



C16-EC-404

6438

BOARD DIPLOMA EXAMINATION, (C-16)

JANUARY/FEBRUARY—2022

DECE - FOURTH SEMESTER EXAMINATION

ELECTRONIC MEASUREMENTS AND CONSUMER GADGETS

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

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

1. List the advantages of digital instruments over analog instruments.
2. Define accuracy and resolution of a meter.
3. List the conditions for flicker free waveforms.
4. Mention the different types of connectors used in oscilloscopes.
5. List the applications of RF signal generator.
6. State the need for recorder.
7. Mention the specifications of microphone.
- * 8. List the advantages of magnetic recording.
9. Distinguish between progressive and interlaced scanning.
10. State the need for set top box.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. With a neat sketch explain the working of FET input voltmeter.
12. Draw the block diagram of general purpose CRO and explain the function of each block.
13. Explain how to measure frequency and phase of a signal using Lissajous figures.
14. Draw the block diagram of logic analyzer and explain.
15. Explain the construction and working of PMMC loudspeaker.
16. Explain the principle of magnetic recording and reproduction.
17. Draw the block diagram of colour TV receiver and explain the function of each block.
18. Explain how chrominance signals are transmitted on one carrier in PAL system.

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