

B.Sc Sem.-5 Examination**SE 305****Electronics (A) - Consumer Electronics****Time : 2-30 Hours]****December-2024****[Max. Marks : 70**

- Instructions:** (1) All questions carry equal marks.
 (2) Symbols used here have their usual meanings.
 (3) Figures to the right indicate marks.

- 1 (A) With diagram explain construction, working & features of Moving coil Microphone. 07
 (B) With diagram explain construction, working & features of Ribbon Microphone. 07

OR

 (A) With diagram explain principle, construction & working Crystal Microphone. 07
 (B) Define Cardiod Microphone. The plates of a condenser microphone have a diameter of 10 cm. The separation varies from 0.002 cm to 0.005 cm Find the capacitance for the two positions. 07
- 2 (A) With diagram explain construction, working & advantages of Moving Coil (Cone Type) Loudspeaker. 07
 (B) With diagram explain construction, working & features of Electrodynamic Loudspeaker. 07

OR

 (A) With diagram explain construction, working & features of Horn Loudspeaker. 07
 (B) Write short note on Baffles and Enclosures. 07
- 3 (A) Write a short note on video disc. 07
 (B) Explain in detail regarding video disc formats and LASER vision. 07

OR

 (A) Discuss about Solid-State LASER. 07
 (B) Write a short note on Optical Memory Disc. 07
- 4 (A) With diagram explain principle, construction & working of Capacitor Microphone. 07
 (B) With diagram explain Cross-Over Circuits in detail. 07

OR

 (A) Explain Selectavison (RCA) and Vide High Density 07
 (B) Explain the term Microphone requirements. Explain following qualities of Microphone in detail: Sensitivity, Frequency Response, Signal to Noise Ratio, Output impedance, Distortion & Directivity. 07
- 5 Attempt any seven out of twelve. 14
 (A) Ribbon microphone has distortion less than _____ %
 (B) The capacitance of a parallel plate air capacitor is inversely proportional to the distance between the _____.
 (C) Crystal microphone principle is based on _____
 (D) Ceramic is the most commonly used material in _____ microphone.
 (E) Moving coil loudspeaker gives frequency response in the 200 Hz to _____ Hz range.
 (F) Electro-dynamic loudspeaker is also known as direct _____ loudspeaker.
 (G) The low frequency loudspeaker covers 16 Hz to 500 Hz is known as _____.
 (H) The medium frequency loudspeaker covers 500 Hz to 5000 Hz is known as _____.
 (I) _____ depth of video disc is approximately 0.1 μm .
 (J) Long play discs for straight forward _____ playback of entertainment programs.
 (K) The TeD and RCA systems, fail to function if the disc _____ is damaged.
 (L) The RCA stylius recovers information from the _____ surface by direct electrical means.