

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

00057

Term-End Examination

December, 2017

BICS-030 : 'C' PROGRAMMING

Time : 2 hours

Maximum Marks : 70

Note : *Question no. 1 is compulsory. Attempt any four questions from the rest.*

1. Choose the correct option for the following multiple choice questions : $7 \times 2 = 14$
- (a) In C programming language, what is used to convert source code into binary code ?
- (i) Compiler
 - (ii) Assembler
 - (iii) Interpreter
 - (iv) None of these
- (b) Which of the following is a valid bit-wise operator in C ?
- (i) & &
 - (ii) <
 - (iii) &
 - (iv) ==

- (c) Which of the following is the right way to initialize an array ?
- (i) `int MARKS { } = {20, 25, 21, 18, 24}`
 - (ii) `int MARKS {5} = {20, 25, 21, 18, 24}`
 - (iii) `int MARKS [5] = {20, 25, 21, 18, 24}`
 - (iv) None of these
- (d) A _____ in a table represents a relationship among a set of values.
- (i) row
 - (ii) column
 - (iii) key
 - (iv) attribute
- (e) To insert data in a table, which SQL command is used ?
- (i) INSERT
 - (ii) UPDATE
 - (iii) SELECT
 - (iv) CREATE
- (f) Which of the following is a user defined data type ?
- (i) int
 - (ii) float
 - (iii) char
 - (iv) enum

- (g) How many values will be stored in array
int MAX [10] [10] ?
- (i) 20
 - (ii) 100
 - (iii) 200
 - (iv) None of these
2. (a) What is Information ? Explain the advantages of storing information with example. 7
- (b) What is DBMS ? Explain the basic features of DBMS. 7
3. (a) What is Operator ? Explain logical and arithmetic operators in C. 6
- (b) Write a C program to store marks of 20 students in a mathematics course. Also find the average marks of the mathematics course. 8
4. (a) Write a C program to find the grade of students on the basis of the following details :
 Grade A for marks 80 and above
 Grade B for marks 61 to 79
 Grade C for marks 40 to 60
 Grade F for marks less than 40
 Make the necessary assumptions required. 8
- (b) Write a C program to find the square root of a given number. Display the appropriate message if the number is not a perfect square. 6

5. (a) Explain with examples, different data types in C. 7
- (b) Write a C program to read a character in lower case and convert it into upper case. 7
6. (a) Explain the use of C language in the study of electrical engineering. 7
- (b) What is CAD ? Explain how it is different from CAM. 7
7. (a) Explain the use of Case statement with the help of an example program. 7
- (b) Write a C program to find whether a given number is even or odd. 7
8. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Primary Key
- (b) CAE
- (c) While Loop in C
- (d) CIM
- (e) SQL
- (f) Two-Dimensional Array
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