Code: R7411004

R07

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

## P C BASED INSTRUMENTATION

(Electronics & Instrumentation Engineering)

Time: 3 hours Max. Marks: 80

Answer any FIVE questions All questions carry equal marks

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- 1. (a) Explain about the computer interfacing for data acquisition and control.
  - (b) Discuss about the input/output port configuration of a computer system.
- 2. Explain in detail the data acquisition and control using standard cards.
- 3. (a) Explain the concepts of scaling and linearization.
  - (b) What are cross-assemblers and discuss its functions in a programming environment?
- 4. (a) Draw and explain the input/output modules of a PLC.
  - (b) What are the applications of PLC?
- 5. (a) Explain basic PLC functions.
  - (b) Explain briefly the programming of ON-OFF outputs of a PLC.
- 6. (a) Discuss SKIP and MCR functions of PLC.
  - (b) Explain briefly about matrix functions.
- 7. (a) Explain in detail the analog PLC operation.
  - (b) Discuss the PLC-PID functions briefly.
- 8. (a) What is a field bus?
  - (b) Explain the operation of field bus with a neat diagram.

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