«SRLNO»

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) What are the characteristics of temporal media data?
b) Describe the roll of synchronization, events, scripts and interactivity during presentation.
c) List the main characteristics of JPEG 2000. Differentiate JPEG and JPEG 2000.
d) What are the characteristics of MMX?
e) Briefly describe components of MIDI.
f) How SMIL functions? Explain it with example and list the methods for SMIL running techniques.
g) What is Video on Demand?

(7x4)

2.

a) Discuss the mechanism content based image retrieval technique with block diagram.
b) Explain MPEG-4 compression scheme.

(9+9)

3.

a) Explain the terms: Sector, Track, Platter, Cylinder, R/W head.
b) Compute the size from 16 heads from 1400 cylinder that contains 16 sector/track consists of 512 bytes/sector.
c) Explain the role of temporal relation in video analysis.
d) What the main methods for file allocation??Explain them with its advantage and disadvantages.

(5+4+3+6)

4.

a) Explain the classification of compression technology for graphic objects.
b) Is MP3Compression scheme is different from MPEG. Compare two multimedia compression algorithms.
c) What is seek time, latency time and transfer rate?

(9+6+3)

5.

a) How RTP and RSVP are different?
b) Discuss the standards of video conferencing.
c) Explain types of MIDI message.

(7+9+2)

6.

a) Explain Real-time scheduling algorithms: Fixed-priority and Dynamic-priority algorithms with example.
b) What are the main characteristics required for operating system to support multimedia data.

(12+6)

7.

a) What is data glove? Why is it necessary for virtual world interfacing purpose?
b) Discuss various types of displaying techniques for virtual world interfacing.
c) What is Huffman coding? Where is it used? Explain it with example.

(6+6+6)