SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 What are photosensitive devices? Explain any one application of it in measurement.

Q.4 Draw and explain the working principle of optical level devices.

Q.5 Explain in detail the sensitivity add selectivity measurement for radio receivers.

Q.6 Explain construction and working of thermocouple in detail.

Q.7 Write short note on any two:

a) RTD

b) Resonance methods

c) Level gauges

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121563-B

6th Sem. / IC, EI

Subject : Advanced Measurement Techniques

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) Selectivity

b) Function of magnetic follower

c) Measurement

d) Capacitance

e) Sensitivity

f) On which effect thermocouple works?

g) Piezo crystals are used in which type of flow meter?

h) Resonance

i) Draw symbol of LED.

j) Write various units of temperature.

k) Attenuator

l) Write full form of RTD

m) One advantage of optical level sensor.

n) Accuracy

o) Ultrasonic

p) Orifice

q) Sensor

r) Photo diode

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

Q.2 i) Describe input-output configuration of instrumentation system.

ii) Draw the functional elements of measurement system.

iii) Describe a method to measure the flow of both liquids and gases.

iv) Explain the working of rotameter.

v) Explain construction and working of light emitting diodes.

vi) What is light attenuation?

vii) Discuss photo conductor.

viii) What is thermistor? Explain.

ix) How the inductance is measured?

x) Describe working of photodiode.

xi) Write short note on IR-detector.

xii) What do you mean by light attenuation?

xiii) Explain parallel T network in brief.

xiv) Write limitation of optical level sensor.

xv) Describe float level gauge.