



**C16-EC-404**

**6438**

**BOARD DIPLOMA EXAMINATION, (C-16)**

**OCTOBER—2020**

**DECE—FOURTH SEMESTER EXAMINATION**

**ELECTRONIC MEASUREMENT AND CONSUMER GADGETS**

*Time* : 3 hours ]

[ *Total Marks* : 80

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**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 and disadvantages of FET input voltmeter.
2. List the characteristics of ideal ammeter.
3. Define deflection sensitivity of CRO.
4. List the different types of probes in CRO.
5. What is the need for recorder?
6. Explain the need for shielding in RF generator.
7. Define the directivity of microphone.
8. Compare permeance of cone type and horn type loud speaker.
9. What is a colour burst signal?
10. What are the differences between additive and subtractive mixing of colours?

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[ *Contd....*

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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 the criteria for valuation are the content but not the length of the answer.

11. Explain the construction and working of PMMC instrument.
12. Explain how the time period, frequency, phase, depth of modulation is measured using CRO.
13. Explain the working of dual trace CRO with block diagram.
14. Draw the block diagram of AF oscillator and explain.
15. Describe the construction and working of crystal microphone along with its characteristics.
16. Explain how noise is reduced in Dolby system.
17. Explain the horizontal scanning and vertical scanning with necessary figures.
18. Write frequency allocation of TV channels used in India.

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