

B.E. (Instrumentation and Control Engineering)

PROCESS INSTRUMENTATION

(2015 Pattern) (406268) (Semester-II)

1. With necessary diagram, explain the Air Fuel ratio control.
2. How the feed forward control strategy is implemented in the Heat exchanger? What is adaptive gain?
3. Illustrate the cascade control implementation for two effect evaporators.
4. How spray dryer is different from other dryers? Explain with suitable control scheme
5. Why end point detection is important in reactors.
6. Enlist the types of compressors? With neat diagram, explain the Surge control in compressors.
7. What is desuperheater? Describe implementation of cascade control for superheater temperature control?
8. Explain the control scheme for bottom product composition control through reboiler temperature.
9. Give the significance of furnace draft in the combustion of fuel in Boiler.
10. Enlist the types of pumps? Explain in detail about on/off control and speed control of pump.
11. What are the limitations of cascade control in case of reactors?
12. Write the factors on which the drying characteristics of a material depend.
13. Draw schematic and discuss about the control system implementation, when two compressors are in series and when in parallel.
14. Describe the pH end point control in detail.
15. Illustrate how the Burner Management System works in Boiler.