USN

10EC/TE841

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

Max. Marks: 100 Time: 3 hrs.

| N | ote: | Answer any FIVE full questions, selecting atleast TWO questions from ed | ach part. |
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| | | PART - A | |
| 1 | a. b. | Explain different type of multimedia networks with diagram. Explain different communication modes and media types. | (10 Marks) (10 Marks) |
| 2 | a. b. | Explain different types of text formats used in multimedia communication. Derive the time to transmit the following digitized images at 64kbps and 1.5 Mbps i) $640 \times 480 \times 8$ VGA compatible image | (08 Marks) s networks |
| | c. | ii) $1024 \times 768 \times 24$ SVGA compatible image. Define aspect ratio, luminance and chrominance. | (06 Marks) (06 Marks) |
| 3 | a. b. | With neat diagram explain image encoder and decoder. Explain the procedure of Huffman ad Arithmetic coding methods. | (14 Marks) (06 Marks) |
| 4 | a. b. | Explain LPC encoder and decoder with diagram. Define I frame, p frame, B frame, motion estimation and motion compensation. | (10 Marks) (10 Marks) |
| | | PART – B | |
| 5 | a. b. | With diagram explain transparent bridge architecture with its example. Explain CSMA/CD MAC method used in IEEE802.3 method in detail. | (10 Marks) (10 Marks) |
| 6 | a. b. | Explain IPV6 datagram format in detail. Explain the operation of AP ad RARP. | (10 Marks) (10 Marks) |
| 7 | a. b. | With diagram explain ATM protocol architecture. Describe communication across ATM network. | (10 Marks) (10 Marks) |
| 8 | a. b. | Explain RTP and RTCP protocols. Explain TCP/IP protocol mechanism. | (10 Marks) (10 Marks) |