USN ☐☐☐☐☐☐☐☐☐☐

10EC/TE841

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

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions, selecting atleast TWO questions from each part.*

PART – A

1 a. Explain different type of multimedia networks with diagram.   **(10 Marks)**
   b. Explain different communication modes and media types.   **(10 Marks)**

2 a. Explain different types of text formats used in multimedia communication.   **(08 Marks)**
   b. Derive the time to transmit the following digitized images at 64kbps and 1.5 Mbps networks
       i) $640 \times 480 \times 8$ VGA compatible image
       ii) $1024 \times 768 \times 24$ SVGA compatible image.   **(06 Marks)**
   c. Define aspect ratio, luminance and chrominance.   **(06 Marks)**

3 a. With neat diagram explain image encoder and decoder.   **(14 Marks)**
   b. Explain the procedure of Huffman ad Arithmetic coding methods.   **(06 Marks)**

4 a. Explain LPC encoder and decoder with diagram.   **(10 Marks)**
   b. Define I frame, p frame, B frame, motion estimation and motion compensation. **(10 Marks)**

PART – B

5 a. With diagram explain transparent bridge architecture with its example.   **(10 Marks)**
   b. Explain CSMA/CD MAC method used in IEEE802.3 method in detail.   **(10 Marks)**

6 a. Explain IPV6 datagram format in detail.   **(10 Marks)**
   b. Explain the operation of AP ad RARP.   **(10 Marks)**

7 a. With diagram explain ATM protocol architecture.   **(10 Marks)**
   b. Describe communication across ATM network.   **(10 Marks)**

8 a. Explain RTP and RTCP protocols.   **(10 Marks)**
   b. Explain TCP/IP protocol mechanism.   **(10 Marks)**

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