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CS-68

03167

BACHELOR IN COMPUTER APPLICATIONS

Term-End Examination

June, 2012

CS-68 : COMPUTER NETWORKS

Time : 3 hours *Maximum Marks : 75*

Note : *Question **one** is **compulsory**. Attempt **any three** from the rest.*

1. (a) Explain the characteristics of Baseband and Broadband coaxial cables. **5**

(b) What is the purpose of a DNS , when we can directly use an IP address ? If a DNS domain name is AAA.BBB.Com , how many labels are involved here ? What is the lowest level domain and what is the highest level domain in the above mentioned domain name ? **5**

(c) Explain the process of connection establishment and multiplexing in the transport layer protocol. **5**

(d) Explain the functioning of 7 layers of OSI model. Write any three stengths of OSI model. **10**

(e) Explain the classes of service defined for ATM. Give an example for each service class. **5**

2. (a) Explain different categories of network. That is LAN, WAN and MAN. Also, explain a protocol associated with each of the LAN, WAN and MAN. **10**

(b) Explain the function of a modem. What are the modulation techniques used in modems ? **5**

3. (a) Explain the function of transparent bridges. Also, write any three advantages and two disadvantages of transparent bridges. **10**

(b) Why does congestion occur in data networks ? **5**

4. (a) Define data rate and signal rate. An analog signal carries 4 bits per signal. If 1000 signal elements are sent per second, then what will be the bit rate. **8**

(b) What are the two sliding windows protocols ? How do they work ? Explain. **7**

5. (a) Define Virtual circuit and datagram. Also, differentiate between virtual circuit subnet and datagram subnet. **10**

(b) What are the two popular approaches to packet switching ? Explain any one of them. **5**
