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Roll No.

18E3

B. Tech. EXAMINATION, 2024

(Fifth Semester)

(C Scheme) (Main & Re-appear)

CSE

CSE305C

Computer Networks

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Draw and explain the OSI reference model. How different layers work with each other to make the communication possible between computers ? **10**
(b) What does "negotiation" mean when discussing network protocols ? Give suitable examples. **5**
2. Differentiate between the following : **15**
 - (a) Peer-to-peer and client server network
 - (b) Connection oriented and connectionless services
 - (c) Tree and irregular topology.

Unit II

3. Draw and explain the TCP/IP reference model. How is it different from OSI reference model ? **15**
4. Draw and explain all the components of IPv6 Header. Also compare it with IPv4. **15**

Unit III

5. Define ALOHA. How does it work ? How is efficiency of ALOHA measured ? How can it be improved ? **15**
6. (a) Why are Ethernet and token ring inappropriate for use in WAN ? **5**
(b) Compare and contrast Ethernet, fast Ethernet and Gigabit Ethernet. **10**

Unit IV

7. Write and explain any two congestion control algorithms over the Internet. **15**
8. What do you mean by quality of service (QoS) ? List and explain any *five* parameters to decide the QoS in a network. **15**