

d) All of these

Q.3 Unit of frequency:-

a) Hertz b) Farad

c) Henry d) Ohm

Q.4 LDR stand for:-

a) Light dependent resonance

b) Linear dependent resistor

c) Light differential resister

d) Light dependent resistor

Q.5 Which device is used to measure the temperature of an object-

a) Thermometer b) Odometer

c) Potentiometer d) Galvanometer

Q.6 The viscosity is measured by:-

a) Hydrometer b) Accelerometer

c) Viscometer d) None of these

Q.7 Which transducer is an active transducer:-

a) LVDT b) Strain gauge

c) Photo voltaic cell d) None of these

Q.8 Force =?

a) Accelerometer/mass b) Velocity x time

c) Mass / Acceleration d) Velocity / time

Q.9 The first 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 Capacitor

a) Farad

b) Henry

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 intermediate stage 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 temperature.

Q.18 What is resolution?

Q.19 Define about tachometer.

Q.20 Explain LVDT.

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?

Q.24 What is photo transistor and explain its working.