Total No. of Questions : 10]

SEAT No. :

P4941

[Total No. of Pages :2

[4959]-1096

B.E. (Electronics & Telecommunication)

AUDIO VIDEO ENGINEERING

(2012 Pattern) (Semester - II) (Elective - III (c))

Time : 2½ Hours] *[Maximum Marks : 70*

Instructions to the candidates:

1) ***Answer questions : Q.1. or Q.2, Q.3 or Q.4 , Q.5. or Q.6, Q.7 or Q.8, Q.9 or Q.10.***
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) Draw and explain the composite video signal used in colour TV transmission. **[5]**

b) Explain the terms: **[5]**

i) Horizontal and Vertical Resolution,

ii) Kell Factor,

iii) Interlaced Scanning

OR

Q2) a) Explain PAL Encoder with necessary block diagram. **[5]**

b) Discuss component coding and composite coding in Digital TV. **[5]**

Q3) a) Discuss Digital TV recording techniques. **[5]**

b) Explain various SDTV, EDTV and HDTV formats. **[5]**

OR

Q4) a) Explain the working principle of CATV. **[5]**

b) Discuss briefly, the developments made so far to evolve HDTV and the standards. **[5]**

Q5) a) Discuss in brief IPTV and Internet TV. **[8]**

b) Enlist various video projection technologies. Explain the working principle of DLP projectors with suitable diagram. **[8]**

P.T.O.

OR

Q6) a) What is the need for Video Intercom System? Briefly, explain the working of the same along with its important features. **[8]**

b) Discuss Wi-Fi transmitter and receiver with its applications. **[8]**

Q7) a) Discuss the magnetic, optical and disc recording principles with suitable diagrams. **[10]**

b) Explain DVD player with necessary block schematic. **[8]**

OR

Q8) a) Explain the playback process of compact disc with suitable diagram. Discuss the different steps involved in the preparation process of CDs with necessary sketches. **[10]**

b) Explain principle of Dolby sound systems for the noise reduction. **[8]**

Q9) a) State the requirements for a good auditorium for pleasant listening. Discuss salient features of acoustical design for an auditorium. **[8]**

b) Discuss with block schematic the working of cordless microphone PA system. **[8]**

OR

Q10)a) Define reverberation time? Explain the importance of reverberation. What are the factors on which reverberation time depends? **[8]**

b) Explain the working of condenser microphone with a neat diagram.List the applications for it. **[8]**

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