**D 13797** (Pages : 2) Name.....

Reg. No.....

# FIRST SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2016

(CUCBCSS–UG)

Core Course

48

BCA 1B 01—PROBLEM SOLVING USING 'C'

Time : Three Hours Maximum : 80 Marks

## Part A

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

1. A program written by a programmer in a high level language is called ————.
2. The ———— is the result of a successful compilation process.
3. The comma operator is an example for ———— operator used in C.
4. If $x = 2, y = ++x$ then what is the value of $y$ ?
5. A loop completely embedded in another loop is known as ————.
6. The ———— statement provides an unconditional jump from one point to another in the same function.
7. Functions already declared and defined in C language libraries are known as ————.
8. What is the memory size of the following union ?

```
union A
{
    int a;
    float b;
};
```

9. The ———— function is used to modify the size of previously allocated space.
10. The ———— function is used to set the position of file pointer to the beginning of the file.

(10 × 1 = 10 marks)

## Part B

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

11. What is the importance of language translators in programming ?
12. What is the result of the expression 10>>2 ? Explain it.
13. Write short note on continue statement.

**Turn over**

14. What is a string ?

15. What do you mean by pre-processor directive ?

(5 × 2 = 10 marks)

## Part C

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

16. What is an algorithm ? Explain its characteristics.

17. Distinguish between implicit and explicit type casting.

18. Write a short note on logical operators in C.

19. Write a C program to print the reverse counting number from a given number.

20. Explain break and continue statements.

21. Explain actual and formal arguments of functions.

22. What do you mean by structure ? How it is initialized ?

23. What is pointer ? What are the advantages of pointers ?

(5 × 4 = 20 marks)

## Part D

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

24. Explain the basic structure of a C program.

25. Explain library functions used in I/O operators in C programs.

26. Explain different types of constants in C.

27. Explain entry and exit controlled loops in C with example.

28. Explain different forms of if statements used in C.

29. Write a C program to sort n numbers.

30. What do you mean by user defined functions ? What are the different components of a user defined function ?

31. Explain pre-processor directives in C.

(5 × 8 = 40 marks)