

314327

24225

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) Assume suitable data, if necessary.
(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
- List different types of microphones. (Any four)
 - “Back lit LED TV is better than the edge lit LED TV” Justify.
 - Compare flatbed, sheetbed, handheld and portable scanners. (Any two points)
 - State any two important specifications of washing machine.
 - State any two applications of wearable antennas.
 - State the specifications of a laser printer (Any four)
 - State the components of a VCS (Video Conferencing System)

P.T.O.

- 2. Attempt any THREE of the following :** **12**
- a) Draw the block diagram and explain the working of photocopier.
 - b) Explain the block diagram of Hi-Fi amplifier with neat sketch.
 - c) State the regulations and procedures of recycling of electronic appliances.
 - d) State any two advantages and disadvantages of smart wrist band.
- 3. Attempt any THREE of the following :** **12**
- a) “Digital camcoders are best for video-recording than digital camera.” Justify.
 - b) Explain the installation procedure of CCTV.
 - c) Explain working procedure of smart interactive board with neat diagram.
 - d) Explain key features of Windows Mixed Reality (WMR).
(Any four)
- 4. Attempt any THREE of the following :** **12**
- a) Explain working principle of an LED projector with neat diagram.
 - b) Explain VR headset with neat diagram.
 - c) State and explain any two hardware and software components of BAS (Biometric Attendance System).
 - d) Explain working procedure of a paper shredding machine.
 - e) Compare augmented reality and Virtual reality. (Any four points)

5. Attempt any TWO of the following :

12

- State with suitable diagram the function of each block of OLED TV.
- List different types of loudspeakers. Explain block diagram of Bluetooth speaker.
- Draw and explain the block diagram of washing machine. State two advantages of automatic washing machine.

6. Attempt any TWO of the following :

12

- Name the system which enables the subscriber to receive TV directly from the satellite and explain it with its block diagram.
- (Refer Dia. Fig. No. 1)

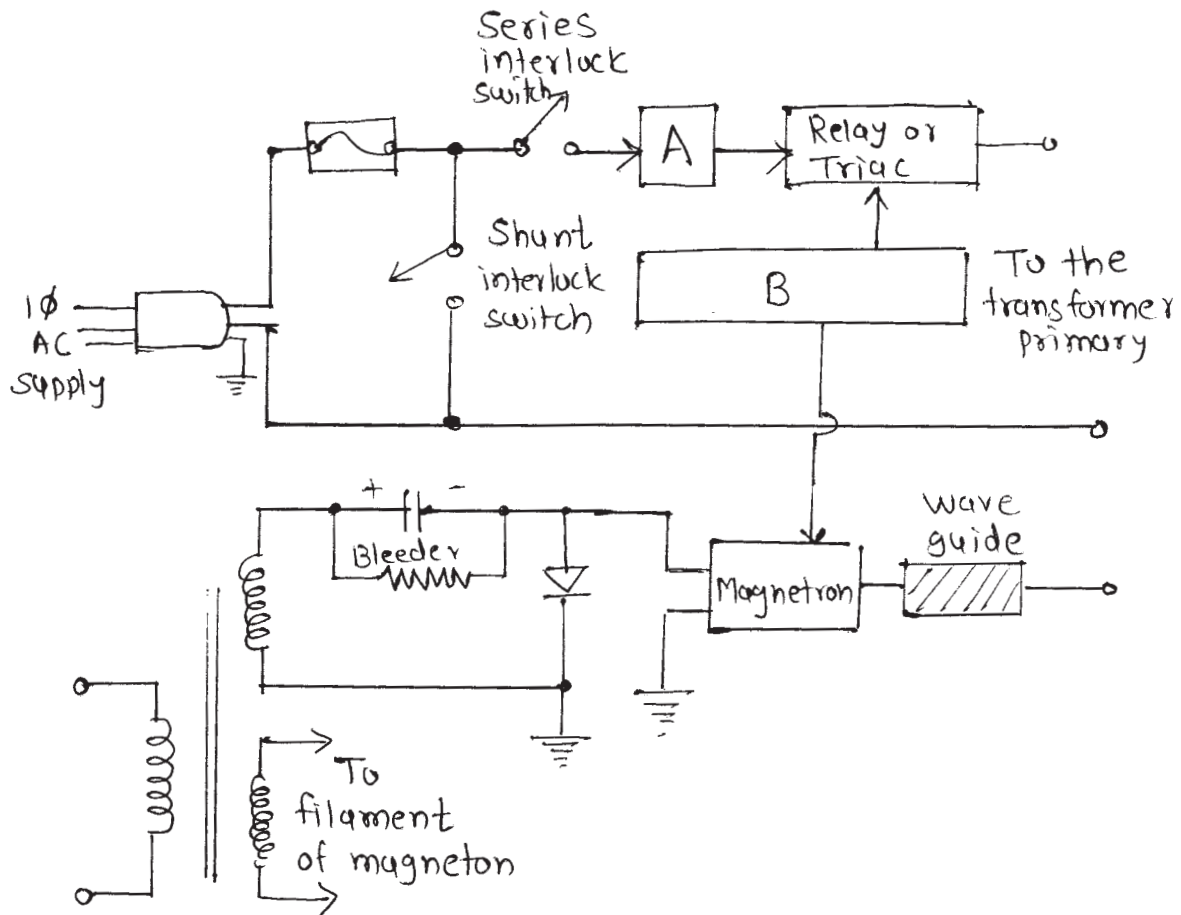


Fig. No. 1

- i) Name the block diagram shown in Fig. No. 1.
 - ii) Identify the block 'A' and 'B' in given block diagram.
 - iii) State the functions of block 'A' and 'B'.
- c) Institute wants to monitor daily attendance of the students. Identify and explain the working procedure of the identified system.
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