



C09-EC-406

**3472**

**BOARD DIPLOMA EXAMINATION, (C-09)**

MARCH / APRIL - 2019

**DECE - IV SEMESTER EXAMINATION**

**AUDIO & VIDEO SYSTEMS**

Time : 3 Hours]

[Total Marks : 80

**PART - A**

**3×10=30**

- Instructions :**
- (1) Answer **ALL** questions.
  - (2) Each question carries **THREE** marks.
  - (3) Answer should be brief and straight to the point.

- 1 List any three differences between CD and DVD.
- 2 Define the following terms related to sound signal :  
(1) reflection (2) refraction (3) absorption of sound.
- 3 Write any three advantages of C.D.
- 4 What is the need for synchronization ?
- 5 Distinguish between progressive scanning and interlaced scanning.
- 6 Mention the differences between additive mixing and subtractive mixing.
- 7 Write the function of Detector in TV receiver.
- 8 What is the band width occupied by a colour signal ?
- 9 List out the deficiencies of the existing TV system.
- 10 What is the basic principle of television via satellite ?

3472 ]

1

[ Contd...

**PART - B****10×5=50**

- Instructions :**
- (1) Answer any **FIVE** questions.
  - (2) Each question carries **TEN** marks.
  - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 (a) Explain volume control circuit used in stereo amplifier.  
 (b) Explain the principle of Dolby noise reduction system.
- 12 (a) Explain the method of optical recording of sound on Photographic Film. **5**  
 (b) Explain the principle of magnetic recording and reproduction of sound. **5**
- 13 Distinguish positive and negative modulation.
- 14 (a) List any eight CCIR-B standards.  
 (b) Write frequency allocation of TV channels in India.
- 15 (a) Draw the block diagram of a color TV receiver.  
 (b) Briefly explain the functions of various stages in it.
- 16 (a) Draw a neat sketch of silicon diode array and name the parts.  
 (b) Explain the working of above camera tube.  
 (c) List the advantages of silicon diode camera tube.
- 17 (a) Explain how the existing TV system can be improved in HDTV system.  
 (b) List the standards of HDTV.
- 18 Draw the block diagram of TV remote control transmitter. Explain the function of each stage.