

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

TELEVISION ENGINEERING

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

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

1. List the characteristics of microphone.
2. Recognize the difference between hue and saturation.
3. List the use of colour burst signal.
4. Write the advantage of MPEG2.
5. State CAS.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Describe the condenser microphone with figure.
2. List the requirements of Hi Fl system.
3. Illustrate the significance of aspect ratio.
4. Describe MAC signal.
5. Explain CCTV system.
6. Describe PIL picture tube.
7. Describe Direct To Home TV.

(5×6 = 30)

## PART — C

(Maximum marks : 60)

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

## UNIT — I

- III (a) Explain the construction details of moving coil microphone. 8  
 (b) Illustrate the block diagram of audio compact disc recording. 7

OR

- IV (a) Explain the construction details of electro dynamic loud speaker. 8  
 (b) Describe the block diagram of PA system. 7

## UNIT — II

- V (a) Explain the diagram of composite video signal. 10  
 (b) Compare NTSC and PAL system. 5

OR

- VI (a) Describe additive colour mixing. 8  
 (b) Why colour signals are transmitted as colour difference signals. 7

## UNIT — III

- VII (a) Explain the block diagram Digital TV receiver. 10  
 (b) Draw the constructional details of Trinitron Picture Tube. 5

OR

- VIII (a) Explain the principle of Digital video compression techniques. 8  
 (b) Discuss Digital TV recording techniques. 7

## UNIT — IV

- IX Explain with block diagram Digital TV satellite system. 15

OR

- X (a) Describe the block diagram of HDTV Transmitter. 10  
 (b) Describe LCD display. 5