## **GUJARAT TECHNOLOGICAL UNIVERSITY** PDDC - SEMESTER – V • EXAMINATION – WINTER 2012

Subject code: X 51103         Date: 23/01/2			,013	
•		me: Audio-Video Systems (Engineering)		
Гіте: 02.30 рт - 05.00 рт Total Marks:			70	
Instr	2. M	tempt all questions. ake suitable assumptions wherever necessary.		
	3. Fi	gures to the right indicate full marks.		
Q.1	(a)	<ul> <li>Give the answers of the following questions:</li> <li>(each of one mark)</li> <li>(1)What is Phon?</li> <li>(2)What is Inverse square law?</li> <li>(3)What is dBV unit?</li> </ul>	07	
		<ul> <li>(4)What is Acoustic Intensity Level (LI) and Acoustic Power Level (Lw)?</li> <li>(5)What do you mean by Semireverberant fields?</li> <li>(6)What do you mean by Proximity effect?</li> <li>(7)What is Crossover networks?</li> </ul>		
	<b>(b</b> )	List the properties of Sound waves.	07	
Q.2	(a) (b)		07 07	
	(b)		07	
Q.3	(a)		07	
	<b>(b</b> )	•	07	
Q.3	<b>(a)</b>	List the requirements of Ideal Loadspeakers and explain Dynamic Loadspeakers.	07	
	<b>(b)</b>	Explain Loadspeaker impedance.	07	
Q.4	(a)	Explain Monochrome television transmitter and receiver with block diagram.	07	
	<b>(b</b> )	0	07	
Q.4	(a)	Explain Negative and Positive Modulation and give comparison between them.	07	
	(b)	<ul><li>(1)List the interference suffered by TV channels and explain each.</li></ul>	05	
		(2)Give reason for preference of AM for picture signal transmission and FM for sound signal transmission.	02	

- Q.5 (a) List factors which influence the choice of intermediate frequencies in 07 TV receivers.
  - (b) Explain Vectroscope in detail. 07

## OR

- Q.5 (a) Discuss the relative merits and demerits of the NTSC,PAL and SECAM 07 television systems. Explain the factors which influence the choice of any one of the three systems.
  - (b) Write short-note on HDTV and Display Technologies (CRT, LCD, 07 Plasma, LED, Projection).

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