1128
B.E. (Information Technology)
Fifth Semester
ITE-544: Multimedia System

Time allowed: 3 Hours   **Max. Marks: 50**

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I.   Attempt the following:-

     a)   What is Run-Length encoding? Explain its need.

     b)   What is a media server?

     c)   Describe Nyquist sampling theorem.

     d)   List any two TV standards that are available worldwide. In addition give one salient feature of each.

     e)   What is the main difference between 1-frarpe and P-frame?   (5x2)

UNIT – I

II.   a) Define multimedia data. What are the five elements of Multimedia?

      b) MHEG and SGML are some of the early Multimedia standards. Describe the two in detail.   (3,7)

III.   What is RAID and its types? What is RAID storage used for?   (10)

IV.   What is the purpose of MIDI? Explain the format for MIDI message. Give four MIDI devices you are aware of.   (10)

UNIT – II

V.   Is MPEG and JPEG lossy or lossless?

     a)   What is the need for compression?

     b)   How does LZW algorithm work? What formats does it work on?   (2,2,6)

VI.   How is MPEG used for audio and video compression?   (10)

VII.   a) What is the importance of Application layer and Transport subsystem in multimedia communication system?

      b) List two multimedia applications of application subsystem. What are the communication. requirements of transport subsystem?   (5,5)

x-x-x