Seat No.:	Enrolment No.

Subject Code: 173206

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – SUMMER • 2014

Date: 31-05-2014

Sub Tin	ject i 1e: 02	Name: Audio and Video Engineering 2:30 pm - 05:00 pm Total Marks: 70	
msu	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Explain the Human Ear in detail with the help of neat sketch. What is Microphone? Explain the parameters on which quality of Microphone depends.	
Q.2	(a) (b)	What is Scanning? Explain the Interlaced Scanning with proper diagram. Explain working principle of Electrodynamic Microphone. And also write its application.	07 07
	4	OR	
	(b)	Draw the Block diagram of VHF tuner and explain the function of each blocks.	07
Q.3	(a)	Explain the following terms. (i)Brightness (ii)Hue (vi)Sone (iii)Threshold of Hearing (vii)Phon (iv)Pitch	07
	(b)	List the types of Loud speaker. Explain the Moving coil cone type Loudspeaker.	07
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Q.3	(a) (b)	Draw and explain the Block diagram of Public Address system. What is Luminance and Chrominance signal? How the color difference signal is generated explain in detail.	07 07
Q.4	(a) (b)	Write a short note on Crystal Microphone. Explain the additive color Mixing technique. OR	07 07
Q.4	(a)	Draw and explain picture signal transmission. Also explain vestigial Transmission in detail.	07
	(b)	Draw the Block diagram of Monochrome T.V. Transmitter and explain function of each block.	07
Q.5	(a) (b)	What is the principle of Magnetic tape recording and reproduction? Draw the Block diagram of Monochrome T.V. Receiver and explain function of each block.	07 07
Q.5	(a)	OR (i) What is Aspect ratio? Give the reasons for choosing it 4/3. (ii) Give the reason why G-Y color difference signal is not used for	07
	(b)	transmission. What is Positive and Negative Modulation? Which type of modulation is used in T.V? why?	07
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