No. of Printed Pages : **1**

Sl. No.

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 is Video on Demand ?
(b) Explain Huffman coding with example.
(c) What are the advantages of RAID technology ?
(d) Explain VRML with example.
(e) What are hypertext and hypermedia ? Give comparison.
(f) What is visual rhetoric ?
(g) Differentiate static media and dynamic media. **(7x4)**

2. (a) What do you mean by Temporal and Non-Temporal data ? List and explain various media types in non-temporal data.
(b) What kind of architecture is required to support Multimedia System ? Explain real time system in multimedia based operating system. **(9+9)**

3. (a) Explain RTP. Briefly mention the components and functions of RTP.
(b) Write a short note on IEEE 1394 interface.
(c) Explain the following terms :
(i) Aspect ratio
(ii) Vertical Retrace
(iii) Resolution **(6+6+[2x3])**

4. (a) Write a short note on Voice over IP (VoIP).
(b) List the different components in the MIDI protocol and describe any two in details.
(c) Write a short note on SMIL. **(6+6+6)**

5. (a) Describe various domain based application of Virtual Reality.
(b) What are the Network protocols for the multimedia data ?
(c) Why MMX processor is efficient ? List the characteristics of MMX instruction set. **(6+6+6)**

6. (a) What is difference between Virtual Reality and Augmented Reality ? Explain important components of virtual reality.
(b) What is Video Compression? Explain MPEG-2 compression Schemes. **(9+9)**

7. (a) What is the authoring system ? Give its significance in multimedia system.
(b) What is JPEG Compression ? Give steps for JPEG encoding.
(c) Explain Content based image retrieval and its application. **(6+6+6)**

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