



C14-EC-502

**4631**

**BOARD DIPLOMA EXAMINATION, (C-14)  
MARCH/APRIL—2018  
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. List the ratings of crystal microphone.
2. Define speech, music and noise.
3. Define the MP3 and MP4 formats.
4. State the need for horizontal and vertical scanning.
5. State the need for vertical synchronization.
6. List the different types of scanning.
7. List the different types of colour TV monitors.

- \* 8. Write the main characteristic of human eye with regard to perception of colours.
- 9. State the need for satellite for TV broadcasting over wide area.
- 10. List the important specifications of UHD 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 crystal microphone. Also give its characteristics.
- 12. Explain the construction and working of operation of Horn Loudspeaker and state its applications.
- 13. (a) State the principle of optical recording. 5  
 (b) Sketch composite video signal as per ISI specification. 5
- 14. Explain the simple circuit showing bass, treble, balance and volume controls in stereo-amplifier.
- 15. Draw the standard scanning pattern in an interlaced scanning and explain.
- 16. Explain the processing of colour video signal (PAL system) in a colour TV receiver.
- \* 17. Explain compatibility and reverse compatibility in TV system.
- 18. Draw and explain the block diagram of DUB-S channel reception.

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