FACULTY OF ENGINEERING

B.E. 4/4 (CSE) II – Semester (Main) Examination, May / June 2012

Subject : **Multimedia Systems** (Elective – III)

Time : 3 hours   Max. Marks : 75

Note: Answer all questions from Part–A and answer any **FIVE** questions from Part–B.

PART – A (25 Marks)

1. An analog signal containing components with frequency values ranging from 50 Hz to 5kHz, is to be sampled. Determine the sampling frequency and the bandwidth of the band-limiting filter.

2. Why is viewing angle less for an LCD display than for a CRT display?

3. What is the advantage of Unicode standard over the ASCII standard?

4. What is meant by gamma correction and why is it necessary?

5. What is RIAA equalization curve?

6. What is meant by key framing and tweening?

7. What is an ID3 tag of MP3 files and what is its utility?

8. What is meant by X rated speed of CD?

9. What is the meaning of following DTD element :

   <!ELEMENT X – O (Y +, Z+>

10. What is meant by learner control and feedback in presentation?

PART – B (50 Marks)

11.a) Clearly distinguish between a story, a script and a storyboard, stating their purposes.

   b) What are the main functions of the video adapter card? How is it connected to the monitor?

12.a) Explain the concept and utility of layers and color channels in image processing software.

   b) Explain how anti-aliasing and dithering can improve image quality.

13.a) Explain the difference between omni-, bi- and uni-directional microphones mentioning where they are used.

   b) Explain the advantage of YC format over RGB format in signal transmission.

14.a) Explain how data is compressed using arithmetic coding scheme.

15.a) Distinguish between copyright, copyleft and anti-copyright.

b) Explain the difference between perambulation, synthetic experience and realization.

16.a) Discuss some of the important features in a typical animation software.

b) What is a basis function? Explain the nature of sine and cosine basis functions in DFT.

17. Write short notes on :
   a) Specifications of digital images
   b) MIDI
   c) DVD-Formats