Tutorial I

1. Define multimedia. Explain the application areas of multimedia.

2. What is Multimedia? Explain global structure of multimedia system.

3. Define application domain? Explain the different criteria that are used to classify media in the multimedia system.

4. Define Multimedia System. Explain properties of Multimedia System.

5. Write short notes

   a) Data stream with Transmission mode

   b) Data stream characteristics for continuous media

   c) Information unit

Tutorial II

1. Explain the different components of a MIDI device.

2. Illustrate the importance of MIDI. Explain the significance of MIDI messages.

3. What is MIDI? What features of MIDI make it suitable for multimedia applications?

4. How can speech be generated from a digital device? Explain in detail.

5. With necessary diagrams explain how the sound is digitized and the sound stored in a multimedia system.

Tutorial III

1. How does a digital computer represent a color image? Explain the digital image representation with conceptual diagram.

2. How do you mean by digital image? Explain the different types of image format.

3. What are the steps involve in Image Recognition? Explain with necessary block diagrams.

4. What are the application ares of image processing? Explain.

5. Briefly explain the spatial filtering technique for image enhancement.

Tutorial IV

1. What do you mean by computer based animation? List the different types of animation languages.

2. List three distinct models of color used in Multimedia. Explain why there are a number of different color models exploited in multimedia data formats.

3. Explain Tele-services and the implementation of Conversation services in Multimedia communication.

4. Explain the methods that are used to control animation. Discuss the YUV model for video transmission.

5. How long will it take to transmit a minute long video of spatial resolution 640×480, 32 bits per pixel and 12 frames per second through a communication link at a constant rate of 56 K bits PS.

6. Describe the television standards.

Tutorial V

1. How is source coding different from entropy encoding? Describe about the MPEG video compression.

2. What are the different types of compression technique used? Explain in detail any one Source encoding technique used for data compression.

3. How is source coding different from entropy encoding? Describe about the JPEG compression.

4. What is data compression? Why multimedia data should be compressed? Describe the JPEG compression with its different modes.

5. Define Run length encoding. Construct the Huffman code for:

Gray Level	0	1	2	3	4	5	6	7
No. of Pixel	4500	1500	900	750	1200	1300	550	100