

Code No: 125DT**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, October - 2020****COMPUTER NETWORKS****(Common to CSE, IT)****Time: 2 hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

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- 1.a) Elaborate on the design issues of data link layer.
- b) Discuss about Internet standards. [8+7]
- 2.a) Describe the Transmission Media. What are the types of Transmission Media?
- b) What are the distinct characteristics of local area networks, explain briefly? [7+8]
- 3.a) Write about CSMA and CSMA/CD in detail.
- b) What is Carrier Sense Multiple Access? Explain about the different approaches of CSMA. [7+8]
- 4.a) What are the different cable topologies of an Ethernet? Explain Manchester Encoding.
- b) Define Bridge. Explain the different types of Bridges. [8+7]
- 5.a) Explain shortest path routing algorithm with an example
- b) Discuss the Optimality Principle with a suitable example. [7+8]
- 6.a) Illustrate design issues of Network layer.
- b) Explain the prevention policies of congestion. [7+8]
- 7.a) What is the format of IPv4 header? Describe the significance of each field.
- b) Write a detailed note on transport services. [8+7]
- 8.a) Discuss in detail about the connection establishment and release in TCP.
- b) How DNS service maps domain names to IP addresses. [8+7]

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