

[5254]-190

B.E. (Information Technology)
MULTIMEDIA SYSTEMS
(2008 Pattern) (Elective - II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6 from Section-I.
- 2) Answer Q7 or Q8, Q9 or Q10, Q11 or Q12 from Section-II.
- 3) Answers to the Section-I and Section-II should be written in separate answersheets.
- 4) Figures to the right indicate full marks.
- 5) Draw appropriate diagrams where ever necessary.
- 6) Use of non programmable electronic calculator is allowed.

SECTION - I

- Q1)** a) What are the goals and objectives of multimedia? [8]
 b) What is Huffman coding? Convert the following using Huffman coding?[8]

A	B	C	D	E	F	G	H
64	16	144	16	4	36	144	32

OR

- Q2)** a) What are the characteristics of multimedia? [8]
 b) What is LZW coding? Convert the '**banana band**' using LZW coding[8]

- Q3)** a) Elaborate any two methods of image enhancement in the context of digital images [8]
 b) Elaborate GIF and TIFF file format [8]

OR

- Q4)** a) Elaborate arithmetic coding method in data compression [8]
 b) Elaborate BMP and JPEG file formats [8]

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- Q5) a)** Elaborate on digital audio and any one CD format [10]
b) Elaborate the principles of MPEG audio compression [8]

OR

- Q6) a)** Elaborate characteristics of sounds [8]
b) Elaborate the delta modulation with the help of a diagram [10]

SECTION - II

- Q7) a)** Why inter-frame correlation is important in video encoding? How I, P and B-frames technique help in the MPEG video compression technique?[8]
b) Describe CCIR, CIF, SIF standards. [10]

OR

- Q8) a)** What is digitization of video? Explain process of digitization of video.[8]
b) What is a need of video file formats? Explain AVI and H.263 briefly.[10]

- Q9) a)** What is virtual reality? Elaborate CCD, VCR and 3D sound system. [8]
b) Elaborate VR hand glove [8]

OR

- Q10)a)** Elaborate basics of VRML. [8]
b) Elaborate head mounted tracking system [8]

- Q11)a)** Elaborate anticipation and staging in the context of animation [8]
b) Elaborate straight ahead action and pose to pose in the context of animation [8]

OR

- Q12)a)** Elaborate easy in and out, exaggeration in the context of animation [8]
b) Elaborate solid drawing and appeal in the context of animation [8]

