



TED (10) 4049/5051

**N19 - 05180**

Reg.No.....

(Revision-2010)

Signature.....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE OCTOBER/NOVEMBER-2019

**AUDIO AND VIDEO SYSTEMS**

[Maximum marks: 100]

(Time: 3 Hours)

PART – A

[Maximum marks: 10]

I. (Answer all questions in one or two sentences, Each question carries 2 marks)

- (1). Define intensity and loudness of sound.
- (2). State aspect ratio.
- (3). What is meant by pedestal and pedestal height?
- (4). What is the need of Balun in TV receiver?
- (5). List the characteristics of a colour.

(5 x 2 = 10)

PART – B

[Maximum marks: 30]

II. (Answer any *five* of the following questions, Each question carries six marks)

- (1). Explain about methods of sound recording.
- (2). Explain the principle of stereo system.
- (3). List the advantages of interlaced scanning.
- (4). State the importance of polarity of video signal.
- (5). Explain video IF amplifier block diagram.
- (6). Explain the operation of deltagun colour picture tube.
- (7). List the advantages and disadvantages of PAL system.

(5 x 6=30)

PART – C

[Maximum marks: 60]

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

**UNIT – I**

- III. (a) Explain PA system with diagram. (8)
- (b) Explain construction of Ribbon microphone. (7)

**OR**

- (IV) (a) Explain magnetic recording and reproduction of sound (8)
- (b) Explain the term of dc biasing and de biasing (7)



**UNIT-II**

- V. (a) Explain the block diagram of monochrome TV receiver. (9)  
(b) Explain the need of blanking retrace pulses. (6)

**OR**

- VI. (a) Explain working principle of TV camera tube. (8)  
(b) Explain SMPS with diagram. (7)

**UNIT-III**

- VII. (a) Explain the block diagram of VHF tuner. (8)  
(b) Explain peak AGC circuit. (7)

**OR**

- VIII. (a) Explain operation of transistor blocking oscillator. (8)  
(b) Explain push pull AFC circuits. (7)

**UNIT-IV**

- IX. (a) Explain the block diagram of Digital TV. (8)  
(b) Explain CCIV with diagram. (7)

**OR**

- X. (a) Explain Trinitron picture tube. (7)  
(b) Explain encoder block diagram of PAL TV system. (8)

.....