Exam.Code:0923
Sub. Code: 6849

1078
B.E. (Information Technology)
Fifth Semester
ITE-535/544: Multimedia System

Time allowed: 3 Hours Max. Marks: 50

NOTE: *Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.*

x-x-x

I. Attempt the following:-

a) What is the difference between ordinary text and hyper-text'?

b) What is digitization? Explain the Nyquist's theorem.

c) What are the commonly used audio, image and video formats?

d) What is video bit-streaming?

e) What is the basis of compression used for text, audio and video data? (5x2)

UNIT – I

II. a) Discuss the characteristics and challenges of Multimedia systems.

b) What is SGML, ODA, MHEG? Discuss the role of these multimedia technologies in detail with suitable examples. (5,5)

III. a) What the various levels used in RAID devices? Explain in detail. Also discuss its in role in the reliable functioning of Multimedia servers.

b) Explain the digitization of audio signal? Explain how the quality of audio depends on sample rate and bit size. (5,5)

IV. Explain the various components of MIDI? Discuss various aspects related to hardware required and its functioning. (10)

UNIT – II

V. a) How are color represented and transmitted in images and video?

b) Explain: analog and digital video? How is it standardized for TV communication? (5,5)

P.T.O.

VI. a) Explain entropy encoding and run length encoding? For which kind of data are these encoding techniques more suitable? Give reason.

b) Explain the Huffman coding and adaptive Huffman coding scheme with example. (5,5)

VII. Explain the following: Transform coding, differential coding, vector quantization, MPEG. (10)

x-x-x