BICS-027

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

Term-End Examination

December, 2015

BICS-027 : COMPUTER ORGANISATION

Time : 2 hours   *Maximum Marks : 70*

*Note : Question no. 1 is **compulsory**. Attempt any **four** questions from the remaining. All questions carry equal marks.*

1. (a)   There are 6 layers in TCP/IP.

    (i)   True

    (ii)   False

    (b)   In a star topology, various computers are attached to different points.

    (i)   True

    (ii)   False

(c) The number of bits in an ASCII code is

  (i) 4

  (ii) 6

  (iii) 7

  (iv) 8

(d) 2's complement of 0101 is

  (i) 0111

  (ii) 1001

  (iii) 1011

  (iv) 1110

(e) In Bus/Tree topology, the bus is used as a carrier for data packets.

  (i) True

  (ii) False

(f) BCD code is also known as 8-4-2-1 code.

  (i) True

  (ii) False

(g) FTP stands for

  (i) File Travel Protocol

  (ii) Fixed Transfer Protocol

  (iii) Float Transfer Protocol

  (iv) File Transfer Protocol   *7×2=14*

2. (a) Explain different complementing schemes and then compare them.   7

    (b) What are the advantages and disadvantages of time sharing system ?   7

3. (a) Explain the importance of binary number system in computers and explain the procedure of converting decimal numbers to any other number system.   7

    (b) Explain the features of RTOs.   7

4. (a) What are the major functions of network operating system ?   7

    (b) What do you mean by TCP/IP ? Why is it important for internet users ?   7

5. (a) What is meant by FTP service ? Under what circumstances would you like to use FTP ?   7

    (b) What are the differences between multiprocessing and multiprogramming ?   7

6. (a) Explain how computers are being used in banking and financial institutions.   7

    (b) Explain excess code-3 code. Why is it called a self-complementing code ?   7

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

(a) Data Communication Equipment

(b) Classification of Computers

(c) Network Topology

(d) Integer and Floating Point Representation

(e) World Wide Web

(f) Remote Sensing