Code : R7411004

R07

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012

PC BASED INSTRUMENTATION

(Electronics & Instrumentation Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions

All Questions carry equal marks

*****

1. (a) Give an account of operating system for computer.
    (b) Discuss about interfacing of input signals briefly.

2. (a) How signals are taken from transducer to control room – explain.
    (b) Elaborate on backplane bus.

3. Write short notes on the following
    (a) Assembly language programming.
    (b) Scaling and linearization using programming.

4. (a) What is PLC? Draw the block diagram of PLC and explain.
    (b) What are input/output modules in PLC – explain.

5. (a) Discuss briefly about registers in PLC.
    (b) Describe counter function with examples of industrial applications.

6. (a) Explain about MCR function in PLC.
    (b) List various comparison functions in PLC and discuss about any two of them.

7. (a) List and discuss about various types of PLC analog inputs and outputs.
    (b) Give an account of cell control by PLC networks.

8. (a) Discuss about operation of Hart protocol.
    (b) Elaborate on smart valves.

*****