

**SECOND SEMESTER B.Sc. DEGREE (SUPPLEMENTARY) EXAMINATION  
MAY 2016**

(UG—CCSS)

Complementary Course

CS 2C 02—PROGRAMMING IN C

Time : Three Hours

Maximum : 30 Weightage

**Section A***Answer all questions.*

1. Which of the following is true for variable names in C ?
  - (a) They can contain alphanumeric characters as well as special characters.
  - (b) It is not an error to declare a variable to be one of the keywords (like goto, static).
  - (c) Variable names cannot start with a digit.
  - (d) Variable can be of any length.

2. What is the output of this C code ?

```
#include <stdio.h>
int main()
{
    int var = 010;
    printf("%d", var);
}
```

- |        |         |
|--------|---------|
| (a) 2. | (b) 8.  |
| (c) 9. | (d) 10. |

3. What is the output of the C code ?

```
# include <stdio.h>
Int main()
{
    Int i = 10;
    Int *p = &i;
    Printf("%d\n", *p++);
}
```

- |                    |                   |
|--------------------|-------------------|
| (a) 10.            | (b) 11.           |
| (c) Garbage value. | (d) Address of i. |

**Turn over**

4. Which of the following is not a keyword in C language.
- (a) Void. (b) Volatile.  
(c) Sizeof. (d) Getchar.
5. Square is a library function (True/False).
6. \_\_\_\_\_ is the arithmetic operator with lowest precedence.
7. Elements of the array are accessed by \_\_\_\_\_.
8. What is the output of the program ?

```
#include<stdio.h>

int main()
{ int x=40;
  { int x=20;
    printf("%d",x);}
  printf("%d",x);
  return 0;
```

- (a) 40,40. (b) 20,40.  
(c) 40,20. (d) error.
9. What is the result for the following declaration?
- ```
int array[] = {1, 2, 3, 4, 5 };
printf( "%d", &array[4] - &array[0] );
```
- (a) 4. (b) - 4.  
(c) 8. (d) - 8
10. A block of memory can be allocated using the function \_\_\_\_\_.
11. What is the meant by 'a' in the following operation ? `fp = fopen("Random.txt", "a");`
- (a) Attach. (b) Append.  
(c) Apprehend. (d) Add.

12. Getw() function is used to read \_\_\_\_\_.

(12 × ¼ = 3 weightage)

### Section B

*Answer all questions.*

13. What is a variable and what is meant by the value of a variable ?
14. What are the character set in C ?
15. What are derived data types ? Give examples ?
16. What is the general form of conditional operator ? Give an example.
17. How values are assigned to members of structure ?
18. Distinguish between printf() and fprintf() ?
19. Which are the various jumping control statements used in C ?
20. Define a structure ?
21. What is meant by dynamic memory allocation ?

(9 × 1 = 9 weightage)

### Section C

*Answer any five questions.*

22. Write any *three* control structures with examples.
23. Write a C program to arrange a set of numbers in descending order.
24. Using suitable example explain actual and formal arguments in C.
25. Write the syntax of for loop? Explain how the loop is get executed with an example.
26. Write a program to compute the sum of digits of a given integer number ?
27. Write a program to count the number of words in a string ?
28. Write a program to read data from keyboard and write it to a file called INPUT ?

(5 × 2 = 10 weightage)

**Turn over**

**Section D**

*Answer any two questions.*

29. Explain different types of operators available in C language with suitable examples.
30. (A) Write a program to merge two sorted array in to a single sorted array in ascending order.  
(B) Write a function to remove duplicates from an ordered array.
31. Explain the significance of user defined functions with example.

(2 × 4 = 8 weightage)