

**DIPLOMA-VIEP
(DECVI)**

Term-End Examination

December, 2013

01101

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. State **true** or **false** : **7x2=14**
- (a) Aspect ratio in a standard definition TV is 4 : 3.
 - (b) Woofers are used for Low frequency response.
 - (c) The TV picture is traced by a beam of light.
- Choose the **correct** answer for the following :
- (d) Most TV systems uses :
 - (i) Linear scanning
 - (ii) Circular scanning
 - (iii) Non linear scanning
 - (iv) None of these
 - (e) For converting the analog signal from the microphone in to a digital signal.
 - (i) AM is used (ii) FM is used
 - (iii) PCM is used (iv) None of these
 - (f) The signal essential to the operation of a black and white TV is :
 - (i) Chrominance signal
 - (ii) Luminance signal
 - (iii) Composite video signal
 - (iv) Control Signal

- (g) In NTSC system, the colour difference signals are :
- (i) Transmitted together
 - (ii) Not transmitted together
 - (iii) Transmitted in antiphase
 - (iv) Transmitted in quadrature
2. (a) Explain with the help of a block diagram working of a Hi-Fi amplifier. 7
 - (b) What do you mean by Dolby NR recording system ? How it works ? 7
 3. (a) Describe the working of CD player with help of a suitable block diagram. 7
 - (b) Discuss the advantages of florescent display system used in CD player. 7
 4. (a) What is interlaced scanning ? How it is done ? 7
 - (b) Draw a composite video signal wave form showing : 7
 - (i) Pedestal height
 - (ii) Blanking pulse
 - (iii) Colour burst
 5. Describe colour TV transmitter and also explain its major blocks with the help of block diagram. 14
 6. Compare NTSC, PAL and SECAM TV Systems. 14
 7. (a) Discuss the various design aspects for cable TV network. 7
 - (b) What do you mean by DTH ? How it works ? 7
 8. Write short note on (any four) : 4x3½=14
 - (a) Graphic Equalizer
 - (b) Functions of Remote Control
 - (c) Image Continuity
 - (d) Additive colour mixing
 - (e) PIL
 - (f) Colour Killer Control