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C09-EC-406

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**BOARD DIPLOMA EXAMINATION, (C-09)
OCTOBER/NOVEMBER-2018
DECE-FOURTH SEMESTER EXAMINATION**

AUDIO & VIDEO SYSTEM

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

- Instructions :**
1. Answer **All** questions.
 2. Each question carries **Three** marks.
 3. Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. List the various sound recording and reproduction methods.
2. Briefly explain about optical pickup system.
3. List the various control required in stereo amplifier.
4. Define the terms trace and retrace, related to interlaced scanning.
5. List the CCIR-B standards for
 - i. Horizontal sync pulse
 - ii. Vertical sync pulse.
 - iii. Front porch and back porch.
6. Draw degaussing circuit of a colour TV receiver.
7. What is the band width occupied by a colour signal?
8. Draw a neat sketch of silicon diode array and name the parts.
9. Draw the block diagram of CA TV.
10. Draw the block diagram of TV remote control transmitter.

PART-B

10X5=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.
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11. (a) Explain the terms speech and noise.
(b) Explain about reflection, refraction, diffraction and absorption.
 12. Explain the working of CD player with a Block Diagram.
 13. Sketch the composite video signal, label the parts and explain them.
 14. (a) What is the need for inter laced scanning?
(b) List the advantages of inter laced scanning
(c) Draw the scanning pattern in an interlaced scanning and explain.
 15. Draw the block diagram of PAL decoder and explain.
 16. (a) Draw the Block Diagram of Black & White TV receiver.
(b) Explain the functions of each stage. And draw the signals at different stages.
 - * 17. (a) Explain how the existing TV system can be improved in HDTV system.
(b) List the standards of HDTV.
 18. (a) Draw the block diagram of DTH.
(b) Explain briefly about DTH system.

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