



C16-EC-404

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BOARD DIPLOMA EXAMINATION, (C-16)

MARCH/APRIL—2018

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. Define accuracy of a meter.
2. Explain the principle of extending the range of DC ammeter.
3. Write the procedure for measurement of depth of modulations using CRO.
4. Define deflection sensitivity of CRO.
5. List any three applications of RF signal generator.
6. List any four front panel controls of AF oscillator.
7. List the advantages of magnetic recording.
8. Mention the use of woofers and tweeters.

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1

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9. List the features of HDTV.
10. List any three standards of PAL colour 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 criterion for valuation is the content but not the length of the answer.

11. Explain the working of FET input voltmeter with a circuit diagram.
12. Draw the block diagram of general-purpose CRO and explain the function of each block.
13. Explain the method of conversion of single-trace CRO into dual-trace CRO with block diagram.
14. Explain the working of AF oscillator (sine and square) with block diagram.
15. Explain the working of dynamic microphone along with their polar characteristics. 8+2=10
16. Explain the concept of noise reduction using Dolby system and features of Dolby Digital 5·1 Surround Sound. 7+3=10
17. Draw the block diagram of a color TV transmitter and state the function of each block.
18. (a) State the need for satellite for TV broadcasting. 5
 (b) Distinguish between progressive and interlaced scanning in TV. 5
