

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Summer Examination-2019

**Subject Name: Audio Video Engineering**

**Subject Code: 4TE06AVE1**

**Branch: B.Tech (EC)**

**Semester: 6**

**Date: 30/04/2019**

**Time: 10:30 To 01:30**

**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 Define the following terms: (14)**
- a) Pitch
  - b) Timber
  - c) Luminance
  - d) Kell factor
  - e) Reverberation
  - f) Baffles
  - g) Ghost interference
  - h) Threshold of hearing
  - i) Image continuity
  - j) Loudness
  - k) Brightness
  - l) Pre equalizing pulses
  - m) Phon
  - n) Resolution

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

- Q-2 Attempt all questions (14)**
- (a) What is scanning and why it is required? Explain interlaced scanning and state its advantages. Also discuss factors affecting number of scanning lines in a TV system.
  - (b) Draw the block diagram of PAL-D Decoder and explain.
- Q-3 Attempt all questions (14)**
- (a) List different types of Loud Speakers and explain any two with neat diagram.
  - (b) Draw Composite Video Signal for three consecutive lines and explain each part in detail.
- Q-4 Attempt all questions (14)**
- (a) Discuss reverberation time and architectural Acoustics in detail.
  - (b) Discuss in brief digital audio broadcasting and PA system.
- Q-5 Attempt all questions (14)**



- (a) Compare NTSC, PAL and SECAM colour television systems.
- (b) What is HDTV? List different types of display technology used for TV and explain any two of them.

**Q-6** **Attempt all questions** (14)

- (a) List the types of loud speakers used in sound engineering and explain any two in detail.
- (b) Explain encoding of colour difference signals and phase error cancellation in PAL Television system.

**Q-7** **Attempt all questions** (14)

- (a) Explain stereophony and multi-channel sound in detail with diagram.
- (b) Explain Vestigial sideband transmission. Discuss advantages of negative modulation in television system.

**Q-8** **Attempt all questions** (14)

- (a) What is LCD? Explain all types of display technology used in LCD. Also give its comparisons.
- (b) Write a short note on plasma television.

