Total No. of Questions : 6]

SEAT No. :

P43

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# APR - 17/BE/Insem - 50
## B.E. E & TC (Semester - II)
## AUDIO VIDEO ENGINEERING (Elective - III (C))
## (2012 Pattern)

*Time : 1 Hours]* *[Maximum Marks : 30*

***Instructions to the candidates:***

1) ***Answers questions 1 or 2, 3 or 4, 5 or 6***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right 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, indicating the various timing of the pulses used. **[5]**

b) Explain with block diagram, the working of colour TV receiver. **[5]**

OR

***Q2)*** a) Discuss the concept of frequency interleaving. **[4]**

b) Explain PAL decoder with necessary block diagram. **[4]**

c) How phase errors are minimized in PAL system? **[2]**

***Q3)*** a) What is component coding and composite coding in Digital TV? **[2]**

b) Discuss Digital TV recording techniques. **[4]**

c) Explain in brief, the lossless and lossy compression techniques. **[4]**

OR

***Q4)*** a) Write note on DTV standards for ATSC, DVB and ISDB. **[6]**

b) Compare SDTV, EDTV and HDTV on various parameters. **[4]**

***Q5)*** a) Discuss Set Top box and CAS used in direct to Home TV. **[6]**

b) Explain CATV system with necessary block diagram. **[4]**

***P.T.O***

OR

***Q6)*** a) Discuss in detail, the case study for Digital Broadcasting for international cricket match. **[6]**

b) Discuss HDTV standards and features. **[4]**

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