## EIGHTH SEMESTER B.TECH. (ENGINEERING) [09 SO EXAMINATION, APRIL 2015

CS/PTCS 09 803 L15—MULTIMEDIA

Time: Three Hours

Maximum: 70 Marks

## Part A — (Short answer questions)

Answer all questions in one or two sentences..

- 1. What is multimedia? Explain the properties of multimedia systems.
- 2. What are the components of a multimedia data representation?
- 3. Write any three image animation packages.
- 4. Calculate the size in MB for a 1 minute stereo recording of CD quality music at 44.1 kHz sampling rate and 16 bit resolution.
- 5. What is meant by media communication?

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B — (Analytical/Problem solving questions)

Answer any four questions.

- 6. Describe in detail about the various classification schemes of computer animation.
- 7. Explain various multimedia interface standards. Explain in detail about the various multimedia data interface standards.
- 8. Define MIDI. List its attributes. Compare and contrast the MIDI and digitized audio in a multimedia production.
- 9. Explain the types of Database Management Systems are preferred for Multimedia systems.
- 10. Explain the requirements that are needed for designing a user-friendly interface.
- 11. Explain the components of a distributed multimedia application.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C — (Descriptive/Analytical/Problem solving questions)

12. (a) List and explain important steps and considerations in recording and editing digital audio.

Or

(b) Explain in detail about multimedia database and also explain the characteristics of MDBMS.

13. 3(a) Discuss in detail about Digital Video Interactive (DVI) with suitable diagrams.

Or

- (b) Explain MPEG file format in detail for motion picture compression.
- 14. (a) Draw the video capture board architecture and write a short note on the functions of each component.

Or

- (b) Discuss about the various authoring tools depending on the application design.
- 15. (a) Describe distributed multimedia systems. What are the components available in distributed multimedia system? Explain in detail.

Or

(b) Write note on any two popular metaphors for user interface design with examples for each one of them.

 $(4 \times 10 = 40 \text{ marks})$