

R18

Code No: 155FM

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, July/August - 2023

INTERNETWORKING with TCP-IP

(Computer Science and Engineering - Networks)

Time: 3 Hours

Max. Marks: 75

- Note:** i) Question paper consists of Part A, Part B.
ii) Part A is compulsory, which carries 25 marks. In Part A, answer all questions.
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A**(25 Marks)**

- 1.a) Differentiate between TCP and IP Protocols. [2]
- b) What is the importance of Bridges? [3]
- c) What is Internetworking? [2]
- d) How does IPV6 differ from IPV4? [3]
- e) How does UDP compute header checksum? [2]
- f) What is data traffic? [3]
- g) What is Early Random Drop? [2]
- h) Write the drawbacks of PQM. [3]
- i) Define Tunneling. [2]
- j) What is Timeout Freezing? [3]

PART – B**(50 Marks)**

2. Explain in detail OSI Reference Model with neat diagram. [10]
- OR**
- 3.a) Differentiate between Gateway and Router.
 - b) Differentiate between two layer switches and three layer switches. [5+5]
- 4.a) How and when is the Network Address Translation (NAT) table initialized?
 - b) Explain how IPV6 Neighbour Discovery Protocol handles Neighbour Reachability. [5+5]
- OR**
5. Explain fragmentation and the fields related to the fragmentation in the IP datagram. [10]
6. Discuss in detail about Congestion Control in TCP. [10]
- OR**
- 7.a) Discuss about Traffic Shaping.
 - b) Write short notes on Resource Reservation. [5+5]

8. Discuss various schemes of Buffer Management. [10]

OR

9.a) Differentiate between Drop Tail and Drop Front techniques.

b) Write about RED Algorithm. [5+5]

10.a) What are the features of SCTP?

b) Discuss about Agent Discovery. [5+5]

OR

11.a) What are the advantages and disadvantages of Mobile TCP.

b) Explain the packet format of SCTP. [5+5]

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Use paper July/Aug-2023