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Eighth Semester B.E. Degree Examination, June/July 2019
Multimedia Communication

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART - A

- 1 a. With the help of a diagram, explain the following:
 - i) Data network (10 Marks)
 - ii) Integrated services digital network (06 Marks)
- b. Explain the operational modes of multipoint conferencing. (04 Marks)
- c. Explain the principle operation of packet switching network. (10 Marks)

- 2 a. Explain the principle of operation of PCM speech codec with a block diagram. Also explain compressor and expander. (06 Marks)
- b. With a neat diagram, explain audio/sound synthesizer. (10 Marks)
- c. Find out the time taken to transmit the following digitized images at both 64 kbps and 1.5 Mbps:
 - i) A 640 × 480 × 8 VGA compatible image (04 Marks)
 - ii) A 1024 × 768 × 24 SVGA compatible image

- 3 a. Encode the string 'went.' comprising characters with probabilities of e = 0.3, n = 0.3, t = 0.2, w = 0.1, . = 0.1 using arithmetic coding. (10 Marks)
- b. With a neat block diagram, explain JPEG. (10 Marks)

- 4 a. Explain with a neat diagram, ADPCM sub-band encoder and decoder. (10 Marks)
- b. Explain H.261 video encoder with block diagram and explain the role of FIFO buffer. (10 Marks)

PART - B

- 5 a. With the aid of a diagram, explain transparent bridge and give an example. (10 Marks)
- b. Explain the following with neat diagrams:
 - i) FDDI networking components (10 Marks)
 - ii) Physical interface

- 6 a. Explain IPV6 datagram format in detail. (10 Marks)
- b. Explain fragmentation and reassembly in the internet with an example. (10 Marks)

- 7 a. With the help of a diagram, explain broadband ATM cell formats. (10 Marks)
- b. Explain classical IP over ATM (IPOA) LAN. (10 Marks)

- 8 a. Explain TCP/IP protocol suite. (10 Marks)
- b. Explain RTP and RTCP. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.