

Total No. of Questions : 10]

SEAT No. :

P2279

[Total No. of Pages : 2

**[5254]-616**

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

**AUDIO VIDEO ENGINEERING**

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

*Time : 2½ Hours]*

*[Max. 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 colour composite video signal used in colour TV transmission. [5]

**b)** What is meant by additive mixing? Explain with proper diagram. [5]

OR

**Q2) a)** Draw a simplified block diagram of PAL decoder and explain. [5]

**b)** Draw the block diagram of TV Pattern Generator. List the various Pattern used. [5]

**Q3) a)** Draw and explain the block diagram of advanced DTV receiver with component encoding. [5]

**b)** Compare the DTV standards for ATSC, DVB and ISDB. [5]

OR

**Q4) a)** Compare CAS and DTH. [5]

**b)** Describe with the help of block diagram the working of component Encoded HDTV Transmitter. [5]

**Q5) a)** What is IPTV? Explain characteristics and advantages for IPTV. [8]

**b)** What is a video projector? What are the different projection technologies? [8]

*P.T.O.*

OR

- Q6)** a) Write a short note on digital satellite TV. [8]  
b) What is mobile TV? What are its challenges and the hardware requirements? [8]

- Q7)** a) Explain the playback process of compact disc with suitable diagram. Discuss the different steps involved in the preparation process of CDs. [10]

- b) Compare Blu-ray disc and DVD. Explain their working. [8]

OR

- Q8)** a) Give the detailed classification of recording techniques. Explain optical recording. [10]  
b) What is Dolby's noise reduction system? Explain its applications. [8]

- Q9)** a) What is reverberation? Define reverberation time. Explain the importance of reverberation. [8]

- b) Draw the block diagram of P.A. system and explain. [8]

OR

- Q10)** a) With the help of block diagram, explain digital radio receiver. [8]  
b) What do you understand by Woofer, Squawker and Tweeter speakers? Explain the necessity of crossover network. [8]

