

Total No. of Questions : 6]

SEAT No. :

**P43**

[Total No. of Pages : 2

**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]

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OR

- Q6)** a) Discuss in detail, the case study for Digital Broadcasting for international cricket match. [6]
- b) Discuss HDTV standards and features. [4]

