

Roll No.

2224

B. E. 5th Sem. (CSE)

Examination – December, 2009

MULTIMEDIA TECHNOLOGIES

Paper : IT-204-E

Time : Three hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any five questions. All questions carry equal marks.

1. Define multimedia. What are distributed multimedia systems ? Explain its applications in various domains.

20

2. Differentiate between :

5 × 4

(a) ATM & ADSL

(b) BMP & PNG

(c) Shading & morphing

(d) Rolling ball animation & bouncing ball animation

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3. Discuss JPEG standard for image compression with its DCT encoding and Quantization, Predictive lossless coding and its performance. 20
4. (a) What is Digital Signal Processing ? Discuss Stereophonic and quadraphonic signal processing techniques. 10
(b) How analog signal is converted into digital signal ? Discuss encoding and quantization in detail. 10
5. (a) What do you mean by Virtual reality ? Discuss its areas of application. 10
(b) What are intelligent VR software systems ? Discuss the requirements of visually coupled systems. 10
6. (a) Discuss the structure of the encoder for MPEG layers I & 2. 10
(b) What is the difference between lossy and lossless Compression ? What are the advantages and disadvantages of each ? 10
7. (a) Explain how authoring tools and presentation tools helps in making multimedia projects ? 10
(b) What is 3D drawing and rendering ? Discuss its areas of application. 10
8. Write short notes on (any *two*) : 2 × 10
(a) Time based media representation
(b) CD Audio CD-I
(c) video on demand