

Total No. of Questions : 10]

SEAT No. :

**P3347**

[Total No. of Pages : 2

**[5670]-616**

**B.E. (Electronics & Telecommunication)**

**AUDIO VIDEO ENGINEERING**

**(2015 Pattern) (Semester - II) (Elective - III (c)) (404191E) (End Semester)**

**Time : 2½ Hours]**

**[Max. Marks : 70**

**Instructions to the candidates:**

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Use of calculator is allowed.
- 5) Assume suitable data, if necessary.

**Q1) a) Define: [5]**

- i) Horizontal and Vertical Resolution
- ii) Progressive and Interlace Scanning

**b) Compare PAL, NTSC and SECAM color TV Systems. [5]**

**OR**

**Q2) a) Justify why the video bandwidth in CCIR-B standard is 5 MHz. [5]**

**b) Explain phase error cancellation in PAL television system. [5]**

**Q3) a) With a block diagram explain the composite encoded DTV transmitter. [5]**

**b) Explain the construction and operating principle of LCD display. [5]**

**OR**

**Q4) a) Compare analog TV, DTV and HDTV. [5]**

**b) With suitable diagram explain CCTV system. [5]**

**Q5) a) What is IPTV? Explain characteristics and advantages of IPTV. [8]**

**b) Explain Wi-Fi TV with relevant block diagram in detail [8]**

**OR**

**P.T.O.**

- Q6)** a) Compare IPTV with internet TV. [8]  
b) Write a short note on Digital video recorders. [8]

- Q7)** a) Draw and explain the block diagram of CD recording and player. [10]  
b) Compare Blue ray disc and DVD. Explain their working. [8]

OR

- Q8)** a) Write a short note on Variable area method of optical recording. [10]  
b) Draw and explain block diagram of MP3 player system. [8]

- Q9)** a) Explain the concept of reverberation and echo? Explain the importance of reverberation. [8]  
b) State the various types of microphones. Explain moving coil microphone with construction details, working, specifications and applications. [8]

OR

- Q10)** a) What are the requirement of good auditorium? Give the salient feature of acoustic design for an auditorium. [8]  
b) Discuss the working principle of satellite radio reception with necessary block diagram. [8]

