

# с14-ес-502

## **4631**

### BOARD DIPLOMA EXAMINATION, (C-14)

### OCT/NOV-2018

#### **DECE—FIFTH SEMESTER EXAMINATION**

CONSUMER ELECTRONICS

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. State the necessity of Baffle for a Loudspeaker.
- 2. Define the concept of Hi-Fi and Stereo.
- **3.** Define the terms speech, music and noise.
- 4. State the frame and field frequencies.
- 5. Distinguish between progressive and interlaced scanning.
- **6.** State the need for front porch and back porch in blanking pulses.
- 7. List the standards of PAL colour transmission system.
- 8. Draw the colour circle.

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- 9. Mention the merits of DTH system.
- 10. List the features of Smart TV.

#### PART-B

10×5=50

Instructions : (1) Answer any five questions.

- (2) Each question carries **ten** marks.
- (3) The answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **11.** Explain the working of dynamic microphone with necessary diagram.
- **12.** Explain the principle, construction and working of magnetic and crystal headphones and their uses.
- **13.** Explain the concept of noise reduction using DOLBY system.
- **14.** (a) Define the MP3 and MP4 formats.
  - (b) Sketch composite video signal as per ISI specification.
- **15.** (*a*) State need for vertical synchronisation, horizontal synchronisation and blanking pulses.
  - (b) Explain positive and negative modulation.
- **16.** Explain the processing of Colour video signal (PAL system) in a Colour receiver.
- **17.** (*a*) Explain primary colours, complementary colours, hue and luminance signal.
  - (b) Draw the block diagram of a colour TV transmitter.
- 18. Draw and explain the block diagram of CATV.

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