DIPLOMA IN COMPUTER SCIENCE AND TECHNOLOGY (DCSVI)

01974

Term-End Examination

June, 2011

BICS-030 : 'C' PROGRAMMING

Time : 2 hours   *Maximum Marks : 70*

*Note : Attempt **any five** questions. Each question **carry equal** marks. First question is **compulsory**.*

1. (a)   The range of unsigned int is :   **2x7=14**
       (i)   0 − 65535
       (ii)   − 32768 to 32767
       (iii)   0 − 255
       (iv)   − 128 to 125

    (b)   Every statement in 'C' ends with :
       (i)   colon   (ii)   semicolon
       (iii)   dot   (iv)   '\n'

    (c)   What is the output of the following code int a; i = 5;
       $a = + + i + i + +;$
       printf("%d%d", a, i);
       (i)   12, 6   (ii)   11, 7
       (iii)   12, 7   (iv)   10, 7

    (d)   If is a :
       (i)   variable   (ii)   keyword
       (iii)   identifier   (iv)   none

(e) Array is of which type :

    (i)   non-linear   (ii)   linear

    (iii) primitive   (iv) none

(f) What is the output of the following code

int a; $i = 15$;

$a = -15\% - 20$;

printf ("%d", a);

    (i)   15   (ii)   0

    (iii) -15 (iv) -3

(g) do - while loop is :

    (i)   Entry control loop

    (ii) Exit control loop

    (iii) both (i) and (ii)

    (iv) none

2. (a) What is Information ? What is the need of information storage and retrieval ? Explain with suitable example.   **7**

   (b) What are key constraints ? Explain each key with suitable example.   **7**

3. (a) Write a program to check whether the given number is prime number or not.   **7**

   (b) Write the syntax of switch. How it differs from the If - else Ladder ?   **7**

4. (a) What is computer ? Write and explain the applications of computer. Computer is the combination of Hardware and software. Justify.   **7**

(b) Write a 'C' program for printing the output 7
as given below.

1
2 3
4 5 6
7 8 9 10

5. (a) What is Database management system ? 7
Explain the architecture of DBMS.

(b) What is array ? Write a program for the 7
addition of two matrices of order 3x3.

6. (a) Write a program to create a database file 7
having student name, Roll Number,
percentage, address and write a query to
get the record of those students who live in
Noida.

(b) What are data types ? Explain each data 7
type with example.

7. Explain the following in short : 2x7=14

(a) CAD
(b) CAM
(c) CAE
(d) CAI
(e) Software available for electrical engineering
(f) DML and DDL
(g) RDBMS