

C14-EC-502

# 4631

# BOARD DIPLOMA EXAMINATION, (C-14) OCT/NOV-2016 DECE-FIFTH SEMESTER EXAMINATION

## CONSUMER ELECTRONICS

Time: 3 hours [ Total Marks: 80

### PART—A

 $3 \times 10 = 30$ 

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 different types of microphones.
- 2. Define the concept of Hi-Fi and stereo.
- **3.** State the principle of optical recording on disc.
- **4.** List different types of scanning.
- **5.** List all the standards of TV transmissions as per CCIR-B system.
- **6.** State the need for front porch and back porch in blanking pulse.
- 7. Distinguish between additive and subtractive mixing of colours.

- 8. What is the bandwidth occupied by the colour signal?
- **9.** State the need for Set Top Box.
- 10. List all the features of Projection TV.

#### PART—B

 $10 \times 5 = 50$ 

**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. Also give its characteristics.
- **12.** Explain the constructional features and principle of operation of PMMC loudspeaker.
- **13.** Explain the concept of noise reduction using DOLBY system.
- **14.** (a) Explain frequency response and equalization.
  - (b) State the need of interlaced scanning with reference to bandwidth.
- **15.** Sketch the composite video signal, label its parts and explain them.
- **16.** Explain complementary colours, saturation, luminance signal and colour circle.
- **17.** Draw the block diagram of colour TV receiver and state the function of each block.
- **18.** Draw and explain the block diagram of CATV.

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