

17668

11819

3 Hours / 100 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. (A) Attempt any THREE : 12
 - (a) Draw the block diagram of basic servo system & illustrate the function of each block.
 - (b) Enlist different equipments used in production studio.
 - (c) Give the application of CCTV (Any 4 points).
 - (d) With the help of diagram explain the construction of CD.
- (B) Attempt any ONE : 6
 - (a) Draw the block diagram of a MP3 player & illustrate function of each block.
 - (b) Draw labelled block diagram of DTH TV & illustrate function of each block.
2. Attempt any TWO : 16
 - (a) Draw the block diagram of HDTV & illustrate the function of each block in detail.
 - (b) With a neat block schematic illustrate working of three beam optical pickup assembly of CD player.
 - (c) State & explain MPEG & JPEG video compression techniques in detail.

- 3. Attempt any FOUR :** **16**
- (a) Draw the block diagram of CCTV & explain its working.
 - (b) Illustrate the principle & working of projection TV to get large screen.
 - (c) Differentiate between Digital Video signal & Analog signal. (Any 4 points)
 - (d) Describe the operation of Jumbo TV Screen.
 - (e) With a neat block schematic illustrate working of colour SVGA.
- 4. (A) Attempt any THREE :** **12**
- (a) State the principle of interactive TV with net diagram.
 - (b) Describe following terms related to HDTV
 - (i) Aspect Ratio (ii) Compatibility
 - (c) Draw a neat block diagram of LED monitor & explain its working & function of each block.
 - (d) Describe video editing techniques & editing equipments.
- (B) Attempt any ONE :** **6**
- (a) Draw block diagram of blue ray disc (BD) player & illustrate the function of each block.
 - (b) With a neat block schematic illustrate working of camcorder.
- 5. Attempt any FOUR :** **16**
- (a) Draw the block diagram of carriage servo system & illustrate the function of each block.
 - (b) Describe why (i) CCTV is wired system (ii) Audio signal is not transmitted in CCTV.
 - (c) State application of projection TV (Any 4)
 - (d) State multi sync monitor & low radiation screen in detail.
 - (e) Draw labelled block diagram of a plan for CATV system.
- 6. Attempt any FOUR :** **16**
- (a) Differentiate between DVD & BD (Any 4 points).
 - (b) State the conditional access built in scrambling system.
 - (c) State the display basic of plasma TV.
 - (d) Describe jumbo TV screen & its parameter
 - (i) Jumbo screen size (ii) Brightness
 - (e) State the principle of VHS-C video recording format.
 - (f) Draw labelled block diagram of two way cable system & illustrate its function.
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