BICS-030

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

Term-End Examination

December, 2016

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BICS-030 : 'C' PROGRAMMING

Time : 2 hours *Maximum Marks : 70*

*Note : Attempt any **five** questions. Question no. 1 is compulsory.*

1. Choose the correct option. 7×2=14

   (a) Programming language 'C' is a

   (i) Low level language

   (ii) Middle level language

   (iii) High level language

   (iv) None of the above

(b) Which of the following is an invalid variable ?

(i) Sum

(ii) Total

(iii) Interest rate

(iv) Name

(c) char data type will take _____ to store a variable.

(i) 1 byte

(ii) 2 bytes

(iii) 4 bytes

(iv) None of the above

(d) Array is a collection of

(i) Different data types

(ii) Similar data types

(iii) Both (i) and (ii)

(iv) None of the above

(e) How many times is a do ... while loop guaranteed to loop ?

(i) 0

(ii) Infinitely

(iii) 1

(iv) None of the above

(f) 'C' is developed by

(i) James Gosling

(ii) Dennis Ritchie

(iii) Bjarne Stroustrup

(iv) None of the above

(g) int data type will take

    (i)   1 byte

    (ii) 2 bytes

    (iii) 4 bytes

    (iv) None of the above

2. (a) Differentiate between the following :   *8*

    (i)   Identifier and Keyword

    (ii) Constant and Variable

    (iii) printf() and scanf()

    (iv) '\n' and '\t'

(b) Write a program to print the size of various data types.   *6*

3. (a) The temperature of a city is given in °F. Write a 'C' program to convert it into °C (where °F denotes Fahrenheit and °C denotes Centigrade).   *7*

(b) Two numbers are input through the keyboard into locations A and B. Write a program to interchange the content of A and B.   *7*

4. (a) What is a Primary Key ? How does it differ from a Candidate Key ? Explain with suitable example.   *7*

(b) Write a 'C' program to find the factorial of any number.   *7*

5. (a) Write a program to generate the following series : 7

(0, 1, 1, 2, 3, 5, 8, 13, 21, 34)

(b) Write a program in 'C' to print the following output : 7

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

6. (a) Explain the importance of 'C' in the core engineering. 7

(b) Write a program to find the multiplication of two matrices. 7

7. (a) Write a program to count the number of words in a given text file. 7

(b) Write a program to remove all blank lines from a file. 7

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

(a) Need for Information Storage
(b) Business Data Processing
(c) CAE
(d) CAI
(e) Break and Continue
(f) Switch Statement