Q.1  a. Explain the compression methodology used in MPEG – 4.

b. What is the relationship between Hyper Media and Hyper Text?

c. Suppose you want to change the size of a bitmapped image & its resolution, will it make any difference which order you perform these operations in? Justify your answer.

d. Differentiate between MPEG-1 and MPEG-2.

e. Distinguish between temporal and non temporal data with examples.

f. Explain Huffman coding.

g. Give four major features of JPEG 2000.  

Q.2  a. Describe the MPEG-2 video compression algorithm with the help of block diagram.

b. How many CD’s of 690 MB size would be needed for a video of 4 hours duration & no compression technique has been used and no sound is there in it. It is assumed that display unit is super VGA and motion frequency is 50 Hz.

Q.3  a. Briefly explain the following with respect to multimedia operating system

   (i)  Resource Management

   (ii) Process Management

b. Specify the hardware and software requirements for multimedia PC.

Q.4  a. What are the important parameters of QoS for Multimedia data transmission? Explain briefly.

b. Explain IP, RTP, RSVP with respect to multimedia network system.

c. Give the overview of Voice over IP.
Q.5  
a. Explain how content based image retrieval is done in multimedia system.  

b. Give the overview of MPEG – 7.

Q.6  
a. What are the advantages and disadvantages of using a scanner or a digital still camera to capture traditional art work as animation sequences? For what type of animation would you have to use a video camera connected to a computer?

b. Under what circumstances might you expect to lose synchronization between sound and picture in multimedia production? What are the steps to be taken to minimize the chances of this happening?

Q.7  
a. Explain the characteristics and uses of Multimedia.

b. Construct an HTML page containing two square buttons. Add event handlers, so that, when the cursor is over one of the buttons, the other one changes into a circle.