



C16-EC-404

6438

BOARD DIPLOMA EXAMINATION, (C-16)

OCT/NOV—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. List the characteristics of ideal voltmeter.
2. Write any three advantages of digital instruments over analogue instruments.
3. List the conditions for stationary waveforms in CRO.
4. List different types of probe used in oscilloscope.
5. State the need for recorders.
6. Write the importance of shielding in RF generators.
7. Mention the use of tweeters and woofers.
8. Define speech and noise.

\* 9. List the merits of DTH system.

10. Explain formation of picture.

**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 construction and principle of operation of PMMC instrument. 10

12. Explain the function of any ten front panel controls of CRO. 10

13. Explain the principle of working of digital storage CRO using block diagram. 10

14. Explain the working of digital IC tester with block diagram. 10

15. Explain the working of carbon microphone along with their polar characteristics. 10

16. Explain the concept of noise reduction using Dolby system and the features of Dolby Digital 5.1 surround sound. 7+3=10

17. Explain how chrominance signals are transmitted on one carrier in PAL system. 10

\* 18. Draw the block diagram of color TV transmitter and state the function of each block. 10

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