

Roll No. ....

**24166**

**B.Tech. 4th Semester (Information  
Technology) Examination – May, 2013**

**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 in all. Questions No. 1 is *compulsory*. Attempt *one* question from each Section. All question carry equal marks.

**1. Explain the following :**

**5 x 4 = 20**

- (a) **Morphing**
- (b) **BMP**
- (c) **Features of VR**
- (d) **Lossy Vs lossless image compression.**

### SECTION - A

2. (a) Define anti-aliasing. Explain the types of anti aliasing techniques. 10  
(b) Discuss the different types of multi media servers in detail. 10
3. (a) What is multimedia ? Explain its applications in various domains. 10  
(b) Write a short note on ATM in multimedia distribution network. 10

### SECTION - B

4. Discuss JPEG standard for image compression along with its DCT encoding and quantization, JPEG predictive lossless encoding and its performance. 20
5. (a) Compare GIF, PNG and JPEG. 10  
(b) Write short note on : 10  
(i) color palettes  
(ii) TIFF

### SECTION - C

6. (a) How do we represent sound in digital world ? Differentiate between stereophonic and quadraphonic signal processing. 10

- (b) Describe speech recognition and its various techniques. 10
7. (a) Discuss various MPEG standards in detail. 10  
(b) Explain DVI technology. 10

**SECTION - D**

8. (a) Describe the intelligent multimedia system with its design and working in detail. 12  
(b) Explain VR operating systems. 8
9. Write a short note on : 10 x 2 = 20  
(a) VR displays  
(b) Intelligent VR software systems.