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

Term-End Examination

00479

June, 2015

BICS-027 : COMPUTER ORGANISATION

Time : 2 hours   *Maximum Marks : 70*

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

1. (a) The brain of any computer system is $7 \times 2 = 14$

   (i) ALU

   (ii) Memory

   (iii) Control Unit

   (iv) None of the above

   (b) Which of the following is the 1's complement of (10) ?

   (i) 01

   (ii) 11

   (iii) 10

   (iv) None of the above

(c) The binary system uses powers of

(i) 2

(ii) 10

(iii) 8

(iv) 16

(d) There are 7 layers in TCP/IP. (True /False)

(e) Mnemonics are used in high level languages. (True/False)

(f) LAN is a set of client computers connected to one or more servers through either cable or wireless connection. (True/False)

(g) ASCII stands for American Standard Code for Information Interchange. (True /False)

2. (a) How are computers classified ? How are they different from one another ? 7

(b) What is the difference between System Software and Application Software ? 7

3. (a) What is a bit ? Explain briefly volatile and non-volatile memory. 7

(b) What are the advantages and disadvantages of Machine Language and Assembly Language ? 7

4. (a) What do you mean by Network topology ? Explain the different topologies in detail.   7

(b) Differentiate between LAN and WAN.   7

5. (a) Define Operating System. Why do we need an operating system ?   7

(b) What is the concept of the following types of operating systems ?   7

(i) Single program operating system

(ii) Multi-program operating system

(iii) Multi-processing operating system

6. (a) What are the applications of computers in Medical Science ?   7

(b) Explain how computers are being used in Educational and Financial Institutions.   7

7. (a) What is Internet ? List the important usages of Internet.   7

(b) What do you mean by input devices for a computer ? Discuss the various types of input devices.   7

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

(a) EBCDIC Code

(b) On-line and Real Time Operating System

(c) TCP/IP

(d) Internet Chatting

(e) Decision Support System

(f) Fourth Generation Languages