

**R15**

Code No: 125DT

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year I Semester Examinations, September - 2021**

**COMPUTER NETWORKS**

**(Common to CSE, IT)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any five questions  
All questions carry equal marks**

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- 1.a) Discuss about guided and unguided transmission media.
- b) Draw a basic block diagram of ARQ and explain Selective Repeat ARQ Method.[7+8]
- 2.a) Write short notes on the following:  
(i) Client server model (ii) Peer to Peer (iii) Interfaces and services (iv) Protocols
- b) Explain one bit sliding window protocol. Give the advantages and disadvantages of one-bit sliding window protocol? [8+7]
- 3.a) Explain collision-free protocols.
- b) Compare and contrast between Transparent and Source routing bridges. [7+8]
- 4.a) Discuss about the assumptions in case of dynamic channel allocation in LANs and WANs?
- b) What are the different types of networking / internetworking devices? [8+7]
- 5.a) What is non- adaptive routing. Explain any two non- adaptive routing algorithms.
- b) Differentiate between open loop and closed loop congestion control. [8+7]
- 6.a) Explain link state routing in detail.
- b) Explain about Dijkstra's shortest path routing algorithm with example. [7+8]
7. What is Logical address and Physical address in computer networks? Why a mapping from logical address to physical address and vice versa is required? Explain the protocols which perform it. [15]
- 8.a) Explain the http request and response methods.
- b) Explain TCP connection management modeling. [7+8]

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