

Con. 5067-08.

RC-6149

(3 Hours)

[Total Marks : 100]

- N.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.

1. (a) State the performance characteristics of DVM. 20
 (b) State the specifications of Dual trace CRO.
 (c) Requirements of Analog type of multimeter.
 (d) The requirement of a laboratory type signal generator.
2. (a) Explain the response of a second order instrument for step and ramp inputs. 10
 (b) Explain with block diagram the successive approximation type of DVM. 10
3. (a) Draw the neat block diagram of function generator and explain the same. 10
 (b) Explain the working of an Analog Electronic Phasemeter. Also state the limitation of it. 10
4. (a) Draw the set up diagram of component testor in CRO. Draw waveforms for various components. 10
 (b) Explain the functions of various controls on the front panel of a C.R.O. 10
5. (a) With block diagram, explain AF sine and square wave generator. 10
 (b) Draw a block diagram and discuss the working of Digital Frequency Meter. 10
6. (a) Explain LVDT with its characteristics and its application in measurement. 10
 (b) What is gauge factor with respect to strain gauge? Explain working of strain gauge. 10
7. Write short notes on any **three** of the following :- 2
 - (a) Level Transducer
 - (b) Data Acquisition System
 - (c) Active Filter
 - (d) Digital Storage C.R.O.
 - (e) Lissajous Pattern.
