

[5154] - 200

B.E. (IT)

MULTIMEDIA SYSTEMS

(2008 Course) (Semester - I) (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) Answer to the section I and section II should be written in separate answer sheets.
- 4) Figures to the right indicate full marks.
- 5) Draw appropriate diagrams wherever necessary.
- 6) Use of non programmable electronic calculator is allowed.

SECTION-I

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

A	B	C	D	E	F	G
100	37	24	12	67	6	4

OR

- Q2)** a) What are the objectives and goals of multimedia? [8]
- b) What is LZW coding? Encode string 'rat bat mat' using LZW coding. [8]
- Q3)** a) Elaborate any two methods of point processing in the context of digital images. [8]
- b) Elaborate GIF and TIFF file format. [8]

OR

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Q4) a) Elaborate fractal image compression. [8]

b) Elaborate BMP and JPEG file formats. [8]

Q5) a) Elaborate on digital audio and any one CD format. [10]

b) Elaborate the MIDI and WAVE audio format. [8]

OR

Q6) a) Elaborate characteristics of sounds. [8]

b) Elaborate the ADPCM 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) Elaborate component, composite and S-video signal formats. Explain their applications. [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.261 briefly. [10]

Q9) a) What is virtual reality? Elaborate CCD, VCR and 3D sound system. [8]

b) Elaborate VR chair. [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]

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