

College of Engineering, Pune

Final Year B-Tech- E & TC

(ET-412)- (Audio Video Engineering)

Date: 01/12/12
Academic Year: 2012-13

Timing: 3 hrs
Max. Marks: 50

Autumn Semester- ESE

Instructions:

1. All questions are compulsory.
2. Draw figures where ever necessary.

- Q. 1 **Write the answers in one or two sentences.** **10**
- i. Write the tradeoff parameters in lossy compression of an image.
 - ii Write two reasons for not using (G-Y) signal in transmission of analog video signal.
 - iii Give one advantage and one disadvantage of component coding and composite coding schemes used in digital video coding.
 - iv What is CIF in video coding standards?
 - v What are 5.1 channels in AC-3 coding standard?
- Q. 2 A. Explain color TV with the block diagram and with appropriate waveforms at input and output of each block. **05**
- B. Explain the applications of H and V sync pulses in color television. **05**
- Q. 3 A. Explain the MUSE system used in HDTV. **05**
- B. Discuss the utility of wobuloscope as test equipment in communication. **05**

Q.4 A. Discuss the relation between psycho-visual model and Q matrix used in video compression. **05**

B. What are different frame formats and their applications in video standards like MPEG1, MPEG2, MPEG4 ? **05**

Q.5 Write short notes on:-

A. Pattern Generator **05**

B. VCD player **05**
