B.Tech. 5th Semester (Computer Science & Engg.)

Examination, December–2012

MULTIMEDIA TECHNOLOGIES

Paper–IT-204-F

Time allowed : 3 hours] _[Maximum marks : 100_

Note : **Question No. 1 is compulsory. Attempt any one question from each section. All questions carry equal marks.**

1. Explain the following : 5×4=20

   (a) Multimedia Databases

   (b) PNG

   (c) Need for Audio Compression

   (d) VEOS.

Section–A

2. (a) Define Shading. Explain the various shading models. 10

   (b) Discuss the types of multimedia authoring systems in detail. 10

3. (a) What is multimedia ? Describe the framework for multimedia systems. 10

   (b) Write a short note on ADSL in multimedia distribution network. 10

Section–B

4. (a) Explain the different types of computer color models in detail. 10

   (b) What is JPEG ? Enumerate its objective, applications and architecture. 10

5. (a) Compare BMP and TIFF file format. 8

   (b) What are the various models of JPEG encoding schemes ? Explain JPEG image compression standards. 12

Section–C

6. (a) Explain the concept of MPEG in detail. 10

   (b) What is DVI technology ? Explain its working. 10

7. (a) Explain any two techniques for encoding analog signals. 10

   (b) What are the main advantages of digital signals over analog signals ? Describe quantization in detail. 10

Section–D

8. (a) What do you mean by virtual reality ? Explain its multimedia applications with example.   10

   (b) What are intelligent VR software systems ?   10

9. (a) Write a short note on VR displays.   10

   (b) Discuss the features and applications of virtual reality.   10