DIPLOMA – VIEP – COMPUTER SCIENCE AND ENGINEERING (DCSVI)

00601   **Term-End Examination**
June, 2014

BICSE-006 : ELECTIVE-COMPUTER NETWORKS

Time : 2 hours   *Maximum Marks : 70*

*Note : Answer any **five** questions. Question no. 1 is compulsory. All questions carry equal marks.*

1. (a)   The other name of a LAN card is   *2×7=14*

   (i)   Modem

   (ii)   NIC

   (iii)   Internet card

   (iv)   Network connector

   (b)   Which of the following items is *not* used in LAN ?

   (i)   Computer

   (ii)   Cable

   (iii)   Modem

   (iv)   Printer

(c) A device that forwards data packets from one network to another is called a

    (i) Bridge

    (ii) Switch

    (iii) Hub

    (iv) Gateway

(d) The network 110·80·40·1 is

    (i) Class A Network

    (ii) Class B Network

    (iii) Class C Network

    (iv) Class D Network

(e) Digital Signature is

    (i) Scanned Signature on computer

    (ii) Code Number of the sender

    (iii) Public Key Encryption

    (iv) Software to recognize Signature

(f) Working of the WAN generally involves

    (i) Satellite

    (ii) Frame delay

    (iii) ATM

    (iv) All of above

(g) Telnet is a

    (i) Network of Telephones

    (ii) Television Network

    (iii) Remote login

    (iv) All of above

2. (a) Discuss the important design issues for various layers. 7

(b) Distinguish between TCP/IP and OSI Reference Models. 7

3. (a) Define Framing. Explain any two methods of Framing with example. 7

(b) Explain about the frame format of PPP. 7

4. (a) Discriminate between the Send window and Receive window for link and show how are they related with 7

(i) Go-Back-N Control Scheme.

(ii) A Selective Repeat ARQ Scheme.

(b) Explain about role of minimum distance in error correction and detection. 7

5. (a) Define Switching. Distinguish between packet and circuit switching and also discuss about virtual circuit switching. 7

(b) Explain the header format of IPv4 and IPv6. 7

6. (a) Explain about the TCP transmission policy, and congestion control. 7

(b) Explain about the various fields of TCP header with the help of neat diagram. 7

7. (a) What is the function of SMTP ? Differentiate between user agent (UA) and mail transfer agent. 7

   (b) State and explain about various types of HTTP Messages. 7

8. Explain any *four* parts from the following : $4 \times 3\frac{1}{2} = 14$

   (a) HDLC

   (b) CSMA/CD

   (c) ATM

   (d) QOS

   (e) Mobile IP

   (f) MIME