

Code No: 127BY

R15**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, May/June - 2019****COMPUTER NETWORKS****(Electronics and Communication Engineering)****Time: 3 Hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

Part- A**(25 Marks)**

- 1.a) Write the problems encountered in OSI reference model. [2]
- b) What is the purpose of Hamming code? [3]
- c) What is repeater? [2]
- d) Define thin and thick Ethernet. [3]
- e) What is congestion control? [2]
- f) Explain briefly about flooding. [3]
- g) What is crash recovery? [2]
- h) What are the disadvantages of IPv4? [3]
- i) Give the HTTP message format. [2]
- j) What are the services offered by application layer? [3]

Part-B**(50 Marks)**

- 2.a) Explain various wired transmission media.
 - b) With a neat sketch, explain TCP reference model. [5+5]
- OR**
- 3.a) Explain HDLC protocol.
 - b) Write a note on Go-Back-N protocol. [5+5]
- 4.a) Describe ALOHA protocol in detail and give its disadvantages.
 - b) Elaborate learning bridges. [5+5]
- OR**
- 5.a) Explain pure Aloha and slotted Aloha.
 - b) Explain the frame format of Ethernet. [5+5]
- 6.a) Write the concept of distance vector routing and illustrate with an example.
 - b) Describe packet switching in detail. [5+5]
- OR**
- 7.a) Compare Virtual circuit and datagram networks.
 - b) Give a brief note on approaches of congestion control. [5+5]

- 8.a) Describe packet fragmentation.
b) Explain dynamic host configuration protocol (DHCP). [5+5]
- OR**
- 9.a) Explain about the ARP.
b) Illustrate with an example three way hand shake protocol for connection establishment in transport layer. [5+5]
- 10.a) Describe TCP segment header.
b) Discuss about protocols used between mail transfer agents. [5+5]
- OR**
- 11.a) Explain about DNS.
b) Explain in detail slow-start congestion control technique in TCP. [5+5]

--ooOoo--

www.FirstRanker.com