

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, APRIL-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 Dolby System
2. Define Aspect ratio
3. Define MAC signals.
4. Define Component video signal.
5. What is CAS?

(3 x 2 = 6)

**PART – B**

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

1. Explain the characteristics of the moving coil microphone.
2. Explain the construction of condenser microphone with diagram.
3. Explain Luminance, Hue, Saturation.
4. Explain Subtractive mixing.
5. Compare the feature of MPEG2 and MPEG4.
6. Explain LED Display.
7. Explain Direct to Home TV.

(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) Explain audio compact disc recording system with block diagram. (8)  
(b) Explain the construction of electro-dynamic type loud speaker with diagram (7)

**OR**

- IV (a) Explain the working principal of Hi-Fi stereo system. (8)

(b) Explain Public Address System with block diagram. (7)

**UNIT-II**

V (a) Explain Composite video signal with diagram. (8)

(b) Explain the operation of CCD camera with figure. (7)

**OR**

VI (a) Explain PAL D decoder with block diagram (8)

(b) Explain chromaticity diagram. (7)

**UNIT-III**

VII (a) Explain the working of digital TV receiver with block diagram (8)

(b) Explain the working of Trinitron picture tube with diagram. (7)

**OR**

VIII (a) Explain the working of digital TV transmitter with block diagram. (8)

(b) Explain the working of Delta-Gun colour picture tube with diagram (7)

**UNIT-IV**

IX. (a) Explain HDTV transmitter with block diagram (8)

(b) Explain LCD Display (7)

**OR**

X. (a) Explain HDTV Receiver with block diagram (8)

(b) Explain Digital TV satellite Reception with block diagram (7)

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