B.E.(with Credits)-Regular-Semester 2012-Information Technology Sem VII
IT - Computer Networks

P. Pages : 2

Time : Three Hours

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2091

GUG/S/18/6604

Max. Marks : 80

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Notes :   1.   Same answer book must be used all questions.
          2.   All questions carry marks as indicted.
          3.   Due credit will be given to neatness and adequate dimensions.
          4.   Assume suitable data wherever necessary
          5.   Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Define Computer Networks? Discuss the origin of computer networks using ARPANET. **8**

     b) Explain TCP/IP Reference in detail. **8**

OR

2. a) What is a layered architecture? Explain the foundations laid for a layered architecture? Discuss the layered structure of ISO-OSI model. **12**

     b) Differentiate between connection oriented & connectionless services. **4**

3. a) Explain IEEE 802.5 TOKEN RING. **10**

     b) What is MAC layer? Explain the Channel Allocation using ALOHA & slotted ALOHA. **6**

OR

4. a) What are CSMA protocols? Compare.
         1-Persistence, Non-Persistence & P - Persistence protocols. **8**

     b) Write a note on ISDN Architecture. **8**

5. a) What are the basic functionalities of Data Link layer? Explain the various Framing techniques. **8**

     b) What is Error control? Explain Hamming Distance code with an example. **8**

OR

6. a) Discuss One Bit sliding Window protocol with an example. **8**

     b) Explain Go Back N protocol. **8**

7. a) Explain in detail the concept of congestion. Explain the leaky Bucket algorithm for congestion control. **8**

     b) What is IP Addressing? How is it classified? Explain the various classes of IP addresses. **8**

OR

8.	a)	What is Routing? What are Adaptive & Non Adaptive routing techniques? Explain shortest path Dijshow Algorithm.	**8**
	b)	Write a note on IP Header.	**8**
9.	a)	Explain in detail the Quality of services of Transport Layer.	**8**
	b)	Write a note on TCP Header.	**8**

OR

10.	a)	Why Transport protocols like TCP & UDP are called end to end protocols. What is the difference between them.	**8**
	b)	Write a note on DNS.	**8**

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