

Roll No.

24166

**B. Tech. (5th Semester) (Computer
Science & Engg.) Examination –
December, 2011**

MULTIMEDIA TECHNOLOGIES

Paper : IT-204-F

Time : Three hours]

[Maximum Marks : 100

Before answering the question, 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 *five* questions with atleast *one* question from each Section and Question No. 1 is *compulsory*.

1. (a) How to generate conceptual video data ? $4 \times 5 = 20$
(b) What is Virtual reality ?
(c) How to convert RGB to YUV and YIQ colour models ?
(d) Define MIDI standard and digital video.
(e) What is distributed multimedia database ?

SECTION – A

2. (a) Explain various multimedia authoring tools. 10
(b) Explain the Differences between aliasing and anti-aliasing. 10
3. (a) Explain video on demand in detail 10
(b) Describe the process of morphing in detail. 10

SECTION – B

4. Explain the need for data compression in multimedia systems. What are the major steps of data compression ? Explain its various types. 20
5. (a) Describe the features of JPEG. 10
(b) What is rendering ? Explain. 10

SECTION – C

6. (a) Explain various standards of MPEG compression methods. 10
(b) Discuss the static and Dynamic Huffman coding with example. 10
7. (a) Describe the features of MIDI standards. 10
(b) What is signal processing ? Describe stereo phonic and quadrasonic signal processing. 10

SECTION – D

8. (a) Discuss and explain various applications of VR environment.
- (b) Explain intelligent VR software systems.
9. Write short notes on :
- (a) Desktop virtual reality 10
- (b) Intelligent multimedia system 10
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