

B.Sc.(IT) Semester - 1 (CBCS) Examination**Nov/Dec - 2022 (OLD COURSE)****PROBLEM SOLVING METHODOLOGIES AND PROGRAMMING IN C(CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

- Question : 1 (A) Answer the following questions. (all four)** **04**
- (1) How many keywords are there in C Language?
 - (2) Define : scanf ()
 - (3) Who and when invented C Language?
 - (4) Give definition : Algorithm.
- Question : 1 (B) Answer the following question. (any one)** **02**
- (1) Explain C tokens.
 - (2) Draw all the symbols of flow chart with their meaning.
- Question : 1 (C) Answer the following question. (any one)** **03**
- (1) What is Data Type? Explain it in details.
 - (2) Draw a flow chart to check that given number is positive or negative or zero.
- Question : 1 (D) Answer the following question. (any one)** **05**
- (1) Write a short note on operator. Explain any two of them in detail.
 - (2) Difference between traditional C and modern C.
- Question : 2 (A) Answer the following questions. (all four)** **04**
- (1) List out loops available in C.
 - (2) Which loop is executed at least one time in any situation?
 - (3) If a=10; b=++a; then what is the value of a and b?
 - (4) Give syntax of : if...else condition
- Question : 2 (B) Answer the following question. (any one)** **02**
- (1) Explain shortly : switch case statement.
 - (2) What is break and continue statement?
- Question : 2 (C) Answer the following question. (any one)** **03**
- (1) Explain : while loop in details.
 - (2) Explain : for loop in details.
- Question : 2 (D) Answer the following question. (any one)** **05**
- (1) Write a short note on : ladder if else. Also give an example.
 - (2) Write a program to print following output.

```

1
2 3
4 5 6
7 8 9 10

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- Question : 3 (A) Answer the following questions. (all four)** **04**
- (1) Explain strlen() function.
 - (2) Explain strcpy() function.
 - (3) Explain clrscr() function.
 - (4) Explain getch() function.
- Question : 3 (B) Answer the following question. (any one)** **02**
- (1) What is library function? Explain it.
 - (2) What is pointer? Explain it.
- Question : 3 (C) Answer the following question. (any one)** **03**
- (1) Describe : User Defined Function. (U.D.F.) in C language and explain any one with example.
 - (2) What is recursion? Explain it.

Question : 3 (D) Answer the following question. (any one)	05
(1) Explain any five standard library functions available in c Language.	
(2) Give difference between call by value and call by reference in function.	
Question : 4 (A) Answer the following questions. (all four)	04
(1) Pointer variable can store the address of another variable. True or False.	
(2) Array is collection of different data type. True or False.	
(3) Which symbol is used to declare pointer variable?	
(4) In structure, the . (dot) operator is used for what?	
Question : 4 (B) Answer the following question. (any one)	02
(1) Explain advantages of array.	
(2) Explain limitations of array.	
Question : 4 (C) Answer the following question. (any one)	03
(1) Describe : structure	
(2) Describe : nested structure.	
Question : 4 (D) Answer the following question. (any one)	05
(1) Explain array and all its type with example.	
(2) Write a program to enter 5 values from keyboard and print sum, average, minimum and maximum value.	
Question : 5 (A) Answer the following questions. (all four)	04
(1) Define : ferror() function.	
(2) Define : fclose() function.	
(3) Define : feof() function.	
(4) Define : rename() function.	
Question : 5 (B) Answer the following question. (any one)	02
(1) Explain : text file and binary file.	
(2) Short note : File handling in C language.	
Question : 5 (C) Answer the following question. (any one)	03
(1) Describe : pointer to array	
(2) Describe : pointer to pointer	
Question : 5 (D) Answer the following question. (any one)	05
(1) Explain any five file handling functions available in c Language.	
(2) Explain use of pointer in dynamic programming.	
