



C09-EC-406

3472

BOARD DIPLOMA EXAMINATION, (C-09)
OCT/NOV—2017
DECE—FOURTH SEMESTER EXAMINATION
AUDIO AND 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) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. What is meant by stereo?
2. Explain the working principle of DVD player.
3. Write any three advantages of CD.
4. Define positive and negative modulations.
5. List the CCIR-B standards for (a) horizontal sync pulse, (b) vertical sync pulse and (c) front porch and back porch.
6. List different types of camera tubes.
7. List any three standards of SECAM color transmission system.
8. Write the function of detector in TV receiver.
9. Draw the block diagram of DTH.
10. List the standards of HD 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. (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
12. (a) Explain the use of various controls in stereo amplifier.
(b) Explain the concept of noise reduction using DOLBY system.
13. (a) Define the terms 'persistence of vision' and 'aspect ratio'.
(b) State the need for equalizing pulses and serrated vertical blanking pulses.
14. Explain horizontal scanning and vertical scanning with necessary figures.
15. (a) Draw degaussing circuit of a color TV receiver and explain.
(b) What is meant by compatibility?
16. (a) Draw the block diagram of a color camera.
(b) Explain the constructional features and working of delta gun picture tube.
17. Draw the block diagram of TV remote control receiver. Explain the function of each stage.
18. (a) Draw the block diagram of CA TV.
(b) Explain about CA TV.
