

Code No: 117BY**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, March - 2017****COMPUTER NETWORKS****(Common to ECE, EIE, BME)****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) How selective repeat protocol resolves issues of stop and wait protocol? [2]
- b) What are the applications of Infrared waves? [3]
- c) Mention some of the physical properties of Ethernet. [2]
- d) Explain the function of repeaters. [3]
- e) What are the metrics used by routing protocols. [2]
- f) How does netid differ from a network address. [3]
- g) Explain briefly about Crash recovery. [2]
- h) Explain about Packet Fragmentation. [3]
- i) What are the basic functions of email systems? [2]
- j) What are the two main categories of DNS messages? [3]

Part-B (50 Marks)

- 2.a) Explain about the Coaxial Cable with neat sketch. [2]
- b) What is bit and byte stuffing explain with an example. [5+5]

OR

- 3.a) Explain the frame format of PPP. [2]
- b) Draw the layered architecture of the OSI reference model and write two services provided by each layer of the model. [5+5]
- 4.a) Explain the flow diagram of CSMA/CD. [2]
- b) Explain about the source routing bridge. [5+5]

OR

- 5.a) Explain about channelization protocols. [2]
- b) Explain the categories of standard Ethernet. [5+5]
6. Explain about the Distance Vector routing protocol with an example. [10]

OR

7. Explain about the Link State routing algorithm. [10]
8. Explain about DHCP. [10]

OR

- 9.a) Explain about CIDR. [2]
- b) Explain about RARP. [5+5]

10. Explain the various fields of the TCP header with the help of a neat diagram. [10]

OR

- 11.a) Explain about the window management in TCP. [2]
- b) Explain about HTTP request. [5+5]

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