

**D 13797**

(Pages : 2)

Name.....

Reg. No.....

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

(CUCBCSS-UG)

Core Course

**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)