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BIEL-034

**DIPLOMA - VIEP - ELECTRONICS AND
COMMUNICATION ENGINEERING (DECVI)**

Term-End Examination

December, 2015

BIEL-034 : AUDIO AND VIDEO ENGINEERING

Time : 2 hours

Maximum Marks : 70

Note : Attempt any five questions. Question no. 1 is compulsory.

1. Select the correct answer.

7×2=14

(a) Which device is used for transmitting and receiving radio waves ?

- (i) Receiver
- (ii) Transmitter
- (iii) Antenna
- (iv) Demodulator

(b) Which of the following camera tubes uses lead oxide (PbO) for the photo conductive target plate ?

- (i) Vidicon
- (ii) Plumbicon
- (iii) Saticon
- (iv) Image orthicon

- (c) An antenna should have
- (i) a very high SWR
 - (ii) a very small SWR
 - (iii) a moderate value of SWR
 - (iv) None of the above
- (d) Pick the odd one out.
- (i) Vidicon Camera
 - (ii) CCD Camera
 - (iii) Plumbicon Camera
 - (iv) Saticon Camera
- (e) PAL stands for
- (i) Phase Amplitude Line
 - (ii) Pulse Amplitude Line
 - (iii) Pulse Alternate Line
 - (iv) Phase Alternate Line
- (f) In gamma correction the _____ is stretched by the picture tube.
- (i) black
 - (ii) gray
 - (iii) white
 - (iv) red

- (g) A traditional cable TV network transmits signals
- (i) upstream
 - (ii) downstream
 - (iii) upstream and downstream
 - (iv) None of the above
2. (a) Describe the function of Hi-Fi amplifier with the help of its block diagram. 7
- (b) State the difference between stereo amplifier and mono amplifier. 7
3. (a) Mention the advantages of fluorescent display system used in CD player. 7
- (b) State the principle of gear system in CD player with diagram. 7
4. Draw the block diagram of a monochrome TV receiver and briefly explain the operation of the receiver. 14
5. (a) Explain the PAL-D decoder with the help of its block diagram. 7
- (b) What is colour burst signal ? Why and where is it added ? 7

6. (a) What is VSB transmission ? Describe its necessity. 7

(b) Draw and explain the block diagram of a DTH system. 7

7. Write short notes on any *four* of the following : $4 \times 3 \frac{1}{2} = 14$

- (a) Woofer
 - (b) CATV and CCTV
 - (c) Burst Pulse Blanking
 - (d) Colour Picture Tube
 - (e) Yagi-Uda Antenna
 - (f) Composite Video Signal
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