

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

**Term-End Examination**

**June, 2016**

00346

**BIEL-034 : AUDIO AND VIDEO ENGINEERING**

*Time : 2 hours*

*Maximum Marks : 70*

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

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1. Define the following :  $4 \times 3 \frac{1}{2} = 14$
- (a) Aspect ratio
  - (b) Kell factor
  - (c) Resolution
  - (d) Guard band
2. (a) State and explain the necessity of crossover network in a Hi-Fi amplifier. 7
- (b) Describe the operation of a Graphic equalizer with the help of its circuit diagram. 7
3. (a) State the principle of drive motors and CD lens in a CD player with a suitable diagram. 7
- (b) Compare NTSC system with the PAL system. 7

4. (a) Write in detail about Automatic Gain Control (AGC) with relevant circuit diagrams. 7
- (b) With a neat sketch, write in detail about Vidicon. 7
5. (a) Draw and explain the operation of a Yagi-Uda Antenna. 7
- (b) Explain the schematic diagram of a modern cable TV system. 7
6. (a) Sketch a composite video signal with all details. Also state the advantages of DVD over Laser Disk. 7
- (b) Give the specifications of a Dish Antenna and LNBC. 7
7. Write short notes on any **four** of the following :  $4 \times 3 \frac{1}{2} = 14$
- (a) DTH
- (b) Subtractive Colour Mixing
- (c) TV Receiving Antennas
- (d) Separation of U and V Colour Phasors
- (e) PAL Encoder
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