

Code: 9A10803

**R09**

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013

**VIRTUAL INSTRUMENTATION**

(Common to E.Con.E and EIE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 Explain neatly the block diagram and architecture of a virtual instrument.
- 2 (a) Differentiate between loops and charts.  
(b) Explain about the case and sequence structures with examples.
- 3 (a) Explain neatly about the DMA controller.  
(b) Explain about the data acquisition interface requirements.
- 4 (a) Explain the current loop in common instrument interfaces.  
(b) Give a short notes on GPIB.
- 5 Explain in detail about the Ethernet control of PXI.
- 6 Differentiate between VISA and IVI.
- 7 Explain briefly about the development of process DBMS.
- 8 Write a short notes on the following:
  - (a) Active X programming.
  - (b) Calibration.
  - (c) SCSI.
  - (d) Motion control.

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