

(B.Tech) (Sem IV) (Rev) Dec 07
 Electronic Instruments 27/12/07

37-07.

(REVISED COURSE)
 (3 Hours)

CD- 5883
 [Total Marks : 100

- 1) Question No. 1 is **compulsory**.
- 2) Attempt any **four** questions out of remaining **six** questions.
- 3) Figures to the **right** indicate **full** marks.

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| State the function of an attenuator in C.R.O. | 5 |
| State the necessary specifications of standard Digital voltmeter. | 5 |
| Explain about Beat frequency oscillator. | 5 |
| Requirements of Analog type of multimeter. | 5 |
| Explain the working of Ramp type digital voltmeter with neat block diagram. Also explain about resolution and sensitivity of Digital voltmeter. | 10 |
| Discuss in brief, the principle of working peak reading, rms reading and average reading of electronic voltmeter. | 10 |
| Explain with neat diagram about the following applications of C.R.O :—
(i) Testing of diodes, transistors, capacitors.
(ii) Frequency and period measurement. | 10 |
| Explain the functions of various controls on the front panel of a C.R.O. | 10 |
| Explain the following with operations and limitations :—
a) Analog Electronic phase meter
b) Digital phase meter. | 20 |
| Explain LVDT and its application in measurement. | 10 |
| Draw a circuit diagram and discuss the working of an analog electronic frequency meter. State the limitations. | 10 |
| Explain any one type of Digital to Analog converters. | 10 |
| Draw the block diagram and explain the working of function generator. | 10 |
| Write short notes on any three :—
a) Digital Storage Oscilloscope (DSO)
b) Data Acquisition System
c) Instrumentation Amplifier
d) Active Filter. | 20 |