

**CONSUMER ELECTRONICS***Time Allowed: 3 Hours**Full Marks: 70***Answer to Question No.1 is compulsory and to be answered first.****This answer is to be made in separate loose script(s) provided for the purpose.****Maximum time allowed is 45 minutes, after which the loose answer scripts will be collected and fresh answer scripts for answering the remaining part of the question will be provided.****On early submission of answer scripts of Question No.1,  
a student will get the remaining script earlier.****Answer any five questions from Group-A, B & C, taking at least one from each group.**

1. A. Choose the correct answer from the given alternatives (any ten): 1x10
- i) Radio broadcasts are generally – (a) amplitude modulated, (b) frequency modulated, (c) both amplitude and frequency modulated, (d) neither amplitude nor frequency modulated.
  - ii) Which of the following microphone has maximum distortion? – (a) Ribbon, (b) Crystal, (c) Condenser, (d) Carbon.
  - iii) Which of the following microphone has bi-directional feature? – (a) Moving coil, (b) Carbon, (c) Ribbon, (d) Condenser.
  - iv) A direct radiating cone type loudspeaker attenuates – (a) medium range frequency, (b) very low frequency, (c) high frequencies, (d) very low and high frequencies.
  - v) A tweeter should be fed from the input through a – (a) LPF, (b) HPF, (c) BPF, (d) BSF.
  - vi) The width of air gap on recording head in a tape recorder is about – (a) 6 micron, (b) 3 micron, (c) 1 micron, (d) 25 micron.
  - vii) In a CD the sampling frequency is nearly – (a) half the highest frequency in audio signal, (b) equal to highest frequency in audio signal, (c) double the highest frequency in audio signal, (d) four times the highest frequency in audio signal.
  - viii) The direction of pick up in a CD is – (a) linear from centre towards edge, (b) linear from edge to centre, (c) non linear from centre to edge, (d) non linear from edge to centre.
  - ix) The function of blend control in stereo systems is – (a) to dilute left channel, (b) to dilute right channel, (c) to dilute any of the two channels, (d) none of the above.
  - x) Graphic equaliser system in stereophonic systems generally have – (a) 3 or 4 bands, (b) 1 band, (c) more than 8 bands, (d) large number of bands.
  - xi) Just when the video signal is applied to the picture tube in a TV receiver, the strength of video signal is about – (a) 1000V, (b) 200V, (c) 50V, (d) 1V.
  - xii) The first pulse of TV remote control is – (a) Start pulse, (b) preliminary pulse, (c) either start pulse or preliminary pulse, (d) crase pulse.
- B. Answer the following questions (any five): 2x5
- i) What should be the frequency response of a good loudspeaker?