

Question bank (G scheme)

Name of Subject: Chemical Process instrumentation and control

Subject code: 17561

Semester: Fifth

Course: CH

Unite test -1

Chapter 1:Basic Concepts(4marks)

3 marks question

1. Define accuracy and precision.
2. Define sensitivity and drift
3. Define speed of response and fidelity.
4. Define lag and dynamic error

Chapter 2: Temperature Measurement(12 marks)

3 marks question

5. Define Seebeck effect and Thomson effect
6. Give the principle of bimetallic thermometer.
7. Draw the diagram of RTD and mark the parts.

4 marks question:

8. Explain the working of radiation pyrometer.
9. Draw different types of thermistor.
10. Give the ice point and steam point in different temperature scales.

Chapter 3: Pressure Measurement(14 marks)

3 marks question

11. State the principle of strain gauge.
12. Convert 500mm of Hg into Pa, Psi, Kg/cm².
13. Draw the diagram of a LVDT and label it.

4 marks question:

14. Explain the working of a dead weight tester
15. Explain the working of Bourdon tube.
16. Explain the working of a bellows pressure transducer

Chapter 4: Level Measurement(12 marks)

3 marks question

17. State the principle of radioactive method for level measurement
18. State the principle of air purge method for level measurement.

4 marks question:

19. Explain the construction and working of capacitive method for level measurement.
20. Describe any one method for solid level measurement.
21. Describe the sight glass method for level measurement.

Chapter 5:Flow Measurement(8 marks)

4 marks question:

22. Draw the diagram of magnetic flow meter and mark the parts.
23. Explain the working of turbine meter.
24. Explain the working of flow nozzle.
25. State the principle and application of piston type variable area meter.