[Time: Three Hours]   [Total Marks:80]

Please check whether you have got the right question paper.

NB: 1. Question No.1 is compulsory
         2. Attempt any 3 questions from the remaining 5 questions.
         3. Draw neat diagrams wherever necessary.

Q 1	Differentiate	20
a)	Juke box and DVD	
b)	RTF and TIFF	
c)	Gray and color image	
d)	PCM and DPCM	

Q 2	a)	Why the communication service quality should be good for multimedia streaming? Explain the role of RTP, RTSP, RTCP and RSVP	10
	b)	For the phrase "Excellent Achievement" perform huffmann coding and generate the output. Apply decoding and convert it back to the text. Also find the redundancy in encoding.	10

Q 3	a)	What are the characteristics of sound waves? Illustrate the steps to digitize audio data.	10
	b)	What is the job of header in a file? Give the header details for BMP file format.	10

Q 4	a)	What is Steganography? Explain any one method with an example.	10
	b)	Discuss the different steps involved in MPEG compression technique. Also compare with H.261.	10

Q 5	a)	What parameters define the quality of an image? Discuss these parameters and their effect on the storage requirement.	10
	b)	What are the multimedia security requirements? Discuss.	10

Q 6	Write short note on(Any Two)	20
a)	Digital Signature	
b)	Authoring Systems	
c)	JPEG compression technique	

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