

- Q.33 Write the difference between connector and timers.  
Q.34 Write atleast five application of ADC.  
Q.35 What are clusters?

### Section-D

**Note:** Long answer Questions. Attempt any two Questions out of three Questions. (2x10=20)

- Q.36 What are the virtual instruments. Explain with block diagram.  
Q.37 Discuss the following terms  
a) Lab view                      b) Arrays  
Q.38 Explain Data Acquisition cards in detail.

No. of Printed Pages : 4  
Roll No.....

181563C/121563C

6th Sem,

**Branch :** Instrumentation & Control

**Subject :** Virtual Instrumentation

**Time :** 3 Hrs.

**M.M. :** 100

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 Which of the following can provide hardware hands haking.  
a) Counter                      b) Timer  
c) RS-232                      d) Parallel Port  
Q.2 USB is parallel mode of transmission of data and this enables for the fast speed of data transfer.  
a) True                      b) False  
Q.3 Data acquisition systems are not widley used.  
a) True                      b) False  
Q.4 VI Stands for  
a) Virtual instruments  
b) Visible Items  
c) Virtual Items  
d) Visible Information  
Q.5 Who invented Lab view?  
a) Jeffkodosky                      b) Woodrow Wilson  
c) John marine                      d) Jack a Robert

- Q.6 Output of AID converter is \_\_\_\_\_
- Given to an analog display
  - Given to ALU.
  - Given to Digital display
  - Given to Voltmeter
- Q.7 What is the full form of USB?
- Universal serial Bus
  - Universal Secured Box
  - Universal Security Block
  - None of Above
- Q.8 Block diagram objects includes
- Functions & Wires
  - Terminals
  - Constant & Structures
  - All of these
- Q.9 The RS-232 is also known as
- Electrical Interface
  - UART
  - SPI
  - Physical Interface
- Q.10 The USB memory space can be shared by the user's memory space.
- True
  - False

### Section B

**Note:** Objective type Questions. All Questions are compulsory. (10x1=10)

- Q.11 Define Bus.
- Q.12 What is Data Acquisition.

- Q.13 What is labview?
- Q.14 Expand DIO.
- Q.15 Define Structure.
- Q.16 Expand USB.
- Q.17 Define Software.
- Q.18 What is Block Diagram?
- Q.19 Write the Unit of Pressure.
- Q.20 What are platters.

### Section-C

**Note:** Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. (12x5=60)

- Q.21 List the various application of data Acquisition.
- Q.22 What is virtual instrumentation.
- Q.23 Differentiate between charts & graphs.
- Q.24 Write a short note on PC hardware structure.
- Q.25 What are the instrumentation Buses.
- Q.26 Write a short note on RS-232.
- Q.27 How we can control temperature of any system using VI.
- Q.28 What are the advantages of lab view?
- Q.29 Write various application of VI in temperature control.
- Q.30 Write a short note on structure.
- Q.31 Explain in brief the hardware used in data acquisition.
- Q.32 What are the interbus?