Total No. of Pages : 01 Roll No. Total No. of Questions : 09 B.Tech. (CSE/IT) (Sem.-4) **DATA COMMUNICATION** Subject Code : CS-206 **Paper ID : [A0460]** Time : 3 Hrs. Max. Marks : 60 **INSTRUCTION TO CANDIDATES : SECTION-A is COMPULSORY.** 1. 2. Attempt any FOUR questions from SECTION-B. Attempt any TWO questions from SECTION-C. 3. SECTION-A  $(10 \times 2 = 20 \text{ Marks})$ (a) Define baud rate. (b) What is terrestrial microwave? (c) What are TLD servers? (d) What is hamming distance? (e) List two important features of LAN. (f) Differentiate between static and dynamic routing algorithms. (g) What is multiplexing at transport layer? (h) Define congestion. (i) What is subnetting? (j) How many classes are there for IP4 addresses? **SECTION-B**  $(4 \times 5 = 20 \text{ Marks})$ 2. Discuss the design issues of network layer. 3. List the advantages and disadvantages of optical fiber transmission media. 4. How buffering is handled in transport layer? 5. Explain flooding routing algorithm with example. 6. Explain stop and wait data link protocol with suitable diagram. **SECTION-C**  $(2 \times 10 = 20 \text{ Marks})$ 7. Explain the meaning of various fields of the TCP header with example. 8. Describe the various congestion control algorithms with examples.

9. Explain the various layers of OSI model and compare it with TCP/IP model.

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