

314327

25226

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) 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) Compare woofer and mid range speaker. (Any two points)
 - b) Define selectivity, fidelity.
 - c) List advantages of OLED.
 - d) “Back lit LED TV.” is better than edge list LED TV.” Justify.
 - e) State advantages of VR Headset.
 - f) State features of Laser printer.
 - g) State the software and hardware components of Biometric attendance system.

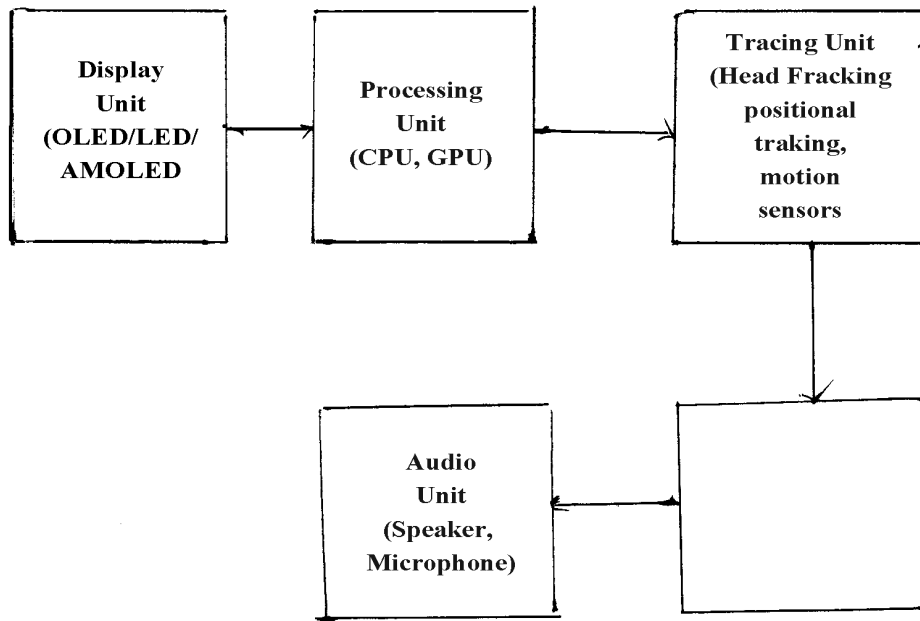
P.T.O.

- 2. Attempt any THREE of the following : 12**
- a) Explain working principle of carbon type microphone with neat diagram.
 - b) Explain working principle of LCD TV.
 - c) Describe the operation of washing machine and state its types.
 - d) Explain picture processing with cw sensor using diagram.
- 3. Attempt any THREE of the following : 12**
- a) Draw and explain public address system.
 - b) State any four specification of Microwave oven.
 - c) Explain Biometric attendance system.
 - d) Explain working procedure of Paper Shredding Machine.
- 4. Attempt any THREE of the following : 12**
- a) State any four specifications of washing machine.
 - b) Draw block diagram of video conferencing system and explain in detail.
 - c) Explain wearable antenna with proper diagram.
 - d) State regulations and procedure of recycling of electronic appliances.
 - e) Explain the working procedure of smart interactive board.

5. Attempt any TWO of the following :

12

- a) i) Explain the working principle of digital camera.
ii) State any four electrical specifications of digital camera.
- b) State applications of smart wrist band, AR device, VR Headset.
(Each any two)
- c) Identity the missing block in the Fig. No. 1 in block diagram of VR Headset and explain the block diagram in detail.



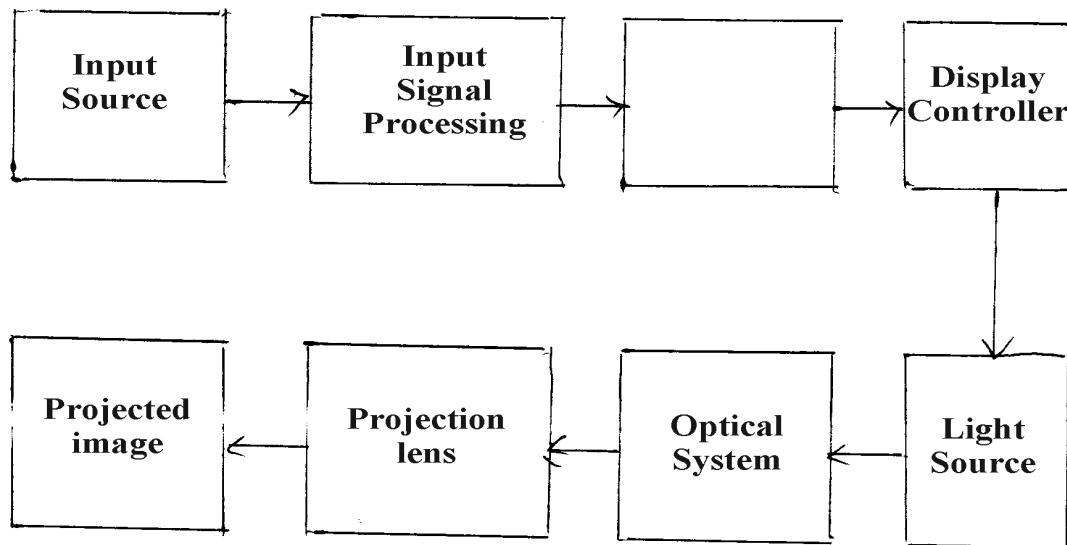
Block diagram of VR Headset

Fig. No. 1

6. Attempt any TWO of the following :

12

- State the function of each block of OLED TV with suitable diagram.
- Explain wiring and safety instruction for Microwave oven.
- Identify the missing block in Fig. No. 2 of block diagram of LED projector and explain the block diagram in detail.



Block diagram of LED Projector

Fig. No. 2
