



# ADITYA DEGREE COLLEGES

## VI SEMESTER PREFINAL EXAMINATION

### III BSC- Physics(cluster)-ELECTRONIC INSTRUMENTATION

Time: AN

Date :

Max. Marks: 75

#### SECTION –A

**I Answer Any Five questions.**

**5 X 5=25M**

1. Define Accuracy, Precision and Resolution of Electronic instruments?
2. Write the specification of Electronic Analog Voltmeter?
3. Draw the block diagram of CRT and explain in short?
4. Explain the measurement of ac voltage and frequency using C.R.O?
5. Explain principle of operation of digital instruments?
6. Explain Frequency measurement using universal counter?
7. Explain the working of Pulse Generator?
8. Explain the working of Distortion Factor Meter?

#### SECTION –B

**II Answer the Following questions.**

**5 X**

**10=50M**

- 9.a) Explain the principles of measurement of DC Voltage and DC currents?

**(or)**

- b. Write the advantages of Electronic voltmeter over conventional voltmeter?

- 10.a) Explain the principles and Block Diagram of Electronic A.C and D.C voltmeters?

**(or)**

- b) Write the specifications of an Electronic voltmeter?

- 11.a) Draw the Block Diagram of CRO and explain?

**(or)**

- b) Draw the Block diagram of a Digital Storage Oscilloscope and explain?

12. a) Explain working of Digital Multimeter with Block Diagram?

**(or)**

- b) Explain Block diagram of a Digital voltmeter?

13. a) Explain Block diagram of a Signal Generator?

**(or)**

- b) Explain the working of LCR Bridge circuit