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.

*****