CS-68

BACHELOR IN COMPUTER APPLICATIONS

00320

Term-End Examination

December, 2010

CS-68 : COMPUTER NETWORKS

Time : 3 hours   *Maximum Marks : 60*

*Note :   Question 1 is **compulsory**. Answer **any two** from the rest.*

1.   (a)   Write the name of OSI layer(s) is responsible   5
           for each of the following :
           *   Framing.
           *   Data encoding.
           *   Data encryption.
           *   Routing.
           *   Process-to-process communication.

     (b)   Match the following to network devices :   5
           *   Translates one MAC protocol to
               another.
           *   Amplify the signal.
           *   Used to perform Bridges functions as
               well as point to point dedicated
               connections.

- Used to interconnect various incoming connections with different outgoing connection.
- Modulation/demodulation.

(c) Why is Quality of service (Q.S) required in network communication ? **2**

(d) Explain the operation of Go Back N with the help of a diagram. **5**

(e) List any three differences between hub and switch. **3**

(f) Differentiate between virtual circuit and datagram subnet. **5**

(g) Differentiate among LAN, MAN and WAN in terms of, topology and Technology used by each network. **5**

2. (a) Draw the ATM protocol model and describe the functions performed by each layer. **5**

(b) Compare between token Bus, and token Ring protocols. **5**

(c) Differentiate between OSI Reference model and TCP/IP model. **5**

3. (a) Briefly describe the use of each field of TCP header. **7**

(b) Differentiate between connection oriented and connectionless services. **4**

(c) Write the advantages of small and fixed size cells.   4

4. Differentiate between the followings :   15

(a) Router and gateway.

(b) Packet and cell switching.

(c) Upward and Downward multiplexing.

5. (a) What is DNS ? What type of naming scheme is used in DNS ? Explain with examples.   4

(b) Describe the characteristics of broad band coaxial cable.   5

(c) Explain Open Shortest Path First (OSPF) routing protocol.   6

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