

Total No. of Questions : 10]

SEAT No. :

**P3969**

**[5561]-668**

[Total No. of Pages : 2

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

**AUDIO VIDEO ENGINEERING**

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

*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)** Explain CCIR-B standard in detail. **[5]**

b) Draw a neat block diagram of PAL encoder and explain function of each block. **[5]**

OR

**Q2) a)** Why is the (G-Y) difference signal not chosen for transmission? How this signal is obtained at the receiver? **[5]**

b) Draw a detailed composite video signal with all details. **[5]**

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

b) Explain the construction and operating principle of OLED display? **[5]**

OR

**Q4) a)** Explain the terms: **[5]**

i) Conditional Access System.

ii) 3D TV

b) Draw and explain the block diagram of a component encoded advanced HDTV transmitter. **[5]**

**P.T.O.**

- Q5)** a) Explain video transmission in 3G/4G mobile system. [8]  
b) Compare IPTV and Internet TV. [8]

OR

- Q6)** a) Explain principles of DVR. How it is differing from VCR. [8]  
b) Write short notes on Mobile TV. [8]

- Q7)** a) Discuss the various methods of optical recording of sound. Explain optical recording on CD in detail. [10]  
b) Write short note on MPEG 2 standard. [8]

OR

- Q8)** a) Write a short note on: Variable area method of optical recording. [10]  
b) Write short note on Blue Ray DVD player. [8]

- Q9)** a) Draw the block diagram of PA system and explain. [8]  
b) State the various types of microphones. Explain any one microphone showing construction details, working, specifications and applications in detail. [8]

OR

- Q10)** a) Discuss acoustic chamber in detail. [8]  
b) Explain the requirement for a good auditorium for pleasant listening. Discuss salient features of acoustical design for an auditorium. [8]

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