



C14-EC-502

**4631**

**BOARD DIPLOMA EXAMINATION, (C-14)  
MARCH/APRIL—2017  
DECE—FIFTH SEMESTER EXAMINATION  
CONSUMER ELECTRONICS**

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. What is microphone? Classify microphones.
2. Define the concept of HiFi.
3. Define speech, music and noise.
4. State the frame and field frequencies.
5. State the need of horizontal and vertical scanning.
6. List the standards of TV transmissions as per CCIR-B.
7. Write the characteristics of human eye with regard to perception of colours.
8. Write comparisons of additive and subtractive mixing.

\* 9. Write important specifications of UHD TV.

10. List applications of projection TV.

**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 working of carbon microphone along with its polar characteristics. 8+2

12. Explain the constructional features and principle of operation of PMMC loudspeaker. 5+5

13. Explain the principle of magnetic recording and reproduction. 5+5

14. (a) Explain the stereo system. 5

(b) Explain the interlaced scanning. 5

15. (a) Sketch the composite video signal, label its parts and explain them. 7

(b) Write frequency allocation of TV channels used in India. 3

16. Draw and explain the block diagram of colour TV transmitter. 5+5

\* 17. Draw and explain the block diagram of colour TV receiver. 5+5

18. Draw and explain complete block diagram of CATV. 5+5

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