

### с16-ес-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

3×10=30

Dist I A.P

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

1.

- (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.

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

PART—B

10×5=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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