

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name: Audio Video Engineering

Subject Code: 4TE06AVE1

Branch: B.Tech (EC)

Semester: 6

Date: 17/04/2017

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

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

- Q-2** **Attempt all questions** **(14)**
- (a) Explain Properties of Sound Waves. Explain Refraction and reflection of sound **05**
 - (b) Give the classification of waves and explain wave properties. **04**
 - (c) What is Microphone? State its characteristics. Explain any one microphone in detail. **05**
- Q-3** **Attempt all questions** **(14)**
- (a) Explain Crystal Loud Speaker and Permanent magnet loud speaker with necessary diagrams. **06**
 - (b) Define tweeter. Explain it types with necessary figures. **06**
 - (c) What is cross over network? **02**
- Q-4** **Attempt all questions** **(14)**
- (a) Explain CVS with necessary diagram. **06**
 - (b) Define Scanning. Why interlace scanning is preferred instead of progressive **06**



	scanning?	
	(c) Which Color difference signal is not transmitted during transmission? Why?	02
Q-5	Attempt all questions	(14)
	(a) Compare positive modulation with negative modulation.	03
	(b) Explain luminance channel.	04
	(c) Draw and Explain Pal-D color receiver.	07
Q-6	Attempt all questions	(14)
	(a) Explain PA system in detail. Explain planning of it.	04
	(b) Explain Video pattern generator.	04
	(c) Explain interference suffered by TV signal	06
Q-7	Attempt all questions	(14)
	(a) Explain Digital TV in brief.	06
	(b) Describe HDTV in detail.	04
	(c) Explain Disc based sound recording.	04
Q-8	Attempt all questions	(14)
	(a) Explain PAL encoder.	04
	(b) Describe TV transmitter and receiver in detail.	06
	(c) Explain Receiver control in brief.	04

