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C09-EC-406

**3472**

**BOARD DIPLOMA EXAMINATION, (C-09)  
SEPTEMBER/OCTOBER - 2020  
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. Distinguish between CD and DUD.
2. Define the terms 'speech', 'music' and 'noise'.
3. Define the terms 'reflection', 'refraction' and 'diffraction'.
4. Distinguish between progressive scanning and interlaced scanning.
5. Compare between positive and negative modulations.
6. Define hue and saturation.
7. Draw the schematic view of colour picture tube.
8. List the primary and complementary colours.
9. List the standards of HD TV.
10. Draw the block diagram of CATV system.

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**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.** Explain the variable area method and variable density method of optical recording of sound on film.

**12.** Explain the working of DVD player with block diagram.

**13.** Sketch the composite video signal and label the parts and explain each one.

**14.** (a) What is the need for interlaced scanning? 2

(b) List the advantages of interlaced scanning. 2

(c) Draw the scanning pattern in an interlaced scanning and explain. 6

**15.** Draw and explain the constructional details and working of image orthicon camera tube.

**16.** (a) Draw the block diagram of a colour TV receiver. 5

(b) Briefly explain the functions of various stages in it. 5

**17.** Draw and explain briefly about DTH system.

**18.** Draw the block diagram of TV remote control receiver. Explain the function of each stage.

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