

22425

21819

3 Hours / 70 Marks

Seat No.

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- 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.

- | | Marks |
|---|--------------|
| 1. Attempt any FIVE of the following : | 10 |
| (a) Draw block diagram of CD player. | |
| (b) List the different components used in CD player. | |
| (c) Compare woofer & midrange speaker (any two points). | |
| (d) Describe the function of MUSE system for HDTV. | |
| (e) State any four electrical specifications of microwave oven. | |
| (f) Differentiate between mono and stereo amplifier w.r.t (i) no. of amplifier (ii) applications. | |
| (g) Explain the function of exposer in photocopier machine. | |
| 2. Attempt any THREE of the following : | 12 |
| (a) Describe the operating principle of condenser type of microphone with neat diagram. | |
| (b) Draw and explain the working of MP3 player. | |
| (c) State Grassman's law. Draw the sketch of additive mixing. | |
| (d) State working principle and explain working of LCD TV with appropriate diagram. | |

3. Attempt any THREE of the following : 12

- (a) Explain working of Digital camcorder.
- (b) State four Electrical specifications with values for washing machine.
- (c) Draw the block diagram of PAL-D decoder and write function of each block.
- (d) State any four CCIR-B standard for colour signal transmission and four CCIRB standards for reception in TV.

4. Attempt any THREE of the following : 12

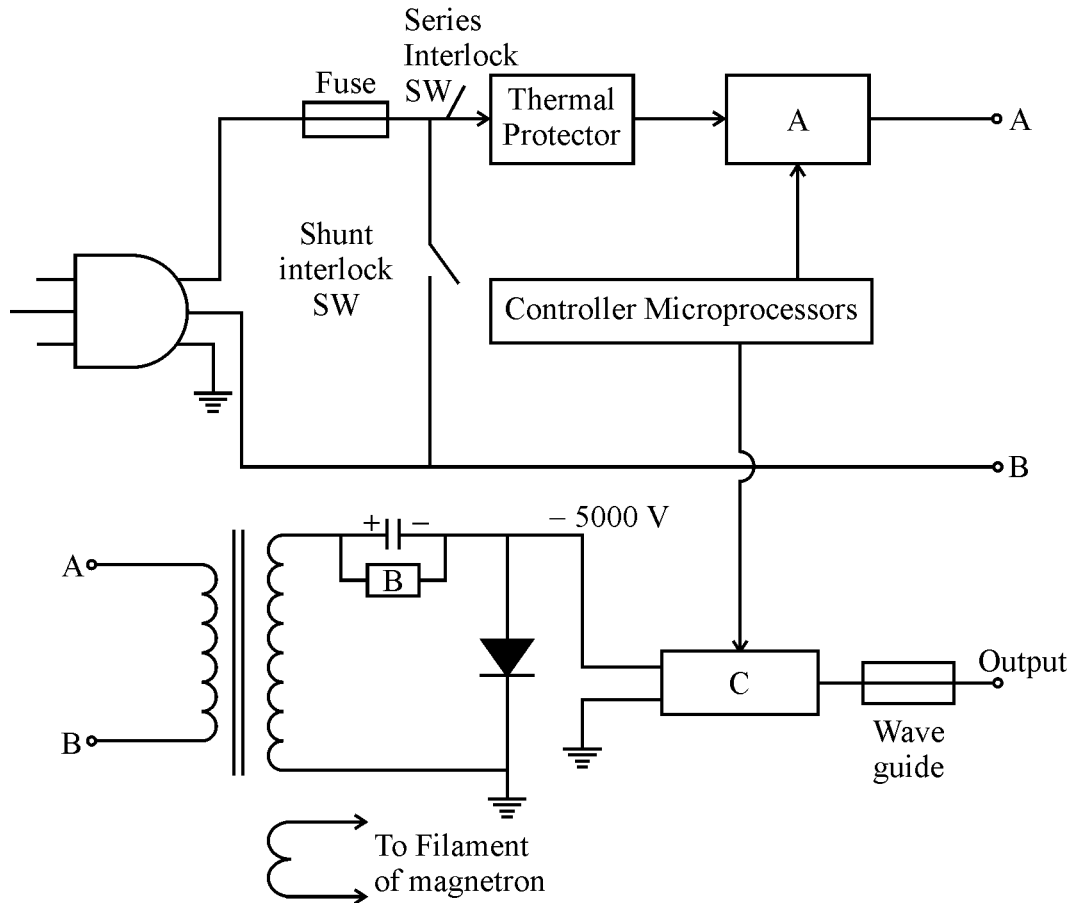
- (a) Explain VSB transmission. State its any four advantages.
- (b) Draw and describe DTH System.
- (c) Describe Troubleshooting procedure of colour TV receiver system.
- (d) Explain any four basic characteristics of sound signal.
- (e) State any four characteristics of Hi-Fi amplifier system.

5. Attempt any TWO of the following : 12

- (a) Explain OLED TV with neat labelled diagram.
- (b) Draw block diagram of washing machine and state types of washing machine.
- (c) Describe why equalising pulses are needed. Draw the vertical synchronising pulse structure.

6. Attempt any TWO of the following :

- (a) Describe vertical and horizontal resolution in brief.
- (b) (i) Name the block diagram shown in fig.1
- (ii) Identify the block “A”, “B” & “C” in given block diagram.
- (iii) State the functions block “A” and “B”.



- (c) Describe the working of pick-up assembly of CD player with the help of neat sketch.
