SE (Electronics) ... May '08
Sub: Electronic Instruments

10/6/08

(118)

n. 2724–08.

(REVISED COURSE)

CO–9793

(3 Hours)

[Total Marks : 100

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

(a) State the factors considered for selecting analog electronic voltmeter. **5**
(b) State the Requirement of a good laboratory type signal generator. **5**
(c) State the important characteristics of Instrumentation Amplifier. **5**
(d) Explain the intensity modulation in C.R.O. **5**

(a) Explain the following terms briefly related to C.R.O. – **10**
  (i) Delayed time base
  (ii) Time/Div and Volts/Div.
  (iii) Focus and Intensity control
  (iv) Post deflection acceleration.
(b) What are Lassajous patterns ? Explain with suitable diagrams how it can be used for measurement of frequency and phase. **10**

(a) Draw a neat diagram and explain working of dual slope integrating type DVM. Also add a note on resolution and sensitivity. **10**
(b) Explain with suitable block diagram of Digital phasemeter. **10**

(a) Explain the working function Generator. Capable of generating pulse, sine, triangular and square wave. **10**
(b) Explain the working of 3½ digital display frequency meter. **10**

(a) What is sensitivity of Electronic voltmeter ? Discuss briefly the working of FET voltmeter. **10**
(b) Explain the process of successive approximation used in 3 bit ADC. What is aliasing for above. **10**

(a) List the various temperature transducers you know. Explain any two type in details. **10**
(b) Explain any one type of velocity transducer and level transducer. **10**

Write short notes on any **three** :– **20**
(a) Digital storage CRO
(b) R-2R ladder network DAC
(c) Active filter
(d) Balanced modulator type phase meter
(e) Component Testing using CRO.

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