

B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APR / MAY 2014

INFORMATION TECHNOLOGY

Fifth Semester

IT9302-MULTIMEDIA SYSTEMS

(Regulation 2008)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. List any four multimedia applications.
2. Compare post script and true type fonts.
3. Write down the important features of H.261 algorithm.
4. How is track ball different from a pen input device?
5. Give the structure of an opengl program.
6. How will you add a video into a web page using img element?
7. Give the characteristics of multimedia databases.
8. How is data read from CD-RW?
9. Why are ATM networks used for multimedia data transmission?
10. What are the message types supported by RTCP?

PART-B (5 x 16 = 80 Marks)

11. (i) Discuss the challenges involved in handling image as a multimedia element. (8)
(ii) How are animations created? Explain the different animation techniques in detail with examples. (8)
12. (a)(i) How is motion compensation estimated in MPEG compression scheme? (8)
(ii) Explain the chunks defined by RIFF specification. (8)

OR

- (b)(i) Explain the different types of scanners, their scanning mechanisms and usage issues. (8)
(ii) Discuss on the symmetric operation of DCT based CODEC in JPEG compression. (8)
13. (a) You are a multimedia designer. You are involved in the process of designing a web site for an e commerce web site. Explain in detail the process of inserting multimedia components into the above web site in the design phase. (16)

OR

- (b) As a multimedia programmer how will you handle the multimedia components programmatically. Explain in detail with code snippets. (16)
14. (a) (i) Explain in detail Hypermedia linking and embedding with examples. (8)

(ii) Explain in detail the different schemes used for storage by considering throughput, speed and reliability. (8)

OR

(b)(i) Explain the various real time scheduling algorithms with example for each. (8)

(ii) Discuss on the synchronization issues related to objects in a multimedia presentation system. (8)

15. (a)(i) Discuss on error resilient entropy encoding mechanism in detail. (8)

(ii) Explain the SIP session initiation process in detail. (8)

OR

(b)(i) Write short notes on:

(i) Interactive TV (5)

(ii) Broadcast schemes for Video on demand (6)

(iii) Quality of multimedia data transmission (5)