00882

DIPLOMA-VIEP ECE

Term-End Examination

December, 2011

BIEL-034 : AUDIO AND VIDEO ENGINEERING

Time : 2 hours   *Maximum Marks : 70*

Note : *Attempt **any five** questions in all. Question No. 1 is **compulsory**. All question carriy **equal** marks.*

1. Choose Correct Answer.   7x2=14

   (a) Human System of hearing is _____.
   - (i) Monophonic
   - (ii) Stereophonic
   - (iii) either (i) or (ii)
   - (iv) None of the above

   (b) A compact disc contains record of audio/ video signal in _____ form.
   - (i) Digital   (ii) Analog
   - (iii) Chemical (iv) None of the above

   (c) The Horizontal frequency of T.V. System in India is _____.
   - (i) 50 Hz   (ii) 625 Hz
   - (iii) 15625 Hz   (iv) 15725 Hz

   (d) The aspect ratio in T.V. receiver is _____.
   - (i) 3 : 1   (ii) 3 : 2
   - (iii) 4 : 3   (iv) 5 : 4

(e) Vidiocon and plumbicon camera tube operates on the principle of _____ .

(i) Photo conduction

(ii) Photo emission

(iii) Photo volatic

(iv) Heat conduction

(f) In PAL system, phase of R-Y signal is changed every alternate line by _____ .

(i) 90°   (ii) 100°

(iii) 270°   (iv) 180°

(g) CATV Stands for _____ .

(i) Common Amplifier TV
(ii) Charged Antenna TV
(iii) Community Amplifier TV
(iv) Community Antenna TV

2. (a) Explain difference between stereo amplifier and mono amplifier.   7

(b) Compare woofer, and Tweeter.   7

3. Draw block diagram of CD player and explain its working.   14

4. (a) Explain interlaced scanning in TV.   8

(b) Define luminance, hue and saturation in TV.   6

5. Draw block diagram of monochrome TV receiver **14** and explain its working.

6. Draw circuit diagram of chroma signal amplifier **14** and explain its operation.

7. Draw block diagram of Direct To Home System **14** (DTH) and explain its working principle.

8. Write short notes on (*any four*) 4x3½=14
   (a) CCTV
   (b) EHT
   (c) Vidicon Camera
   (d) T.V. Transmitter
   (e) CCIR Standard for T.V.
   (f) Function of controls in CD Player.

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