IV B.Tech I Semester Regular/Supplementary Examinations, Jan/Feb - 2022
COMPUTER NETWORKS
(Common to Electronics & Communication Engineering and Electronics & Instrumentation Engineering)

Time: 3 hours   Max. Marks: 70

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any FOUR questions from Part-B
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PART–A *(14 Marks)*

1. a) What are the advantages of and draw backs of mesh topology.   [3]
    b) What is digital modulation?   [2]
    c) Write about Utopian Simplex Protocol.   [3]
    d) What is static channel allocation?   [2]
    e) What are the problems with congestion?   [2]
    f) Write the significance of DNS.   [2]

PART–B *(4x14 = 56 Marks)*

2. a) Discuss in detail about the LAN and WAN.   [7]
    b) Differentiate OSI reference model with the TCP/IP reference model.   [7]

3. a) Explain the advantages of TDM and CDM.   [7]
    b) Give brief explanation about Single window protocols.   [7]

4. a) Describe the stop and wait protocol with neat sketch.   [7]
    b) Explain in detail about the sliding window protocol using Go-Back-NA.   [7]

5. a) Explain various classes of IEEE 802.X Standard Ethernet.   [7]
    b) Discuss the assumptions for dynamic channel allocation.   [7]

6. a) What are the general principles of congestion control? Explain.   [7]
    b) Explain the Dijkstra's Shortest Path Routing Algorithm with an example.   [7]

7. a) Discuss the role played by the message transfer agent.   [7]
    b) Compare and Contrast the UDP header and the TCP header.   [7]

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