

7E4095

Roll No. _____

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7E4095**B. Tech. VII Semester (Back) Examination, Nov-Dec - 2011****Computer Engineering
7CS5 Multimedia Systems
(Common with IT)****Time : 3 Hours****Maximum Marks : 80
Min. Passing Marks : 24****Instructions to Candidates:**

Attempt any five questions selecting one question from each unit. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Unit - I

1. a) Explain some of multimedia data interface standard for images, sound and video. (10)
- b) Write short note on multimedia hardware. (6)

OR

1. a) Describe the multimedia presentation. (6)
- b) What is the role of multimedia in business application. Explain in detail. (10)

Unit - II

2. a) Can a single MIDI message produce more than one note sounding? Is it possible for more than one note to sound at once on a particular instrument if so. How is it done in MIDI? How many different instruments are there in General MIDI? Why? (8)
- b) What is digital audio? Compare digital audio with MIDI. (8)

OR

2. a) With reference to digital video describe chroma subsampling, CCIR standard for digital video and HDTV. (10)
- b) Write short note on audio file format. (6)

Unit- III

3. a) What is compression? Explain the difference between lossless and lossy compression. (10)
- b) Describe the LZ 77 compression. (6)

OR

3. a) Compare the rate of adoption of adaptive Huffman coding and adaptive arithmetic coding. What prevent each method from adapting to Quick changes in source statistics? Take example. (8)
- b) What is LZW compression? Encode and decode the string ABA BB ABC AB ABBA using LZW encoder and decoder. (8)

Unit - IV

4. Write short note on -
- a) Speech compression
- b) Loss compression and silence compression. (16)

OR

4. Write short note on -
- a) Describe the loss less compression of sound. (8)
- b) Explain the synthesis Digital audio concept. (8)

Unit - V

5. Write short note on :
- a) Explain JPEG compression (8)
- b) Describe zig zag coding in detail. (8)

OR

5. Write short note on :
- a) MPEG standard (8)
- b) MHEG standard. (8)