

C6-R4: MULTIMEDIA SYSTEMS

NOTE:

1. Answer question 1 and any FOUR from questions 2 to 7.
2. Parts of the same question should be answered together and in the same sequence.

Time: 3 Hours

Total Marks: 100

1.
 - a) Write down the basic components of a distributed multimedia system?
 - b) Briefly discuss the functions of region element of SMIL with example.
 - c) Give the three layers of IEEE 1394?
 - d) Explain the Video-Phony with example.
 - e) What are the different techniques of content based information retrieval?
 - f) How to create a multimedia presentation?
 - g) What are the main elements of the MPEG-7?

(7x4)
2.
 - a) Can mp3 support variable bitrate? Give the steps of mp3 encoding algorithm.
 - b) Explain the importance of VoIP.
 - c) Briefly discuss the advantages of HDTV system over the other Television system.

(7+5+6)
3.
 - a) How Steady State CPU Time is allocated for multimedia resource handling?
 - b) Explain the TIFF and GIF image format and its usages.
 - c) Give briefly the MPEG video compression technique?

(8+4+6)
4.
 - a) Explain Huffman encoding with an example and its advantages.
 - b) Present the differences between digital audio and MIDI.
 - c) Illustrate the essential properties of asynchronous transfer mode.

(8+4+6)
5.
 - a) What is QoS for multimedia delivery? Illustrate the QoS Framework for the same.
 - b) Write the different stages of the JPEG encoding technique.

([3+7]+8)
6.
 - a) Why should you use an authoring system? What are the differences between Authoring Vs Programming? What are the different authoring paradigms?
 - b) Do you think MMX processor is efficient than others? How?

([4+5+4]+5)
7.
 - a) Draw the block diagram of Conceptual Model of a VRML Browser. Write the header syntax of a VRML file.
 - b) Explain the differences between the artisan and factory metaphor as a multimedia production paradigm.

(10+8)