

- Q.28 Write short note on Radiation Pyrometers.
 - Q.29 Describe Thermocouple method for low pressure measurement.
 - Q.30 Mention advantages and disadvantages of Venturi meter.
 - Q.31 Discuss high pressure measurement method.
 - Q.32 Write short note on Hot wire Anemometer.
 - Q.33 What are Fiber optic Thermometers.
 - Q.34 Discuss Gamma Rays method for level measurement.
 - Q.35 Write a short note on Ultrasonic Flowmeter.

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5th Sem / Branch : IC, EI
Sub.: Process Instrumentation

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 _____ is unit of Temperature.

a) Bar b) Watt
c) Kelvin d) Tesla

Q.2 Thermistor is used for measurement of _____.

a) Temperature b) Pressure
c) Flow d) None of these

Q.3 Ionization gauge is used for measurement of _____.

a) Low Pressure b) High Pressure
c) Medium Pressure d) None of these

Q.4 Orifice meter is used for measurement of _____.

a) Flow b) Pressure
c) Temperature d) Level

Q.5 Ultrasonic flow meters are insensitive to variation in _____.

a) Viscosity b) Density
c) Temperature d) All of these

- Q.6 The output of Turbine Flow meter is _____.
a) Digital b) Analog
c) Both A & B d) None of these
- Q.7 Thermistors are _____.
a) Passive Transducer b) Active Transducer
c) Both A & B d) Output Transducer
- Q.8 A Reynold's number of 4000 indicates.
a) Turbulent b) Laminar
c) Both A & B d) None of these
- Q.9 The output of Electromagnetic Flow meter is unaffected by changes in characteristics of Liquid _____.
a) Viscosity b) Pressure
c) Temperature d) All of these
- Q.10 Manometer is used for measurement of _____.
a) Pressure b) Temperature
c) Flow d) All of these

SECTION-B

Note: Objective type questions. All questions are compulsory. $(10 \times 1 = 10)$

- Q.11 Thermistors are compact and rugged. T/F
- Q.12 Diaphragms are used for Pressure measurement. T/F

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- Q.13 Thermocouples are used to detect very small changes in Temperature T/F.
- Q.14 Electromagnetic Flow meter utilizes ____ crystals.
- Q.15 Radiation Pyrometers are used for Temperature measurement. T/F
- Q.16 Orifice flow meters are volumetric flow meters T/F.
- Q.17 Write one disadvantages of Thermistor.
- Q.18 Define Flow.
- Q.19 Pirani gauge is used for measurement of ____ pressure.
- Q.20 Ultrasonic transducers are utilized for Level measurement T/F.
- Q.21 Mention units of Pressure.
- Q.22 Hot wire Anemometers are used for measurement of Flow. T/F.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. $(12 \times 5 = 60)$

- Q.23 Discuss units of Temperature and Flow.
- Q.24 Write short note on Thermocouple.
- Q.25 Explain pressure measurement using Bellows.
- Q.26 Discuss Orifice flow meter.
- Q.27 Describe Electric method for level measurement.

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