

Code: R7411007

R07

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

VIRTUAL INSTRUMENTATION

(Electronics and Instrumentation Engineering)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) With the help of block diagram, explain the architecture of a virtual instrument.
(b) Explain the features of an embedded controller.
- 2 (a) Explain how case and sequence structures are used in VI programming.
(b) Explain about local and global variables.
- 3 (a) Explain in detail about ADC and DAC systems.
(b) Distinguish between timers and counters.
- 4 (a) Explain about RS232C interface system.
(b) Write a brief note on GPIB.
- 5 Explain the bus utility signals indicating their protocol.
- 6 Write about the network topologies. Discuss the significance of such configurations in the industrial applications.
- 7 (a) What are the different tool sets available in VI? Explain any one in detail.
(b) Discuss various applications of virtual instrumentation.
- 8 (a) What is simulation?
(b) Explain in detail the image acquisition and processing using VI.
