

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)