R13

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.
 b) What is bit and byte stuffing explain with an example. [5+5]

OR

3.a) Explain the frame format of PPP.
 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.
 b) Explain about the source routing bridge. [5+5]

OR

5.a) Explain about channelization protocols.
 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.
 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.
 b) Explain about HTTP request. [5+5]

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