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

Term-End Examination

December, 2013

BICS-031 : BASICS OF NETWORKING

Time : 2 hours   *Maximum Marks : 70*

Note :   Attempt any five questions. Each carry equal marks.

1. (a) What are the three fundamental characteristics that determine the effectiveness of a data communication system ?   **7**

    (b) Differentiate between OSI and TCP/IP reference models.   **7**

2. (a) Categorize the five basics topologies in terms of line configuration.   **7**

    (b) Explain the Hamming code using a suitable example.   **7**

3. (a) What is the purpose of subnetting in IP addressing ? Justify your answer.   **7**

    (b) Differentiate between static and dynamic routing algorithms.   **7**

4. (a) Name the advantages of optical fibre over twisted pair and co-axial cables.   **7**

    (b) What is framing ? Discuss the different methods used for framing.   **7**

5. (a) What is the header format of UDP ? **7**
    Describe the protocol with suitable diagram.

   (b) Compare the CSMA protocols with **7**
    ALOHA protocols used in MAC layer.

6. (a) List various congestion control algorithms **7**
    used in Network layer. Explain any one.

   (b) Explain the structure of PSTN. **7**

7. Write short notes on **any two** : **7x2=14**
   (a) Satellite communication
   (b) Circuit Switching
   (c) HUB
   (d) DNS
   (e) Firewall