



C09-AEI-402

3412

BOARD DIPLOMA EXAMINATION, (C-09)
OCT/NOV—2014
DAEIE—FOURTH SEMESTER EXAMINATION
ELECTRONIC MEASURING INSTRUMENTS

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions** : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answer should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Classify the analog measuring instruments.
2. List the applications of bridge circuits.
3. Draw the circuit of shunt-type ohmmeter.
4. List the advantages of digital instruments over analog instruments.
5. List the specifications of digital voltmeters.
6. State the conditions for stationary and flicker-free waveforms.
7. List the specifications of CRO.

- * 8. State different parts of CRT.
- 9. List the applications of RF signal generator.
- 10. Draw the block diagram of logic analyser.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11. Explain the construction and principle of operation of PMMC instrument. 10
- 12. Explain the working of FET input voltmeter with necessary circuit (DC/AC) and emitter-follower voltmeter. 10
- 13. Explain the working of ramp-type digital voltmeter with block diagram. 10
- 14. Explain the working of digital LCR meter with block diagram. 10
- 15. Draw the block diagram of general purpose CRO and describe the function of each block. 10
- 16. Explain triggered sweep with necessary circuit and mention its advantages. 10
- 17. (a) Explain the working of AF oscillator (sine and square) with block diagram. 7
- (b) List the applications of AF oscillators. 3
- 18. Explain the working of digital IC tester with block diagram. 10
