

Code: R7411307

R07

B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013

INSTRUMENTATION AND CONTROL IN MANUFACTURING SYSTEMS

(Electronics and Control Engineering)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain the various manufacturing operations in brief.
(b) Enumerate the components of a manufacturing system.
- 2 (a) Explain the basic elements of an automated system.
(b) Enumerate the various forms of computer process control.
- 3 (a) List the various application of numerical control in present era.
(b) List the differences between NC, DNC and CNC.
- 4 Can robot replace human begin? Justify with relevant applications.
- 5 Enumerate the benefits and application of FMS.
- 6 (a) List the differences between traditional and modern quality control.
(b) Explain various control charts.
- 7 Explain in detail the various "quality inspection technologies".
- 8 Explain the following in brief:
 - (a) Shop floor control.
 - (b) Process planning.
 - (c) Design for manufacturing.
 - (d) Capacity planning.
