

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – SUMMER 2024****Subject Code:2151101****Date:31-05-2024****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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Define: Overtone, Timbre, Pitch.	03
	(b) Define Reflection and diffraction of sound waves and compare them.	04
	(c) Explain Guitar as a Helmholtz Resonator.	07
Q.2	(a) Write a note on USB Mp3 player.	03
	(b) Write a short note on Cone type loudspeaker.	04
	(c) Explain Ribbon microphone in detail.	07
	OR	
	(c) Compare Moving Coil Microphone and Ribbon Microphone.	07
Q.3	(a) What do you understand by interlaced scanning? How is it different from progressive scanning?	03
	(b) What is an Audio Signal? Mention the advantages of Digital Audio.	04
	(c) Write a note on Modulation of Video and Audio signals.	07
	OR	
Q.3	(a) What is Luminance and Chrominance signal?	03
	(b) Compare Positive and Negative Modulation.	04
	(c) Draw and explain a CRT Picture tube.	07
Q.4	(a) Write a note on Digital TV receivers.	03
	(b) What is CCTV? Where is it used?	04
	(c) Write a short note on CATV.	07
	OR	
Q.4	(a) Explain advantages and disadvantages of Plasma screen.	03
	(b) Compare LCD TV and LED TV.	04
	(c) Compare MPEG -x format and H.26x format.	07
Q.5	(a) Explain troubleshooting in Public Address System.	03
	(b) How to identify the faulty component in the Faulty stage?	04
	(c) Explain troubleshooting in Stereo Amplifier.	07
	OR	
Q.5	(a) Explain different reflective projection systems.	03
	(b) Compare LED-Backlit and Backlit LCD displays.	04
	(c) Explain Surround sound stereo receiver.	07
