BICS-031

DIPLOMA – VIEP – COMPUTER SCIENCE AND ENGINEERING (DCSVI)/ADVANCED LEVEL CERTIFICATE COURSE IN COMPUTER SCIENCE AND ENGINEERING (ACCSVI)

Term-End Examination

June, 2016

00706

BICS-031 : BASICS OF NETWORKING

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt any five questions. Each question carries equal marks.*

1. (a) What are the main functions of the network layer in OSI model ? 7

    (b) Describe TCP/IP model in Computer Communication network. 7

2. (a) Differentiate between twisted pair, coaxial cable and fiber optics. 7

    (b) What is meant by Simplex and Half-duplex communication systems ? Give representative examples of each. 7

3. (a) Describe the process of printer sharing and file sharing in a network. 7

    (b) Explain the functions of gateway and bridge in a network. 7

4. (a) Define the term Router. Describe it with the help of an example. 7

(b) How does the transport layer ensure that the complete message arrives at the destination and in the proper order ? 7

5. (a) Define a protocol. What are the functions of ICMP and PPP ? 7

(b) Explain IP Addressing in detail. Differentiate between Registered and Unregistered Addressing. 7

6. (a) Briefly describe the various classes of IP addresses. 7

(b) Describe the operation of ARP in detail. 7

7. Write short notes on any *four* of the following : $4 \times 3\frac{1}{2} = 14$

(a) DSL

(b) HTTP

(c) SLIP

(d) Subnet Masking

(e) Handshaking