### Scheme - I

## **Sample Question Paper**

Program Name : Electronics Engineering Programme Group

Program Code : DE/EJ/ET/EN/EX/EQ

Semester : Fourth

Course Title : Consumer Electronics

Marks : 70 Time: 3 Hrs.

### **Instructions:**

(1) All questions are compulsory.

- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

## Q.1) Attempt any FIVE of the following

10 Marks

(a) Identify block "A" given in figure 1, and predict the output signal of block A.

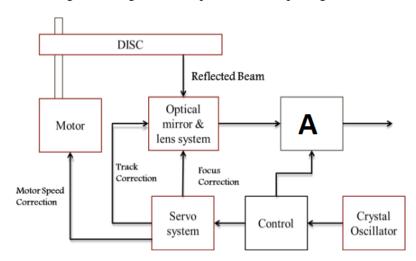


Figure 1

- (b) State 4 Parameters of Public Address System.
- (c) List out four technical specifications of Hi-fi Audio Amplifier system,
- (d) "Back Lit LED TV is better than edge Lit LED TV" Justify.
- (e) List any two wiring and Safety Instructions for use of microwave Oven.
- (f) For Woofer and Tweeter comment on the following factors.
  - i. Frequency Range.
  - ii. Size of Speakers.
- (g) Explain the Function of Exposer in Photocopier Machine.

### Q.2) Attempt any THREE of the following: -

12 Marks

- (a) State the function of Equilizer with the block diagram of Hi-fi audio amplifier.
- (b) Identify blocks "A" and "B" given in figure 2, and state its function.

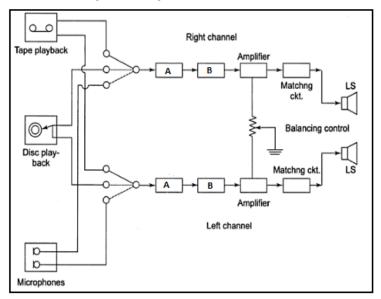


Figure 2

- (c) Define:
  - i. Positive Modulation.
  - ii. Negative Modulation.
- (d) Explain the NHK MUSE encoding system.

### Q.3) Attempt any THREE of the following.

12 Marks

- (a) "Digital Camcorders are best for video recording then digital camera" Justify.
- (b) State four Electrical specifications with values for Washing Machine.
- (c) Identify the missing block in given diagram (Figure 3). Describe the working of the this system.

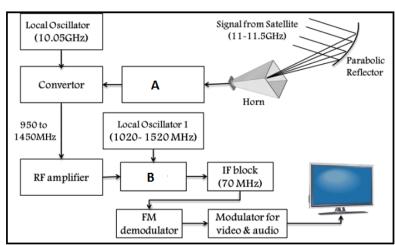


Figure 3

(d) List any eight specifications of CCIR-B Standards for Color signal transmission and reception.

### Q.4) Attempt any THREE of the following.

12 Marks

- (a) Describe with the help of diagram Front porch, Back porch and Line Sync Pulse in Horizontal Sync Pulse.
- (b) Explain with the help of diagram the Function of Sync Separator.
- (c) Explain the working of photocopier with its block diagram.
- (d) Describe with the help of diagram the working principle of carbon type microphone.
- (e) Sketch the block diagram of MP3 Player.

# Q.5) Attempt any TWO of the following.

12 Marks

- (a) State with suitable diagram the function of each block of OLED TV.
- (b) Draw the Block diagram of Washing Machine. State and Justify type of Washing machine having more advantages.
- (c) Draw labelled Diagram of Composite Video Signal and state the function of Line Sync Pulse.

## Q.6) Attempt any TWO of the following.

12 Marks

- (a) Define Vertical and Horizontal Resolution. Calculate vertical and horizontal resolution for 625 line system.
- (b) i. Name the Block diagram shown in Figure 4.
  - ii. Identify the block "A" and "B" in given block diagram,
  - iii. State the functions block "A" and "B".

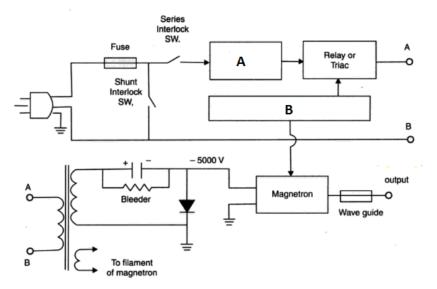


Figure 4

(c) Describe with the help of block diagram, Operation of CD Player.

### Scheme - I

# **Sample Test Paper - I**

Program Name : Electronics Engineering Programme Group

Program Code : DE/EJ/ET/EN/EX/EQ

**Semester** : Fourth

Course Title : Consumer Electronics

Marks : 20 Time:1 Hour

### **Instructions:**

(1) All questions are compulsory.

- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

## Q.1 Attempt any FOUR.

08 Marks

- a) Define with respect to Sound System
  - i. Sensitivity
  - ii. Selectivity
- b) List four Types of Microphones used in Sound System.
- c) List types of CD lens used in CD player.
- d) Define with respect to TV System
  - i. Aspect Ratio
  - ii. Image Continuity
- (e) State the functions of drive motors used in CD player.

### Q.2 Attempt any THREE.

12 Marks

- (a) Describe with the help of diagram working principle of Electrostatic speaker.
- (b) Explain with the help of diagram the function of each Block of Hi-Fi amplifier.
- (c) Draw the block diagram of CD player.
- (d) Describe with the help of neat diagram Vestigial Side band transmission.

### Scheme - I

# Sample Test Paper - II

Program Name : Electronics Engineering Programme Group

Program Code : DE/EJ/ET/EN/EX/EQ

Semester : Fourth

Course Title : Consumer Electronics

Marks : 20 Time: 1 Hour

### **Instructions:**

(1) All questions are compulsory.

- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

## Q.1 Attempt any FOUR.

08 Marks

- (a) "LED TV is more Energy efficient than LCD TV", Justify.
- (b) State time periods of horizontal and vertical sync detail
- (c) Draw the block diagram for separating U and V signal in Colour TV.
- (d) State the types of Washing Machine.
- (e) State the need of equalizing pulses in colour TV.

### Q.2 Attempt any THREE.

12 Marks

- a) Describe with the help of block diagram the function of color TV transmitter.
- b) Explain with the help of block diagram the operation of PAL-D decoder.
- c) Describe using suitable diagram the single chip controllers.
- d) Explain with the help of block diagram the construction of LED TV.