Code: 9A10801

R09

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

(Electronics and Instrumentation Engineering)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

- 1 (a) Discuss the block diagram of a personal computer and discuss about each unit.
 - (b) Discuss about PCI bus.
- 2 Discuss about plug-in data acquisition boards used in industry applications.
- 3 (a) What is scaling and linearization?
 - (b) Write an assembly language program, to control a stepper motor for speed control.
- 4 (a) With a neat diagram explain about a PLC system.
 - (b) Explain about design of power supplies required in a PLC system.
- 5 (a) Explain the procedure for creating the ladder diagrams.
 - (b) List out the basic PLC functions.
- 6 Discuss about PLC intermediate functions with examples.
- 7 Explain in detail about PLC networking and its operation.
- 8 Discuss in detail about PLC installation, troubleshooting and maintenance.
