

Total No. of Questions : 12]

SEAT No. :

P1806

[4859]-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 Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6 from Section-I and Q. 7 or Q. 8, Q. 9 or Q. 10, Q. 11 or Q. 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) Draw diagram and explain structural components of Multimedia Database. **[8]**

b) What is Multimedia Authoring? State any explain any three multimedia authoring tools. **[8]**

OR

Q2) a) Explain following terms with reference to multimedia: **[8]**

- i) Windows API.
- ii) Graphics Libraries.
- iii) DirectX
- iv) Open GL.

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? Explain Histogram Equalization with suitable example. [10]

- Q5)** a) Explain terms PCM, DPCM & DM. [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)** State the algorithm of LZW text compression and decompression. Compress the following string using LZW text compression. Also decompress the output generated after compression. Show tables.

aababacbaacbaadaaa [16]

OR

- Q8)** a) Explain in brief any two Text file formats. [8]
b) Describe steps involved in MPEG video compression technique. [8]

- Q9)** a) Explain Client Pull and Server Push 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) Explain various networking components required for a reliable Multimedia data transmission. [8]

OR

Q12) Write short notes on following: [16]

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

● ● ● ● ●