

Total No. of Questions :12]

SEAT No. :

P3434

[4959]-209

[Total No. of Pages :3

B.E. (Computer Engineering)
a: MULTIMEDIA SYSTEMS
(2008 Course) (Semester - I) (Elective - II)

Time : 3 Hours]

[Max. Marks :100

Instructions to the candidates:

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *Answer Question No. 1 or 2, 3 or 4, 5 or 6 from section I and Q.No. 7 or 8, 9 or 10, 11 or 12 from section II.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right side indicate full marks.*
- 5) *Use of calculator is allowed.*
- 6) *Assume suitable data, if necessary.*

SECTION-I

- Q1)** a) What are the various devices used in multimedia systems? What are the different multimedia components present in windows OS? [8]
- b) What is Multimedia Authoring? State any explain any three multimedia authoring tools. [8]

OR

- Q2)** a) Explain in brief Multimedia Architecture. How Windows supports multimedia? [8]
- b) State and explain Multimedia Building Blocks. [8]
- Q3)** a) State and explain any four techniques to enhance the image in image processing. [8]
- b) Explain RLE and Huffman coding technique stating suitable example.[10]

OR

P.T.O.

- Q4)** a) Explain TIFF file format in brief. [8]
b) What is histogram of an image? Write algorithm for computing histogram of 8 bit gray scale image? [10]

- Q5)** a) What are different audio devices used in multimedia systems? Explain any three. [6]
b) Explain types of microphones based on constructional features and functional features. [10]

OR

- Q6)** a) Explain any two methods of audio compression. [8]
b) Explain with diagram components of elementary audio system. [8]

SECTION-II

- Q7)** Explain the algorithm of LZW text compression and decompression with suitable example. [16]

OR

- Q8)** a) Name different techniques used for text compression. Explain with suitable example Arithmetic coding applied to text data. [8]
b) Describe steps involved in MPEG video compression technique. [8]
- Q9)** a) Explain basic principles of 2D animation. [8]
b) State and explain ten types of primitives of OpenGL. [10]

OR

- Q10)**a) Explain major steps involved in 3D animation. [10]
b) State and explain methods of computer based animation. [8]

- Q11)** a) State and explain any four applications of multimedia over internet. [8]
- b) State and explain the requirements of Multimedia applications on the network. [8]

OR

Q12) Write short notes on following: [16]

- a) Video conferencing.
- b) Tele - robotics system.
- c) Multimedia over IP.

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