D 74362 (Pages 2) 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 x 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 ?

Turn over

14. What is recursion ?

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

(5 x 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 x 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 x 8 = 40 marks)