

B.Sc. Sem-5 Examination

S.E 305

Electronics (A) Consumer Electronic

August 2021

Time : 2-00 Hours]

[Max. Marks : 50

Instructions: All Questions in SECTION – I carry equal marks
 Attempt any **THREE** questions in SECTION – I
 Question IX in SECTION – II is **COMPULSORY**

SECTION - I

- Q.I** (A) With diagram explain construction, working & features of Condenser Microphone. 7
 (B) With diagram explain working & advantages of Electro-dynamic Loud speaker. 7
- Q.II** (A) With diagram explain construction, working & features of Crystal Microphone. 7
 (B) With diagram explain construction, working & features of Horn Loudspeaker. 7
- Q.III** (A) Explain elements of a Television System. Also explain Persistence of Vision and flicker. 7
 (B) Explain Side Band Frequencies arising when a 20 kHz carrier is AM with a frequency 4 KHz. 7
- Q.IV** (A) With the help of figure explain Interlacing of Scanning Lines in detail. 7
 (B) With the help of diagram explain a typical Monochrome TV Camera. 7
- Q.V** (A) Write a short note on Te-Se Alloys, Organic compounds & magneto optical materials. 7
 (B) Discuss about video disc systems comparison. Explain Recording System with figures. 7
- Q.VI** (A) Explain in detail regarding video disc formats and LASER vision. 7
 (B) Write a short note on Optical Memory Disc. 7
- Q.VII** (A) With diagram explain construction, working & features of Carbon Microphone. 7
 (B) With diagram explain construction, working & features of Moving Coil Loudspeaker. 7
- Q.VIII** (A) Explain Vidicon Camera Tube in detail with diagrams. 7
 (B) Write a short note on evolution of video disc. 7

SECTION – II

- Q.IX** Attempt any **EIGHT** 8
- (A) A moving coil microphone works on the principle of _____ emf.
 (B) Crystal microphone is based on _____ effect.
 (C) The wooden cabinet used for radio and TV receiver sets is a _____ baffle.
 (D) If size of baffle is much larger than half the wave length, it is known as _____ baffle.
 (E) The composite video signal locks in the frequency and phase of the frame and _____ oscillators.
 (F) In video signal, the voltage representation of every line scanned is separated from the next by the _____ interval.
 (G) The method of scanning, where the odd & even lines are alternately traced is called _____ scanning.
 (H) The image formed on the retina is retained for about _____ ms even after optical excitation has ceased.
 (I) Pit depth of video disc is approximately _____.
 (J) Average pit width in video disc is _____.
 (K) _____ is the cheapest and the most basic of the three video disc formats.
 (L) The RCA stylus recovers information from the disc surface by direct _____ means.
 (M) Ribbon microphone has an aluminium ribbon which acts as a diaphragm as well as _____.
 (N) A _____ pass filter having a cut-off frequency of 5000Hz feeds the tweeter.
 (O) The highest video frequency depends on the number of _____.
 (P) Average track pitch in video disc is _____.