

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – SUMMER 2019****Subject Code: 2151101****Date: 19/06/2019****Subject Name: Audio Video Systems****Time: 02:30 PM TO 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.

		MARKS
Q.1	(a) Define the followings (any three) (i) Aspect Ratio (ii) Compatibility (iii) Saturation (iv) Luminance (v) HUE	03
	(b) Describe Resolution & its classification.	04
	(c) Draw and explain The Composite Video Signal in detail.	07
Q.2	(a) Define the followings (any three) (i) Pitch (ii) Timbre (iii) Overtone (iv) Phon (v) Loudness.	03
	(b) Explain : Multichannel Sound	04
	(c) Describe the construction of a carbon microphone and explain its functioning.	07
	OR	
	(c) What are the types of optical recording? Explain any one method of optical recording of sound on a film.	07
Q.3	(a) Compare EDTV & HDTV.	03
	(b) Write the difference between JPEG and MPEG types of compression technique.	04
	(c) Write short note on PA system.	07
	OR	
Q.3	(a) Compare LED TV & LCD TV.	03
	(b) Explain need of compression and how compression works?	04
	(c) What is characteristic impedance of loudspeaker? Explain various types of loudspeakers with diagram.	07
Q.4	(a) Write a short note on Colour Difference signals. Briefly explain the concept of Additive Mixing.	03
	(b) Explain how the luminance and color difference signals are developed from Camera outputs.	04
	(c) Explain interlaced scanning in detail	07

OR

- Q.4** (a) Write a short note on sound, ear and cochlea with neat diagrams. **03**
(b) Explain difference between positive and negative modulation **04**
(c) Draw the block diagram of color TV transmitter and explain each blocks in detail. **07**
- Q.5** (a) Explain audio as data **03**
(b) Write a note on Servicing of TV. **04**
(c) Compare front projection system and rear projection system **07**

OR

- Q.5** (a) Write a short note on stereophonic sound system **03**
(b) Explain common faults & Defective stages of television receiver. **04**
(c) Write a short note on plasma television. **07**

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