

- Q.3 Short Answer Questions (Attempt any 10 out of 12) [20]**
- 1 Write classification of instruments based on requirement of manual assistance.
 - 2 Write the principle of mercury thermometer.
 - 3 Describe Sight Glass method.
 - 4 List different control actions.
 - 5 Write any two differences between circular and strip chart recorder.
 - 6 Write classification of open channel flow measuring devices.
 - 7 State Fourier's Law.
 - 8 What is thermal conductivity?
 - 9 Differentiate cooler and condenser.
 - 10 Discuss classification of Dryers.
 - 11 Explain Relative volatility and state Raoult's Law.
 - 12 Write about types of distillation.

- Q.4 Long Answer Questions (Attempt any Four) [32]**
- 1 Write principle, construction and working of Bimetallic Thermometer.
 - 2 Discuss working of Bellow Pressure Gauge and Diaphragm Pressure Gauge.
 - 3 Write principle, construction, working and advantages of Venturimeter.
 - 4 Discuss about ON-OFF Control.
 - 5 Derive an equation for heat transfer through Resistance in series
 - 6 Explain working of Double pipe heat exchanger.
 - 7 Write a note on Rectification column
 - 8 Discuss about Rotary Dryer.
