

No. of Printed Pages : 4
Roll No.

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Eltx. Engg.

Subject:- Audio Video Systems/ Consumer Electronics

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which microphone has the best frequency response?
a) carbon microphone
b) ribbon microphone
c) moving coil microphone
d) condenser microphone
- Q.2 In telephones _____ Microphone is used.
a) carbon b) ribbon
c) moving coil d) condenser
- Q.3 Light emitting diodes emits light when it is in _____
a) zero biased b) reversed biased
c) forward biased d) none of the above
- Q.4 What is the aspect ratio used in Indian TV system?
a) 16:9 b) 4:9
c) 3:7 d) 16:12
- Q.5 The total duration of one complete line in TV system is called _____

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- a) blanking period
b) line period
c) synchronization pulse duration
d) none of the above

- Q.6 Which material is used to coat inside CRT face?
a) lithium b) phosphorus
c) sodium d) potassium
- Q.7 How many electron gun is/are used in color TV picture tube?
a) One b) Two
c) Four d) Three
- Q.8 Which of the following is not a primary color?
a) red b) green
c) yellow d) blue
- Q.9 A loudspeaker converts _____ signals into _____ signals
a) electrical, sound
b) sound, electrical
c) electrical, mechanical
d) mechanical, electrical
- Q.10 Treble is used for _____
a) low frequency
b) high frequency
c) extremely low frequency
d) none of the above

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 What do you mean by resolution?
- Q.12 Expand the term DVD.
- Q.13 Name the primary colors.
- Q.14 What is the full form of LED.
- Q.15 What is a microphone?
- Q.16 For which frequency, the woofer is used?
- Q.17 How many lines are scanned in one complete frame?
- Q.18 Expand the term DSL.
- Q.19 How many electron gun is/are used in monochrome TV picture tube?
- Q.20 Give the name of grids used inside the CRT.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain the characteristics of microphones.
- Q.22 Explain the concept of additive & subtractive mixing.
- Q.23 How you can distinguish between woofer and tweeter speakers?
- Q.24 Discuss the need of synchronizing and blanking pulses.
- Q.25 Describe the transport mechanism of tape recorder.

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- Q.26 Distinguish between LED & LCD TV.
- Q.27 What do you mean by scanning? What are its types?
- Q.28 Discuss the functions of equalizing pulses in TV signal transmission.
- Q.29 Give the comparison between NTSC, PAL & SECAM systems.
- Q.30 Distinguish between microphone and loudspeaker.
- Q.31 Explain the composition of composite video signal.
- Q.32 Explain the construction and working of vidicon camera tube.
- Q.33 Write a short note on MPEG-4 format.
- Q.34 Explain with diagram, the working of NTSC decoder system.
- Q.35 Write a short note on DTH.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Describe the working of carbon microphone in detail along with its characteristics.
- Q.37 Explain with suitable diagram, the working principle of monochrome picture tube.
- Q.38 Write a short note on any two of the following:
 - a) Elements of TV communication
 - b) CRT
 - c) Ribbon microphone

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