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III/IV B.Tech (Supplementary) DEGREE EXAMINATION

April, 2017	**Information Technology**
Fifth Semester	**Data Communications &Computer Networks**
Time: Three Hours	**Maximum :** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1. Answer all questions (1X12=12 Marks)
   a. What is an interface?
   b. What do you mean by bitstuffing?
   c. What is the difference b/n LAN and WAN?
   d. Name any three methods of error detection
   e. What is the functionality of a router?
   f. What is flooding?
   g. What is the purpose of a choke packet?
   h. Define adaptive routing.
   i. Difference between packet switching and circuit switching.
   j. What is the drawback of UDP protocol?
   k. What is the purpose of a RPC
   l. Define MIME

UNIT I

2.a	Discuss in detail about communication model with neat sketch	6M
2.b	Explain about error correction techniques.	6M

(OR)

3.a	Explain in detail about OSI model protocol architecture with neat sketch.	8M
3.b	Briefly discuss High level data link control protocol	4M

UNIT II

4.a	Discuss in detail about circuit switched networks.	6M
4.b	Explain about hierarchical routing	6M

(OR)

5.a	Explain in detail about congestion control in virtual-circuit subnets.	6M
5.b	Draw and explain IPV4 Packet header format	6M

UNIT III

6.a	Write short notes on Berkeley Sockets.	4M
6.b	Discuss in detail about TCP flow control and buffering	8M

(OR)

7.a	Explain about real-time transport protocols.	6M
7.b	Explain in detail about TCP connection management.	6M

UNIT IV

8.a	Discuss in detail about DNS resource records.	6M
8.b	Explain about Simple mail transfer protocol.	6M

(OR)

9.a	Explain in detail about Hyper Text Transfer protocol	6M
9.b	Differentiate static web documents and dynamic web documents.	6M