

- Q.26 Make a list of different type of pressures and define any one.
- Q.27 Name the various elastic Pressure measuring devices and define any one with the help of diagram.
- Q.28 Name the types of bourdon tube. Briefly describe any one.
- Q.29 Differentiate between Laminar and turbulent flow of fluids.
- Q.30 Define steady and unsteady flow of fluids.
- Q.31 Write a short note on Rota meter.
- Q.32 Write short note on ultrasonic liquid level gauge.
- Q.33 Write down the advantages and disadvantages of open loop control system.
- Q.34 Classify the control system and briefly describe them.
- Q.35 Define Analog and digital types of instruments.

SECTION-D

- Note :** Long Answer type question. Attempt any two questions. (2x10=20)
- Q.36 What is humidity? Write down the types of humidity and techniques used for its measurement.
- Q.37 What is bourdon tube? How it is used for pressure measurement. Explain the working of "C" type bourdon tube.
- Q.38 Name the various direct and indirect liquid level measurement techniques and describe one from each.

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5th Sem / Food Technology

Subject : Instrumentation & Process Control

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Bimetallic thermometers are used for the measurement of _____.
- a) Weight
 - b) Velocity
 - c) Flow
 - d) Temperature
- Q.2 Tertiary measurement involves _____ translation on the quantity to be measured.
- a) 1
 - b) 2
 - c) 3
 - d) 0
- Q.3 Matching of two colours, such as when judging the colour of red hot metal is known as _____.
- a) Primary Measurement
 - b) Secondary measurement
 - c) Tertiary measurement
 - d) None
- Q.4 The difference between Measurand and standard used to correct the automatic process control system is known as _____.
- a) Measurand
 - b) Standard
 - c) Result
 - d) Feed back

- Q.5 Which of the following is a desirable characteristic of an instrument?
a) High accuracy b) High sensitivity
c) Low response delay d) All of the above
- Q.6 Unit of pressure is _____
a) Mass/Area b) Force/Area
c) Force/Volume d) Mass/Volume
- Q.7 Which of the following temperature measuring instrument need not touch the object whose temperature is being measured?
a) Radiation pyrometer
b) Thermoelectric pyrometer
c) Glass thermometer
d) None of the above
- Q.8 The closeness with which the reading of an instruments approaches the true value of the variable being measured is called.
a) Accuracy b) Precision
c) Durability d) Dependability
- Q.9 Full form of RTD is
a) Resistant temp. detector
b) Resistant time device
c) Real temp. device
d) None of the above
- Q.10 Thermisters have _____ temperature coefficient.
a) Positive b) Negative
c) Zero d) None of the above

SECTION-B

- Note :** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Name two level measurement instruments.
Q.12 Give the full form of DBT and WBT.
Q.13 One atmospheric pressure is equal to _____.
Q.14 Name the different types of Bourdon tubes used for pressure measurements.
Q.15 Write down the common types of Manometers.
Q.16 Boiling point of water is _____ degree Kelvin.
Q.17 Name the different types of diaphragms used for pressure measurements.
Q.18 Metal used as high expansion material in Bimetallic thermometer is _____.
Q.19 Material used to make bourdon tube is _____.
Q.20 What is measured with Orifice Meter?

SECTION-C

- Note :** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Name the types of fluid flow.
Q.22 Write short note on sight glass liquid level measurement techniques.
Q.23 Name any four static characteristics of instruments and define any one.
Q.24 Name any two non electric temperature measuring devices and define any one.
Q.25 Give the name of different thermometers and briefly describe any one.