



DDD-1718

**B. Sc. (I.T.) (Sem. I) Examination**  
**March / April - 2016**  
**Programming in C**

Time : 3 Hours]

[Total Marks : 70

**Instruction :**

नीचे दृश्यावल नलशानीवाणी वलगतो उतारवडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. Sc. (I.T.) (SEM. 1)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="PROGRAMMING IN C"/>	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="7"/> <input type="text" value="1"/> <input type="text" value="8"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="NIL"/>	<input type="text"/>
	Student's Signature

- 1 Answer following questions : (any three) 18
- (i) Explain execution cycle of C program.
  - (ii) Differentiate between static and dynamic memory allocation. Explain malloc, calloc and realloc functions with example.
  - (iii) Explain nested structure with example.
  - (iv) Explain recursion with its advantages and disadvantages.
- 2 Answer following questions : (any three) 18
- (i) Write an UDF to compare two strings. Function should return 1 if both strings are equal, otherwise it should return 0.
  - (ii) Write a program to print Fibonacci series by using recursion.
  - (iii) Write a function to find the largest element of an m by n matrix.
  - (iv) Create a structure employee (eno, name, designation, salary). Write a program to display information of employee in descending order of salary.

**3** Answer following questions : (any three) **18**

- (i) Explain storage classes in C.
- (ii) What is an array ? Write an UDF to sort an array of 10 integers.
- (iii) Explain `getc()`, `getchar()` and `gets()` functions with example.
- (iv) Explain command line arguments with example.

**4** Answer following questions : (any eight) **16**

- (i) Explain difference between `&` and `&&` operator.
- (ii) List all escape sequences available in C language.
- (iii) Explain symbolic constants in C.
- (iv) Differentiate between `break` and `continue` statement.
- (v) How will you take string with whitespace using C ?
- (vi) Explain the use of `sizeof()` operator.
- (vii) Explain enumeration with example.
- (viii) What will be the output of the following code segment ?

```
main ( )
{
    char s[10];
    strcpy (s, "abc");
    printf ("%d %d, strlen(s), sizeof (s) );
}
```

(ix) What is the output of the following statement :  
`printf ("% -3d", 12345);`

(x) What is the output of the following statement ?

```
main ( )
{
    float y;
    y = 198.7361;
    printf ("%7.2f", y);
}
```