

Enrollment No: _____

Exam Seat No: _____

C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name: Audio Video Engineering

Subject Code: 4TE06AVE1

Branch: B.Tech (EC)

Semester: 6

Date: 24/10/2018

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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Q-1 Attempt the following questions: (14)

- a) Define Aspect Ratio.
- b) What is audio Signal?
- c) Define Resolution.
- d) Write a full form of (A) VGA and (B) HDMI
- e) Why scanning line has always odd value?
- f) What is pitch?
- g) What is Echoes?
- h) State the functions of AGC circuit in TV.
- i) In subtractive color mixing method, which Two color produces magenta?
- j) What is mean by compatibility?
- k) What is Phon?
- l) What is the function of color killer circuit?
- m) What is Comb filter?
- n) What is frequency interleaving?

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (14)

- (a) Write the principle of loudspeaker. Describe the characteristics that decides quality of operation of loudspeaker
- (b) Describe interlaced scanning and justify that "For interlaced scanning the total number of lines in any TV system must be odd."

Q-3 Attempt all questions (14)

- (a) Draw and explain vertical and horizontal sync detail.
- (b) What is luminance and chrominance signal? State its significance. Explain separation of U and V color phasors in detail.

Q-4 Attempt all questions (14)

- (a) Draw and explain Color Pattern Generator.
- (b) Compare plasma TV and LCD TV in detail.



- Q-5** **Attempt all questions** (14)
- (a) Sketch the sectional view of a picture tube that employs electrostatic focusing and electromagnetic deflection and label all the electrodes.
 - (b) Draw and Explain Pal-D color receiver.
- Q-6** **Attempt all questions** (14)
- (a) Explain Digital Audio Broadcasting. Write its advantage and disadvantages.
 - (b) Explain Video pattern generator.
- Q-7** **Attempt all questions** (14)
- (a) Explain tweeters and its types.
 - (b) Explain HDTV in detail.
- Q-8** **Attempt all questions** (14)
- (a) Explain TV transmitter and receiver in detail.
 - (b) Give comparison of NTSC , PAL and SECAM color systems

