ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES
(AUTONOMOUS)
M.Tech II-Semester Regular Examinations, May 2016
Multimedia and Communications Systems
(Communication Systems)

Date:	Time: 3 hours	Max Marks: 60

Answer ONE Question from each unit
All questions carry equal marks
All parts of the question must be answered at one place only

UNIT-I

1. a. Name the different multimedia communication techniques and explain any two communication techniques in detail.   (CO-1, PO-2, 3)   (6M)
    b. Explain the need and the principles of digitization of a signal.   (CO-1, PO-3, 4)   (6M)

(Or)

2. a. How is transfer of data and its rates specified in multimedia system?   (CO-1, PO-2, 3)(4M)
    b. Provide stage-by-stage description of a differential pulse code modulation (DPCM) system with block diagrams of the transmitter and receiver section   (CO-1,4, PO-3)(8M)

UNIT-II

3. a. What is data compression? What benefits are offered by compression techniques in designing multimedia systems?   (CO-3, 4, PO-2, 3)   (6M)
    b. What is lossless compression? Explain any two lossless compression standards.
                                                                    (CO-3, 4, PO-2, 3)   (6M)

(Or)

4. a. Explain any two image compression techniques in detail.   (CO-4, PO-3)   (6M)
    b. Explain the need of encoding and explain the types of encoding with examples
                                                                    (CO-4, PO-1, 3)(6M)

UNIT-III

5. a. Compare JPEG and MPEG. How would motion JPEG differ from MPEG?
        (CO-2, 4, PO-3)   (6M)
    b. What is the need of audio/video standards? Explain different MPEG standards and also give their frame structure. (CO-2, 4, PO-1, 3, 4)   (6M)

(Or)

6. a. Explain Linear predictive coding, code-excited LPC. (CO-2,3,4, PO-1,3,4)   (4M)
    b. Explain about MPEG audio coders, Dolby audio coders (CO-3, 4, PO-1, 3, 4)   (8M)

<div align="center"><u>UNIT-IV</u></div>

7. a. Discuss the standards related to interpersonal communications (CO-4, 5, PO-4, 5, 11)   (6M)
    b. Name different interactive applications over the internet and explain. (CO-5, PO-5, 11)   (6M)

<div align="center">(Or)</div>

8. a. Discuss Reference Models   (CO-4, 5, PO-4, 5, 11)   (4M)
    b. Explain the standards for entertainment applications   (CO-4, 5, PO-5, 11)   (8M)

<div align="center"><u>UNIT-V</u></div>

9. a. What is the need of file transfer? Explain about FTP, TFTP (CO-3, 5, PO-8, 11, 12)   (6M)
    b. Discuss about Voice Over Internet and its standards.   (CO-3, 5, PO-8, 11, 12)   (6M)

<div align="center">(Or)</div>

10. a. What are different cable TV networks? Discuss.   (CO- 5, PO-8, 11, 12)   (6M)
    b. How does the satellite communication can be applied for HDTV communication?
       (CO-5, PO-8, 11, 12)   (6M)

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