

2025

CONSUMER ELECTRONICS

Full Marks: 100

Time: Three hours

*The figures in the margin indicate full marks for the questions.**Answer any five questions.*

1.	a)	Explain different types of quality of Microphone. Also differentiate between frequency response and distortion of microphone.	5+3=8
	b)	Explain in details about Crystal Microphone along with its diagram.	7
	c)	Compare the similarities between all types of microphone in terms of quality, merits and demerits.	5
2.	a)	Explain different features of Loudspeaker in details.	6
	b)	Explain the working principle of electrodynamic Loudspeaker with its proper diagram.	8
	c)	Differentiate between woofers, tweeters and squawker.	6
3.	a)	Define baffles and enclosures.	4
	b)	Define cross over circuit of the loudspeaker. Also explain the working principle of cross over circuit for woofer and tweeter types of loudspeaker.	2+10
	c)	Explain the principle of Magnetic recording in details.	6
4.	a)	Explain the working of recording head and playback head in the Magnetic tape recorder system. Also differentiate between two of them.	6+4=10
	b)	Explain the Tape Transport mechanism of tape recorder with proper figure.	10
5.	a)	Explain the process of optical recording of Audio Compact Disc Systems.	7
	b)	Give the details of dimension and data storage on a CD.	7

	c)	Explain the Monophonic sound and its advantages, disadvantages in details.	6
6.	a)	What controls are usually provided in stereo systems? Discuss their details with diagrams.	7
	b)	Draw the block diagram of a stereo tape recorder and explain its working.	7
	b)	Differentiate between Monophonic sound and Stereophonic sound.	6

