

# C09-EC-406

## 3472

# BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2018

## DECE—FOURTH SEMESTER EXAMINATION

### AUDIO AND VIDEO SYSTEMS

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. Mention the characteristics of Hi-Fi system.
- **2.** What is meant by diffraction and absorption of sound waves?
- **3.** What is meant by MP3 system?
- 4. State the need for horizontal and vertical scanning.
- 5. List any six standards of TV transmission as per CCIR.
- **6.** What are the primary colours and complementary colours?
- **7.** What is colour burst signal?
- **8.** Define compatibility and reverse compatibility.
- 9. Draw the block diagram of DTH receiver.
- **10.** State how existing TV system can be improved in HD TV system in any three aspects.

| Instructions: (1) Answer any five questions. |  |    |
|--|--|----|
|  | (2) Each question carries ten marks.   |    |
|  | (3) Answers should be comprehensive and the criter<br>for valuation is the content but not the length<br>the answer.     |    |
| 11.  | Explain variable area method and variable density method of optical recording of sound on film with the help of diagram. | 10 |
| 12.  | (a) Explain the working of DVD player.   | 6  |
|  | (b) List the advantages of CD.   | 4  |
| 13.  | Explain interlaced scanning with the help of neat sketch.  | 10 |
| 14.  | (a) Explain the advantages of negative modulation over positive modulation.  | 5  |
|  | (b) Distinguish between progressive scanning and interlaced scanning.  | 5  |
| 15.  | Explain the construction and working of image orthicon camera tube with the help of neat diagram.                        | 10 |
| 16.  | Draw the block diagram of colour TV receiver and explain the function of each block.                                     | 10 |
| 17.  | Explain how CA TV works with the help of neat block diagram.   | 10 |
| 18.  | Explain the working of TV remote control transmitter with the help of neat diagram.                                      | 10 |

/3472 AA8—PDF WWW.MANARESULTS.CO.IN