

Code: 9A10701

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December 2015

AUTOMATION OF INDUSTRIAL PROCESSES

(Electronics & Instrumentation Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Discuss the various elements of computer controlled processes with suitable diagrams.
(b) With a block diagram, explain the hierarchical control system.
- 2 Explain the communication models in distributed control systems.
- 3 Discuss the various design considerations in a controller design.
- 4 Compare the deadbeat and Dahlin's algorithms.
- 5 Discuss the examples for feed forward controller.
- 6 Explain the features of adaptive control systems and discuss the parameters and adjustment mechanisms.
- 7 Discuss any two intelligent control systems with suitable examples.
- 8 Discuss the architecture and selection of the programmable logic controllers.
