Code No. 3242

FACULTY OF ENGINEERING

B.E. 4 / 4 (CSE) II – Semester (Main) Examination, May / June 2011

Subject: Multimedia Systems (Elective – III)

Time: 3 Hours

Max. Marks: 75

Note: Answer all questions from Part-A and any five questions from Part-B.

PART – A (25 Marks)

1. What is meant by sampling rate?

2. What is a shadow mask?

3. What are the two types of compression methods that are applied to text?

4. What is a device independent colour model? Give example.

5. What is the difference between intra-frame and interframe video compression?

6. What is the difference between WAV file and a MIDI file?

7. What is Hytime?

8. What is QOS? Give some typical parameters of QOS.

9. In how many ways two intervals (binary temporal relations) can relate in time?

10. What is the utility of DTD in SGML?

PART – B (50 Marks)

11.(a) Distinguish between multimedia 'production' and 'playback'. How and why would hardware and software requirements vary in each case?

   (b) What is dynamic range and how does it influence the number of bits to be used for the quantizer?

12.(a) What is meant by font? Differentiate between bitmap fonts and vector fonts?
   (b) Explain how anti-aliasing and dithsing can improve image quality?

13.(a) How does sound card process WAV files and MIDI files?

   (b) Explain some of the basic functions of video capture software.

14. Explain in brief various steps in the SPEG compression standard.

15. Describe the working principle of encoding digital data on a CD surface.

16.(a) What is meant by digital rights management? How it can be incorporated?

   (b) What is meant by virtual reality? What are its different forms?

17. Write short notes on:
   a) 3D modeling
   b) Animation on Web
   c) Multimedia Database systems.

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