

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – NOVEMBER – 2022**
TELEVISION ENGINEERING

(Maximum Marks : 100)

(Time : 3 hours)

PART – A
(Maximum Marks : 10)

Marks

I. Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. Define Directivity of loud speaker.
2. State the Channel bandwidth of PAL system.
3. What do you mean by pedestal height?
4. Identify the significance MAC signals.
5. Write the principle of OLED Display.

(5x2=10)

PART –B
(Maximum Marks : 30)

II. Answer any **five** of the following questions. Each question carries 6 marks.

1. Describe the construction details of crystal microphone.
2. Explain the block diagram of audio CD playback system.
3. Illustrate the necessity of blanking pulses in composite video signals.
4. Discuss video compression ITU standards.
5. List the features of HDTV.
6. List the significance of colour difference signal.
7. Discuss video on demand.

(5x6=30)

PART – C

(Maximum Marks : 60)

(Answer **one full** question from each unit. Each full question carries 15 marks)

UNIT – I

- III.** (a) Describe the construction details of moving coil microphone. (8)
(b) Explain Dolby system. (7)

OR

- IV.** (a) Illustrate the characteristics of loud speakers. (8)
(b) Explain the block diagram of HIFI system. (7)

UNIT – II

- V.** (a) Explain PAL D decoder block diagram. (8)
(b) Describe additive colour mixing. (7)

OR

- VI.** (a) Compare different colour TV systems (8)
(b) Describe CCD camera. (7)

UNIT –III

- VII.** (a) Explain the block diagram of Digital TV Transmitter. (8)
(b) Describe the construction details of PIL picture Tube. (7)

OR

- VIII.** (a) Explain the principle of Digital TV. (8)
(b) Discuss video compression technique used in MPEG 1. (7)

UNIT – IV

- IX.** (a) Illustrate CATV system with block diagram. (8)
(b) Describe LED Display. (7)

OR

- X.** (a) Describe Direct to home TV using necessary block diagram. (10)
(b) Discuss set top box. (5)
