

22425

22223

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****
- a) Compare monophonic amplifier and stereophonic amplifier.
 - b) State any four specification of CD.
 - c) “Back lit LED TV is better than the edge lit LED TV” justify.
 - d) Define the following terms:
 - i) Horizontal resolution
 - ii) Vertical resolution
 - e) State the Grassman’s law.
 - f) Define the following
 - i) Contrast
 - ii) Hue
 - g) State the principle of photocopier machine.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain working principle of detection used in CD player with the help of neat sketch.
 - b) Compare woofer, midrange and tweeter speaker types.
(any four points)
 - c) Define positive and negative modulation. State any two merits and two demerits.
 - d) Describe NHK-MUSE system for HDTV.
- 3. Attempt any THREE of the following:** **12**
- a) Which type of washing machine has best result, justify.
 - b) State any four specification of microwave oven.
 - c) Identify the missing block in given diagram in Fig. No. 1. Describe the working of this system.
(Please refer Page No. 4 for Fig. No. 1.)
 - d) List any eight specification of CCIR-B standards for colour signal transmission and reception.
- 4. Attempt any THREE of the following:** **12**
- a) Draw the composite video signal label each section.
 - b) State the troubleshooting procedure of colour TV receiver system.
 - c) Explain the picture processing with a CCD sensor for a Digicam.
 - d) State the different types of microphones and explain one of them in detail.
 - e) Draw and explain public address system.

5. Attempt any TWO of the following:**12**

- a) State with suitable diagram the function of each block of OLED TV.
- b) “Digital Camcorder” are the best for video recording than digital camera. Justify.
- c) Draw block diagram of colour TV transmitter and explain its working in detail.

6. Attempt any TWO of the following:**12**

- a) Explain the term ‘Interlaced scanning’ with neat sketch.
- b) Sketch the MP3 player and explain.
- c)
 - i) Name the block diagram shown in Fig. No. 2.
 - ii) Identify the block “A” and “B” in given block diagram.
 - iii) State the functions of “A” and “B”.

(Please refer Page No. 5 for Fig. No. 2.)

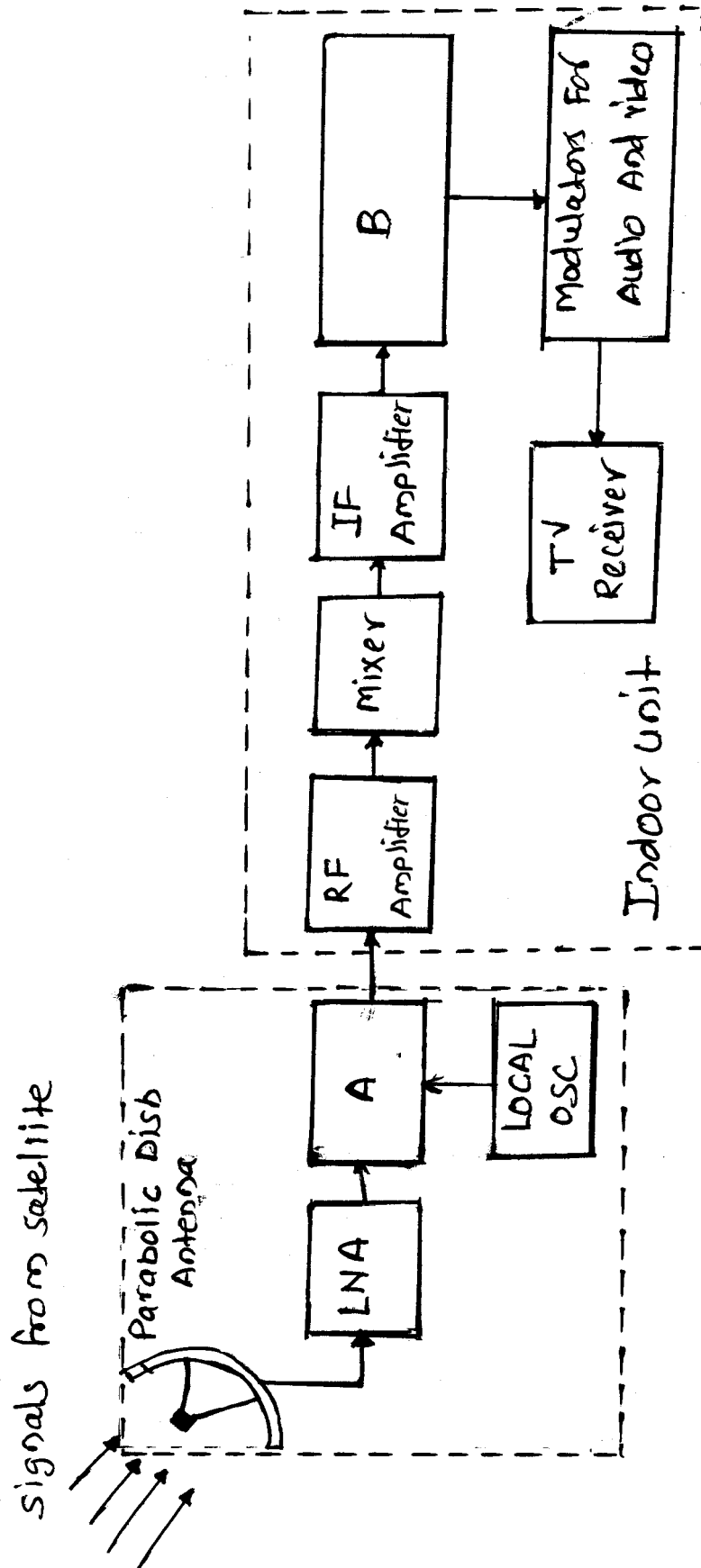


Fig. No. 1. For Q. No. 3. (c)

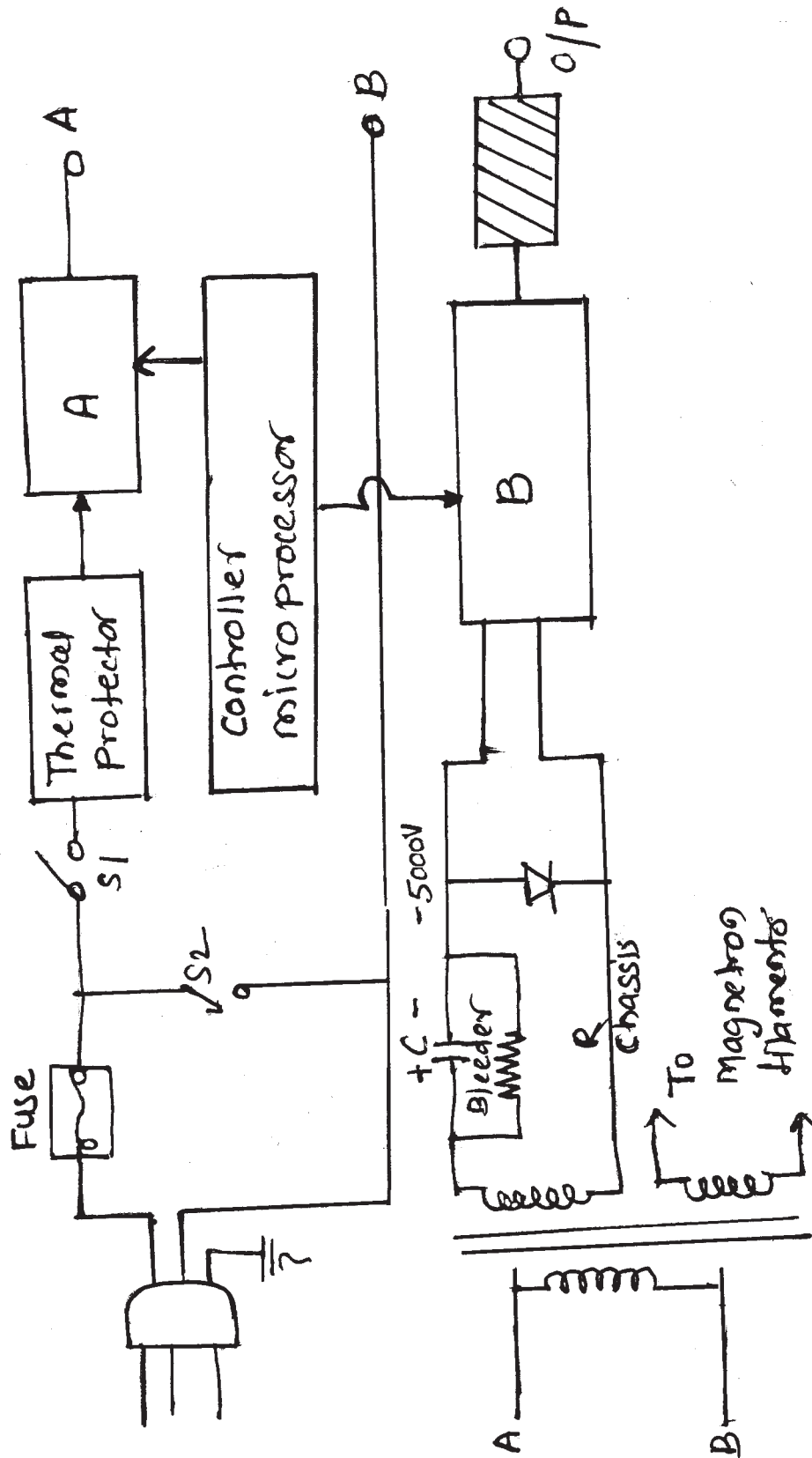


Fig. No. 2. For Q. No. 6. (c) (i)