

**GUJARAT TECHNOLOGICAL UNIVERSITY****PDDC - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: X 51103****Date: 16-05-2013****Subject Name: Audio Video Engineering****Time: 02.30 pm - 05.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Write a short note on inverse square law, reflection, refraction and root mean square measurements **07**  
(b) Write a short note on mental processes and audio level metering **07**
- Q.2** (a) Explain digital filtering in detail **07**  
(b) Explain carbon and moving coil microphone in detail **07**  
**OR**  
(b) Explain loudspeaker impedance in detail **07**
- Q.3** (a) Explain public address systems and installations in detail **07**  
(b) Explain in detail magnetic recording and erasing **07**  
**OR**
- Q.3** (a) Explain in detail picture resolution **07**  
(b) Explain in detail Interlaced scanning **07**
- Q.4** (a) Explain in detail video signal dimensions **07**  
(b) What is positive and negative modulation? Explain merits and demerits of negative modulation **07**  
**OR**
- Q.4** (a) Explain in detail Interference suffered by TV signals **07**  
**Q.4** (b) Explain in detail vestigial sideband transmission **07**
- Q.5** (a) Draw the block diagram of PAL-D colour receiver **07**  
(b) Explain in detail vectroscope **07**  
**OR**
- Q.5** (a) Give the comparison in detail for NTSC, PAL and French colour TV system **07**  
(b) Write a short note on following **07**  
i)HDTV ii)CRT iii)LCD iv)plasma v)LED

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