

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER-2021**

TELEVISION ENGINEERING

[Maximum marks: 75]

(Time: 2.15 Hours)

PART – A

I (Answer any **three** questions in one or two sentences. Each question carries 2 marks)

1. Define sensitivity of a microphone.
2. List any four characteristics of loud speaker.
3. Define aspect ratio.
4. Define hue.
5. List the different HDTV standards. (3 x 2 = 6)

PART – B

II (Answer any **four** of the following questions. Each question carries 6 marks)

1. With a neat sketch explain the working of condenser microphone.
2. List the requirements of Hi-Fi sound system.
3. With the help of block diagram explain compact disc recording.
4. Explain the method of obtaining colour difference signal from CTV camera.
5. Explain with neat sketch PIL picture tube.
6. List the requirements of compatibility.
7. With the help of block diagram explain the operation of DTH receiver. (4 x 6= 24)

PART – C

(Answer **any of the three units** from the following. Each full question carries 15 marks)

UNIT –I

- III. (a) Draw and explain the working of moving coil microphone. (8)
(b) With the help of block diagram explain the principle of stereo sound system. (7)

OR

- IV.(a) Draw and explain the working of electrodynamic loud speaker. (8)

(b) With the help of block diagram explain the operation of PA system. (7)

UNIT-II

V. (a) With the help of block diagram explain PAL encoder. (10)

(b) Draw a neat sketch VSB transmission of TV channel. (5)

OR

VI. (a) Explain additive colour mixing with sketch. (6)

(b) Name the full form of three colour TV systems and compare each other. (9)

UNIT-III

VII. (a) Draw and explain the block diagram of Digital TV transmitter. (9)

(b) List advantages of MAC signal. (6)

OR

VIII.(a) Draw and explain the block diagram of digital TV receiver. (12)

(b) List any three Digital Television standards. (3)

UNIT-IV

IX. (a) Draw and explain HDTV receiver with block diagram. (10)

(b) With block diagram explain CCTV system. (5)

OR

X. (a) Draw and explain the block diagram of digital satellite receiver. (10)

(b) List the advantages of OLED (5)
