

Code No: 155FM

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech III Year I Semester Examinations, March - 2024****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) Define passive hub. [2]
- b) Write the need of layered architecture. [3]
- c) What is fragmentation? [2]
- d) Write the advantages of IPV6. [3]
- e) What is RSVP? [2]
- f) Write about frame relay. [3]
- g) List out buffer management schemes. [2]
- h) Write drawbacks of PQM. [3]
- i) What is Tunneling? [2]
- j) Define mobile agent. [3]

PART – B**(50 Marks)**

- 2.a) Explain TCP/IP networking model and its layers.
 - b) What is Transport Bridge and explain in detail. [5+5]
- OR**
- 3.a) Describe about Bus back bone and Star back bone architecture of networks.
 - b) Explain about physical, logical and port addresses. [5+5]
- 4.a) Explain functionality of TCP.
 - b) Describe IP addressing mechanisms. [5+5]
- OR**
- 5.a) Write principles of internetworking.
 - b) Explain congestion control in TCP. [5+5]
- 6.a) Explain open loop congestion control mechanism in detail.
 - b) Describe the characteristics of data flow. [5+5]
- OR**
- 7.a) Explain any two techniques to improve QoS.
 - b) Discuss integrated services of Quality of Service. [5+5]

- 8.a) Explain passive buffer management scheme.
b) Describe Drop front queue management. [5+5]

OR

- 9.a) Discuss Random Early Detection algorithm.
b) Explain features of RED. [5+5]

- 10.a) Write the services of SCTP.
b) Explain the packet format of SCTP. [5+5]

OR

- 11.a) Write about error control mechanism in SCTP.
b) Explain snooping TCP. [5+5]

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Use of Papers March-2024