

Code No: 843AB

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, July/August - 2021****COMPUTER NETWORKS****Time: 3 Hours****Max.Marks:75****Answer any five questions****All questions carry equal marks**

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1. Explain the TCP/IP reference model with neat diagram. [15]
- 2.a) Compare the optical fiber over copper wire.  
b) Explain Go – Bank – N sliding window protocol with clear illustrations. [7+8]
- 3.a) What is pure ALOHA and slotted ALOHA? Explain.  
b) Discuss the stop and wait ARQ protocol in detail. [7+8]
4. Write a short note on  
a) 1-persistent CSMA  
b) Non-persistent CSMA  
c) P-persistent CSMA. [5+5+5]
- 5.a) Compare Virtual-Circuit and Data gram Networks.  
b) Draw and explain the header format of IPv6. [7+8]
- 6.a) Explain the five parts of the link state routing with an example.  
b) Discuss Dynamic Host Configuration Protocol and Address Resolution Protocol. [7+8]
- 7.a) Differentiate between UDP and TCP.  
b) Explain Congestion control algorithms in detail. [7+8]
- 8.a) Differentiate between FTP and HTTP.  
b) Give a brief explanation about Electronic mail. [7+8]

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