

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

Term-End Examination

June, 2016

00826

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) Which of the following translators converts high level language to machine level language ?
- (i) Compiler
 - (ii) Assembler
 - (iii) Interpreter
 - (iv) Preprocessor

- (b) Which of the following is a valid variable ?
- (i) int
 - (ii) float
 - (iii) for
 - (iv) average
- (c) Int data type will take _____ to store a variable.
- (i) 1 byte
 - (ii) 2 bytes
 - (iii) 4 bytes
 - (iv) None of the above
- (d) How many elements will be there in A [10] [5] ?
- (i) 50
 - (ii) 10
 - (iii) 5
 - (iv) 15
- (e) A file is a collection of
- (i) Files
 - (ii) Identifiers
 - (iii) Related records
 - (iv) None of the above
- (f) 'C' was developed by
- (i) James Gosling
 - (ii) Dennis Ritchie
 - (iii) Stroustrup
 - (iv) None of the above

- (g) A function which calls itself is known as
- (i) Recursion
 - (ii) Call by value
 - (iii) Call by reference
 - (iv) None of the above
2. (a) Define Information. Explain information storage and retrieval with a suitable example. 7
- (b) What do you mean by DBMS ? Explain the various advantages of database. 7
3. (a) What is data type in 'C' ? Explain the different data types with examples. 7
- (b) Differentiate between the following : 7
- (i) While and do-while loop
 - (ii) If-else and switch statement
4. (a) Write a 'C' program to print the following outputs : 8
- ```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```
- (b) Write a program in 'C' to check if a given number is a leap year or not. 6

5. (a) Two numbers are entered through the keyboard. Write a program to find the value of one number raised to the power of another. 7
- (b) Write a program to print all the ASCII values and their equivalent characters. 7
6. (a) What is the importance of 'C' in the core engineering? Explain. 7
- (b) Write a program in 'C' to find the transpose of a matrix. 7
7. (a) Define data processing. Differentiate between commercial and business data processing applications. 7
- (b) Write a 'C' program to count the number of lines in a file. 7
8. Write short notes on any *four* of the following :  $4 \times 3 \frac{1}{2} = 14$
- (a) Array
- (b) Candidate Key
- (c) CAD
- (d) CAM
- (e) Operators
- (f) Basic Structure of 'C' Program