Assignment 3

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 involving in Image Recognition? Explain with necessary block diagrams.
4. What are the application areas of image processing? Explain.
5. Briefly explain the spatial filtering technique for image enhancement.

Assignment 4

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

Assignment 5

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**
No. of pixel	**4500**	**1500**	**900**	**750**	**1200**	**1300**	**550**