

Question bank 2(I scheme)

Name of Subject: Chemical Process instrumentation and control

Subject code: 22407

Semester: IV

Course: CH

Chapter 4:Flow and level Measurement(11 marks)

2 marks question:

1. State the principle of radioactive method for level measurement
2. State the principle of ultrasonic level detector.

4marks question:

- 4 Draw the diagram of electromagnetic flow meter and mark the parts.
- 5 Explain the working of turbine meter.
- 6 Explain working of thermal flow meter.
- 7 Explain the working of rotating vane meter.
- 8 Draw the diagram of ultrasonic flow meter.
- 9 Explain working of high pressure sight glass level indicator.
- 10 Explain working of air purge method for level measurement.
- 11 Explain working of radioactive method for level measurement.

Chapter 5: process control system and control valve(24 marks)

2 marks question:

- 12 Give 2 differences between open loop and closed loop system.
- 13 Draw the valve characteristics.
- 14 Define rangeability and turn down.
- 15 List the various types of control valves.
- 16 State 2 advantages of DCS.
- 17 What is cavitation?

4 marks question:

- 18 Difference between servo and regulatory process.
- 19 Explain automatic control system with one example.
- 20 Explain pneumatic proportional controller.
- 21 Describe cascade control system.
- 22 Draw the block diagram of PLC.
- 23 Describe the features of DCS.
- 24 List the factors to be considered while selecting control valve.
- 25 Draw the block diagram of DCS.
- 26 Explain working of solenoid valve.