

Total No. of Questions : 10]

SEAT No. :

P2259

[Total No. of Pages : 2

[5254]-595

B.E. (Electronics Engineering) (Semester - II)

AUDIO AND VIDEO ENGINEERING

(2012 Pattern) (Elective - III)

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) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Use of calculator is allowed.*
- 5) *Assume suitable data, if necessary.*

Q1) a) Define following terms - **[5]**

- i) Hue
- ii) Saturation
- iii) Kell factor
- iv) Brightness
- v) Aspect ratio

b) Why (G-Y) signal is not suitable for color transmission? **[5]**

OR

Q2) a) What is chromaticity diagram? Explain its significance in color TV. **[5]**

b) Sketch a well label diagram of composite video signal and explain it in detail. **[5]**

Q3) a) Compare PAL, NTSC and SECAM TV System. **[5]**

b) Draw the block diagram of colour TV receiver and explain its operation. **[5]**

OR

Q4) a) Draw a block diagram of PAL Encoder. Explain its working. **[5]**

b) Write short notes on Interlaced and progressive scanning. **[5]**

P.T.O.

- Q5)** a) Discuss in brief IPTV and Wi-Fi TV. [8]
b) Write short note on [8]
i) Camcorders
ii) Webcam

OR

- Q6)** a) Discuss in detail Web TV system. [8]
b) Explain the following: [8]
i) 3D TV
ii) Perspective of TV white spaces

- Q7)** a) State the necessity of reverberation, typical reverberation periods & factors on which reverberation time depends. [10]
b) Write a note on: [8]
i) PA system for Auditorium
ii) Special types of Microphone

OR

- Q8)** a) Discuss acoustic chamber in detail. [10]
b) Discuss with block diagram, working of cordless microphone PA system. [8]

- Q9)** a) Compare CD, DVD and Blue-ray DVD. Draw the block diagram of CD recording. [8]
b) Explain in detail Dolby sound system and also state its advantages. [8]

OR

- Q10)**a) Describe ITU-T (G) compression standards. [8]
b) Draw and explain the block diagram of MP3 player. [8]

