CBCS SCHEME

USN

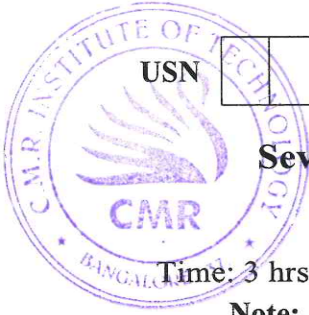**Seventh Semester B.E. Degree Examination, July/August 2022**
Multimedia Communication

Time: 3 hrs.   Max. Marks: 80

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a. Explain multipoint conferencing with neat block diagram. **(06 Marks)**
    b. Define QoS. Explain QoS parameters associated with a packet switched network. **(06 Marks)**
    c. Explain communication modes in brief. **(04 Marks)**

OR

2   a. Explain telephone network, integrated services Digital Network, and Bread band multiservice network with neat block diagram. **(08 Marks)**
    b. Explain packet switched network and circuit switched network with neat block diagram. **(08 Marks)**

Module-2

3   a. Explain digitization principles using neat block diagram of encoder and decoder and waveforms. **(10 Marks)**
    b. Explain raster scan display architecture with neat block diagram. **(06 Marks)**

OR

4   a. Calculate the time to transmit the following digitized images at both 64kbps and 1.5Mbps :
      i) a $640 \times 480 \times 8$ VGA – compatible image
      ii) a $1024 \times 768 \times 24$ SVGA – compatible image **(06 Marks)**
    b. Explain PCM speech with neat block diagram. **(06 Marks)**
    c. Assuming the CD – DA standard is being used, estimate storage capacity of a CD – ROM to store a 60 minute multimedia title. **(04 Marks)**

Module-3

5   a. Encode the text: went • using arithmetic coding if following are probabilities of each character. e = 0.3, n = 0.3, t = 0.2, w = 0.1 and • = 0.1. **(10 Marks)**
    b. Encode the text : AAAABBCD using static Huffman coding. **(06 Marks)**

OR

6   a. Explain working of JPEG neat block diagram of encoder and decoder. **(12 Marks)**
    b. Explain LZ technique. **(04 Marks)**

Module-4

7   a. Explain DPCM with neat block diagram of encoder and decoder. **(12 Marks)**
    b. Explain code – excited LPC in brief. **(04 Marks)**

OR

8 a. Explain MPEG – 4 with neat diagram of encoder and decoder. **(10 Marks)**

   b. Explain main features of a DMS. **(06 Marks)**

Module-5

9 a. Explain error resilient technique for video. **(06 Marks)**

   b. Explain streaming video across internet with neat diagram. **(10 Marks)**

OR

10 a. Explain video delay causes in ATM network. **(08 Marks)**

    b. Explain MPEG video error concealment with block diagram. **(08 Marks)**

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