

Total number of printed pages:

D/4th/DECE402

2024

### 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)	A woofer has a cross over frequency of 1000 Hz. The cross over circuit has an inductance of 6mH. Find (a) resistance of woofer (b) capacitance of crossover circuit.	4
	c)	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
4.	a)	Explain the working of recording head and playback head in the Magnetic tape recorder system. Also differentiate between two of them.	6+3=9
	b)	Differentiate between Magneto-optical recording and domain propagation memory.	4
	c)	Explain the Monophonic sound and its advantages, disadvantages in details.	7
5.	a)	Differentiate between Monophonic sound and Stereophonic sound.	6
	b)	Explain why phosphor screen is necessary in the TV system.	5

