

**D 74362**

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Name.....

Reg. No.....

**FIRST SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2014**  
(CUCBCSS-U.G)

Core Course

6BCA 1B 01 —PROBLEM SOLVING USING C

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer all questions.  
Each question carries 1 mark.*

1. The step by step procedure for solving a specific problem is called \_\_\_\_\_.
2. Source programs are translated into machine code by \_\_\_\_\_.
3. \_\_\_\_\_ are certain reserved words that have standard, predefined meanings in C.
4. What will be the output of the following printf statement  
printf("%d",10 and 2).
5. The \_\_\_\_\_ statements are used to execute a statement or a group of statements repeatedly until a test condition becomes false.
6. (10 > 3) ? printf ("A") : printf ("B") ; what is the output ?
7. \_\_\_\_\_ character is used represent the end of the string.
8. \_\_\_\_\_ is a collection of elements of same data type.
9. The \_\_\_\_\_ statement undefines a defined macro.
10. The \_\_\_\_\_ function gives the current position in the file.

(10 × 1 = 10 marks)

**Part B**

*Answer all question.  
Each question carries 2 marks.*

11. What is meant by compile time error ?
12. What do you mean by C tokens ?
13. What do you mean by exit control loop ?

14. What is recursion ?
15. What is the role of free() function in dynamic memory allocation ?

(5 × 2 = 10 marks)

### Part C

*Answer any five questions.  
Each question carries 4 marks.*

16. Write an algorithm to find whether a given number is prime or not.
17. Write a short note on symbolic constants.
18. Explain switch statement with example.
19. Distinguish between entry and exit controlled loops.
20. Write a C program to find the length of a string without using library functions.
21. Distinguish between union and structure.
22. What is conditional compilation ? How does it help a programmer ?
23. Write short note on fseek() function.

(5 × 4 = 20 marks)

### Part D

*Answer any five questions.  
Each question carries 8 marks.*

24. Describe the process of creating and executing a C program under Windows and Linux systems.
25. Explain bitwise operators used in C with example.
26. Explain operator precedence and associativity of C operators.
27. Explain break, continue and goto statements with suitable examples.
28. Write a C program to convert a number from decimal to octal.
29. Explain different categories of user defined functions in C.
30. Write a C program to copy a file. The name of source and destination files is to be given using command line arguments.
31. What do you mean by dynamic memory allocation ? Explain the library functions used for it ?

(5 × 8 = 40 marks)