Total No. of printed pages = 5

RETEST EXAMINATION – 2019

Semester : 6th

Subject Code : Et- 601

CONSUMER ELECTRONICS AND MAINTENANCE

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks for the questions.

Instruction :

1. *All* questions of PART – A and PART – B are compulsory.

PART – A

Marks – 25

1. Fill in the blanks : 1×10=10

   (a) A moving coil Microphone works on the principle of _____.

   (b) The maximum range of audio frequency is _____ Hz .

[Turn over

(c) Woofer extends _____ frequency response and Tweeter extends _____ frequency response .

(d) Baffle is used with _____.

(e) VCR uses a _____ transformer.

(f) The field frequency in T.V. receiver is _____ Hz.

(g) In T.V. receiver the sound signal is _____ modulated and video signal is _____ modulated.

(h) NTSC stands for _____.

(i) A microphone based on piezoelectric effect is called _____ microphone.

(j) Horizontal Sync. frequency is _____ Hz.

2. State whether the following statements are true or false : 1×10 = 10

(i) In principle a Loudspeaker is like a generator.

(ii) A cross –over network divides the incoming signal into separate frequency ranges for each loudspeaker .

(iii) Tweeter extends high frequency response.

(iv) Head gap allows magnetic line of force to pass through the tape.

(v) In T. V. system the lines frequency is equal to 625 Hz.

(vi) In TV system total channel band- width VHF and lower UHF in India is equal to 14 MHz.

(vii) Relative speed of tape in VCR is increased by using rotating heads.

(viii) In Carbon microphone not uses external DC supply.

(ix) Stereophony gives the sense of direction to the listener.

(x) A balun is a step up transformer.

3. Choose the correct option from the following : 1×5=5

(i) Impedance of a loudspeaker is of the order of _____

(a) Ohms (b) Kilo-ohms

(c) Mega – ohms (d) None of these

(ii) A loudspeaker works on the principle of_____.

(a) Motor (b) Generator

(c) Amplifier (d) Detector

(iii) India uses CCIR _____ standard.

(a) A (b) B

(c) C (d) D

(iv) Stereophony gives sense of _____ to the listeners.

(a) Loudness (b) Timber

(c) Pitch (d) Direction

(v) India uses _____ Colour system.

(a) NTSC (b) SECAM

(c) PAL (d) None of these

PART – B

Marks – 45

4. What are the requirements of a good Loudspeaker ? Name the different types of Loudspeaker, and with neat sketch explain any one of them. 2+1+6 =9

5. What is sensitivity, selectivity and fidelity of a radio receiver. Draw the block diagram of A.M. radio receiver and explain shortly each block.

6. Differentiate between monophonic and stereophonic system. Draw the block diagram of a stereophony system and explain each block. 1+8=9

7. Draw the block diagram of Monochrome T. V. receiver, and explain clearly each block. 3+6=9

8. Write the short notes on : (any *two*) 4½× 2= 9

(i) Microphone

(ii) VCR

(iii) Microwave oven

(iv) Tape transport mechanism

(v) Base and treble control