

Code No: R05411004

R05

Set No. 2

IV B.Tech I Semester Examinations, NOVEMBER 2010

PC BASED INSTRUMENTATION

Electronics And Instrumentation Engineering

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Explain how MS DOS handles Input and Output devices.
(b) Explain the I/O channels and their functions recognized by MS DOS. [8+8]
2. Explain proportional, integral and derivative control actions. [16]
3. Explain different types of programming devices of a PLC. [16]
4. Explain computer interfacing for data acquisition and control in process control instrumentation. [16]
5. Explain the PLC arithmetic functions with examples. [16]
6. (a) Define state language programming of a PLC.
(b) Describe the four basic components of a step in a state language programming. [8+8]
7. What is PLC? Draw and explain the architecture of a PLC with a neat diagram. [16]
8. Explain the following signal conditioning circuits in data acquisition boards [4×4=16]
 - (a) Data logger
 - (b) PC-plug-ins
 - (c) Computer back plane PC plug-ins
 - (d) Network based systems.

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R05

Set No. 4

IV B.Tech I Semester Examinations, NOVEMBER 2010

PC BASED INSTRUMENTATION

Electronics And Instrumentation Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions

All Questions carry equal marks

1. Explain proportional, integral and derivative control actions. [16]
2. Explain the PLC arithmetic functions with examples. [16]
3. (a) Explain how MS DOS handles Input and Output devices.
(b) Explain the I/O channels and their functions recognized by MS DOS. [8+8]
4. What is PLC? Draw and explain the architecture of a PLC with a neat diagram. [16]
5. Explain computer interfacing for data acquisition and control in process control instrumentation. [16]
6. Explain different types of programming devices of a PLC. [16]
7. (a) Define state language programming of a PLC.
(b) Describe the four basic components of a step in a state language programming. [8+8]
8. Explain the following signal conditioning circuits in data acquisition boards [4×4=16]
 - (a) Data logger
 - (b) PC-plug-ins
 - (c) Computer back plane PC plug-ins
 - (d) Network based systems.

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R05**Set No. 1****IV B.Tech I Semester Examinations, NOVEMBER 2010****PC BASED INSTRUMENTATION****Electronics And Instrumentation Engineering****Time: 3 hours****Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Explain how MS DOS handles Input and Output devices.
(b) Explain the I/O channels and their functions recognized by MS DOS. [8+8]
2. Explain the PLC arithmetic functions with examples. [16]
3. Explain the following signal conditioning circuits in data acquisition boards [4×4=16]
 - (a) Data logger
 - (b) PC-plug-ins
 - (c) Computer back plane PC plug-ins
 - (d) Network based systems.
4. Explain computer interfacing for data acquisition and control in process control instrumentation. [16]
5. Explain different types of programming devices of a PLC. [16]
6. (a) Define state language programming of a PLC.
(b) Describe the four basic components of a step in a state language programming. [8+8]
7. What is PLC? Draw and explain the architecture of a PLC with a neat diagram. [16]
8. Explain proportional, integral and derivative control actions. [16]

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R05**Set No. 3****IV B.Tech I Semester Examinations, NOVEMBER 2010****PC BASED INSTRUMENTATION****Electronics And Instrumentation Engineering****Time: 3 hours****Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. Explain the following signal conditioning circuits in data acquisition boards [4×4=16]
 - (a) Data logger
 - (b) PC-plug-ins
 - (c) Computer back plane PC plug-ins
 - (d) Network based systems.
2. Explain different types of programming devices of a PLC. [16]
3. (a) Explain how MS DOS handles Input and Output devices.
(b) Explain the I/O channels and their functions recognized by MS DOS. [8+8]
4. What is PLC? Draw and explain the architecture of a PLC with a neat diagram. [16]
5. Explain the PLC arithmetic functions with examples. [16]
6. Explain proportional, integral and derivative control actions. [16]
7. (a) Define state language programming of a PLC.
(b) Describe the four basic components of a step in a state language programming. [8+8]
8. Explain computer interfacing for data acquisition and control in process control instrumentation. [16]
