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

Term-End Examination

December, 2014

00326

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) A computer program that converts assembly language to machine language is   *7×2=14*
    (i)   Compiler
    (ii) Interpreter
    (iii) Assembler
    (iv) None of the above

    (b) The symbols used in an assembly language are
    (i)   Codes
    (ii) Mnemonics
    (iii) Assembler
    (iv) None of the above

(c)   A device which is used to convert digital signals into analog signals :

   (i)   Modulator

   (ii)   Demodulator

   (iii)   Modem

   (iv)   Decoder

(d)   TCP/IP has three layers.
   (True/False)

(e)   A group of eight bits is known as a Nibble.
   (True/False)

(f)   The ASCII code for letter A is 1000001.
   (True/False)

(g)   Instructions given in a program do not define any actions for the computer.
   (True/False)

2.   (a)   What is the difference between Digital, Analog and Hybrid Computers ?   7

   (b)   Differentiate between Micro Computers and Mainframe Computers.   7

3. (a) What are the major differences between Machine language and High level language ? 7

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

4. Explain the following : $4 \times 3\frac{1}{2} = 14$

   (a) Batch processing

   (b) Multi-programming

   (c) Time sharing

   (d) Multi-processing

5. (a) What do you mean by computer networking ? What are the advantages of computer network ? 7

   (b) Define Network Protocol. What is the need of protocols ? Explain. 7

6. (a) What are the different applications of computers in business ? Explain in detail. 7

   (b) Explain the different types of memories. Differentiate between RAM and ROM. 7

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

   (b) What is the role of an output unit ? Discuss the various types of output devices. 7

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

(a) BCD Code

(b) Floating Point Representation

(c) Gray Code

(d) Internet

(e) Network Topologies

(f) Network Operating System

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