

Roll No. ....

**24166/24268**

**B. Tech. 5th Sem.**

**(Computer Science & Engg.) VIII**

**Examination – December, 2013**

**MULTIMEDIA TECHNOLOGIES**

**Paper : IT-204-F**

**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 complain in this regard, will be entertained after examination.*

**Note:** The students have to attempt *first* common question, which is *compulsory*, and *one* question from each of the *four* sections. Thus students will have to attempt 5 questions out of 9 questions.

1. (a) Define morphing.

8 × 2.5

(b) Differentiate between CD-ROM and CD-R/W

(c) Differentiate between lossy and lossless compression.

(d) Differentiate between BMP and PNG image format.

- (e) What is sub-band coding ?
- (f) Mention some advantages of audio compression ?
- (g) Mention some applications of VR.
- (h) What is the role of authoring tools in multimedia.

### SECTION – A

- 2. (a) Define Multimedia. Give classification of multimedia. Discuss various application of multimedia. 15
- (b) Explain Animation with its usage. 5
- 3. (a) Define anti aliasing. What is the use of anti aliasing filter ? 10
- (b) Explain ADSL technology with diagram. 10

### SECTION – B

- 4. What do you mean by JPEG ? Give its objective, architecture and performance. 20
- 5. Write notes on:
  - (a) 3D drawing and rendering 10
  - (b) Colour palettes 10

### SECTION – C

6. Explain architecture of MPEG with different levels of hierarchy. 20
7. (a) What is stereophonic and quadra-phonic signal processing ? Explain. 10
- (b) Explain digital representation of sound with various encoding techniques. 10

### SECTION – D

8. (a) Explain intelligent Multimedia system. 10
- (b) Explain orientation tracking. 10
9. Write notes on :
- (a) desktop virtual reality, 10
- (b) VR operating system. 10
-