

Code No: 115DT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, March - 2017

COMPUTER NETWORKS

(Common to CSE, IT)

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) What is the use of datalink layer ? [2]
- b) What is ARP? Explain. [3]
- c) Explain about Broadcast link. [2]
- d) Give the classification of multiple access protocols. [3]
- e) Write any two services network layer provides to transport layer. [2]
- f) Explain about datagram and virtual circuit. [3]
- g) What is internetworking? [2]
- h) List out the internetworking devices. [3]
- i) What is the role of UDP in internet transport protocol? [2]
- j) What is TELENET? [3]

PART-B

(50 Marks)

- 2. Explain about various transmission media in physical layer with a neat sketch. [10]
- OR**
- 3. Elaborate on the design issues of data link layer. [10]
- 4. Write in detail on Time-Division Multiplexing and Frequency-Division Multiplexing with an example for each. [10]
- OR**
- 5. Write and explain about various multiple access protocols. [10]
- 6. Explain the Optimality Principle with a suitable example. [10]
- OR**
- 7. Explain distance vector routing algorithm. [10]
- 8. What happens when large packet wants to travel through network with smaller maximum packet size? Explain. [10]
- OR**
- 9. Explain tree-structured numbering scheme. [10]
- 10. Explain about RPC with a neat sketch. [10]
- OR**
- 11. What is DNS? What are the services provided by DNS and explain how it works. [10]