

22425

12223

3 Hours / 70 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions* – (1) All Questions are *Compulsory*.
- (2) Illustrate your answer with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Use of Non-programmable Electronic Pocket Calculator is permissible.
- (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any FIVE of the following:** **10**
- a) List the different components used in CD-player.
 - b) Draw the block diagram of PA system (Public address).
 - c) List different types of microphones.
 - d) Difference between LED and LCD (any two points).
 - e) List any two wiring and safety instruction of microoven.
 - f) List the types of loudspeakers.
 - g) State the electric specification of washing machine.

P.T.O.



2. Attempt any THREE of the following:

- a) Compare mono amplifier system with stereo amplifier system.
- b) Draw the block diagram of Hi-fi audio amplifier. State four characteristics of Hi-fi amplifier.
- c) State Grassman's law. Draw the sketch of additive mixing.
- d) State any eight CCIR-B standard of colour signal transmitter and receiver.

3. Attempt any THREE of the following:

12

- a) Explain working of digital cam coder.
- b) Draw block diagram of washing machine and state types of washing machine.
- c) Draw the block diagram of PAL-D-decoder.
- d) Define the following w.r.t. to Television :—
 - i) Contrast
 - ii) Luminance
 - iii) Hue
 - iv) Saturation

4. Attempt any THREE of the following:

12

- a) Describe vertical resolution and horizontal resolution in brief.
- b) Draw the block diagram of monochrome TV receiver.
- c) Explain working of microwave oven with neat block diagram.
- d) Compare woofer, midrange and tweeter. (any four points.)
- e) Describe the working of pickup unit of CD player with neat sketch.

5. Attempt any TWO of the following:

12

- a) State with suitable diagram the function of each block of OLED TV.
- b) Explain the picture processing with CCD sensor for DIGICAM.
- c) Draw the composite video signal label each section and define pedestal height and colour burst.

6. Attempt any TWO of the following:

12

- a) Draw block diagram of colour TV transmitter and label it.
 - b) Draw the block diagram of photocopier and explain it's principle of working.
 - c) Draw and explain block diagram of CD-player. State the advantages of CD.
-