No. of Printed Pages : 4

BIEL-034

DIPLOMA – VIEP – ELECTRONICS AND COMMUNICATION ENGINEERING (DECVI)

00496

Term-End Examination

December, 2014

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 questions carry equal marks.*

1. Select the correct answer : *7×2=14*

(a) The antenna gain relative to the isotropic radiator is

(i) dB

(ii) dBd

(iii) dBi

(iv) All of the above

(b) The Yagi-Uda antenna consists of

(i) a driven director and a parasitic reflector

(ii) a driven reflector and a parasitic director

(iii) a parasitic director and reflector

(iv) All of the above

(c) Video signals in TV are

(i) amplitude modulated

(ii) phase modulated

(iii) frequency modulated

(iv) None of the above

(d) In a standard CD player, data/information is accessed using which method ?

(i) Sequential Access

(ii) Random Access

(iii) Multi-Variate Access

(iv) None of the above

(e) A traditional cable TV network transmits signals

(i) upstream

(ii) downstream

(iii) upstream and downstream

(iv) None of the above

(f) Which of the following camera tubes has minimum lag ?

(i) Vidicon

(ii) Plumbicon

(iii) Saticon

(iv) Iconoscope

(g) The part of the visible spectrum where camera pickup tubes have the greatest output is

(i) Red

(ii) Blue

(iii) Yellow-green

(iv) Infra-red

2. (a) State the principle of pick up assembly in CD player with diagram. 7

(b) Draw the diagram of Yagi-Uda Antenna with its radiation pattern. 7

3. (a) Draw the block diagram of PAL-D Receiver and explain. 7

(b) How does NTSC system differ from PAL system ? 7

4. (a) Explain the block diagram of monochrome receiver. 7

(b) Explain the working principle of Television camera tube. 7

5. (a) Draw the block diagram of dB meter and explain with the help of working principle. 7

(b) Explain the different controls used in Hi-fi Amplifier. 7

6. (a) Give the different components used in CD player and explain all of them. *7*

(b) Why is Vestigial Side Band (VSB) transmission used to transmit video spectrum ? *7*

7. Write short notes on the following :

(i) Dish Antenna *4*

(ii) Burst Pulse blocking *4*

(iii) Colour Killer circuit *2*

(iv) CAT V versus MAT V *4*