

IV B.Tech I Semester Supplementary Examinations, November 2005
PC BASED INSTRUMENTATION
(Electronics & Instrumentation Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Draw the Basic Building blocks of Automation system and explain it in detail?[16]
2. List out Various essential features of operating system for PC based Instrumentation and give the description for each one in detail, with a diagram. [16]
3. What is a Data bus logic ? System Data bus is distributed into how many sections List them. Draw the schematic block diagram for the Data bus Distribution and explain the functions of all the ICs and signals in the diagram. [16]
4. Classify the bus control signals? Explain any one type of bus control signals among them? [16]
5. Explain in detail about RS-232C serial interface with a neat diagram. What are its limitations. [16]
6. Explain in detail with a neat diagram how a video display work. [16]
7. (a) Explain the features of ADC/DAC/Digital I/o card.
(b) Discuss the power requirements, Base address selection and I/o map of the card. [8+8]
8. Write a program in C to demonstrate the operation of both D/A and A/D converters. [16]
