

Total No. of Questions :6]

SEAT No. :

**P92**

[Total No. of Pages :2

**APR - 18/ BE/ Insem. - 52**

**B.E. (E & TC)**

**AUDIO VIDEO ENGINEERING**

**(2012 Course) (Semester - II) (Elective - III)**

*Time : 1 Hour]*

*[Max. 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 side indicate full marks.*
- 4) *Use of Calculator is allowed.*
- 5) *Assume suitable data, if necessary.*

- Q1)** a) Explain the working of PAL Decoder with necessary block schematic. [5]  
b) Discuss the need of frequency interleaving with suitable diagram. [5]

OR

- Q2)** a) State Grassman's law. Explain additive and subtractive color mixing. [5]  
b) Explain the working of IF modulated TV Transmitter with suitable block diagram. [5]

- Q3)** a) Explain basic principles of digital video compression technique. [5]  
b) Discuss digital TV signals and digitized video parameters. [5]

OR

- Q4)** a) Write working principle of following display devices: [6]  
i) LED  
ii) LCD  
iii) Plasma  
b) Explain in brief, the family of various MAC systems. [4]

**P.T.O.**

- Q5)** a) Explain digital Cable TV systems with necessary block schematic. [5]
- b) Discuss how Football match is broadcasted with cameras at various locations? [5]

OR

- Q6)** a) Explain the terms:
- i) Direct to Home TV
  - ii) Conditional Access System
  - iii) 3D TV systems [6]
- b) State main features of HDTV and discuss HDTV standards. [4]

