



Code No: 823AE

R15**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA III Semester Examinations, January - 2018****COMPUTER NETWORKS****Time: 3hrs****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**5 × 5 Marks = 25**

- 1.a) Write about TCP/IP reference model. [5]
- b) Discuss the internetworking devices Hub, Router and Gateway. [5]
- c) Explain flooding routing algorithm. [5]
- d) Explain the use of tunneling. [5]
- e) What is HTTP and explain its request methods? [5]

PART - B**5 × 10 Marks = 50**

2. Discuss data link layer design issues. [10]
- OR**
- 3.a) Explain selective repeat sliding window protocol with an example. [5+5]
- b) Discuss about Internet standards.
- 4.a) Explain frame format of IEEE 802.3 standard Ethernet. [5+5]
- b) Explain working of CSMA/CD.
- OR**
5. Explain various ALOHA protocols. [10]
- 6.a) What is meant by congestion control? How it is implemented in network layer. [5+5]
- b) Discuss about various congestion control algorithms in detail.
- OR**
7. Explain distance vector routing algorithm with example. [10]
8. Explain in detail about crash recovery. [10]
- OR**
- 9.a) Explain IPV6 header format with the help of a neat diagram. [5+5]
- b) Discuss about RARP.
- 10.a) Explain TCP connection management. [5+5]
- b) Explain TCP congestion control.
- OR**
- 11.a) Explain DNS. [5+5]
- b) What are the services provided by DNS and explain how it works.

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