

C16-EC-404

6438

BOARD DIPLOMA EXAMINATION, (C-16) SEPTEMBER/OCTOBER - 2020 DECE—FOURTH SEMESTER EXAMINATION

ELECTRONIC MEASUREMENTS AND CONSUMER GADGETS

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

Instructions: (1) Answer **all** questions.

- (1) Thiswer an 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. Mention any three characteristics of ideal ammeter.
- **2.** List any three advantages of digital instruments over analogue instruments.
- 3. Write any three front panel controls of CRO.
- **4.** List the conditions for flicker free waveform in oscilloscope.
- **5.** State the specifications of AF oscillator.
- **6.** Write any three applications of RF signal generator.
- 7. List any three disadvantages of magnetic recording.
- **8.** State the specifications of microphone.

- 9. Distinguish between progressive and interlaced scanning.
- 10. List any three standards of PAL color transmission system.

PART—B

 $10 \times 5 = 50$

- **Instructions**: (1) Answer any **five** questions.
 - (2) Each question carries **ten** marks.
 - (3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.
- **11.** Explain the working of RAMP type digital voltmeter with block diagram.
- **12.** Explain the principle of working of digital storage CRO using block diagram.
- 13. Draw the circuit diagram of triggered sweep circuit with UJT and explain.
- 14. Explain the working of AF oscillator (sine and square) with block diagram.
- 15. Explain the constructional features and principle of operation of PMMC loudspeaker.
- **16.** Explain the concept of noise reduction using DOLBY system.
- 17. Draw and explain the block diagram of color TV transmitter.
- **18.** (a) Explain the main characteristics of human eye with regard to perception of colors.
 - (b) List the features of HDTV.

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