

Reg. No.....

Name.....

B.C.A. DEGREE END SEMESTER EXAMINATION OCTOBER/NOVEMBER 2017**SEMESTER –1: BACHELOR OF COMPUTER APPLICATIONS (BCA) (CORE COURSE)****COURSE: 16U1CRBCA2: PROGRAMMING IN 'C'***(Common for Regular 2017 admission and Supplementary/Improvement 2016 admission)*

Time: Three Hours

Max. Marks: 75

SECTION – AAnswer **all** Questions. Each question carries **1** mark

1. What is an interpreter?
2. Distinguish between variable and constants.
3. What are unary operators in C.
4. What is the purpose of the getchar function?
5. Write C program to find area of a circle.
6. List various bitwise operators in C.
7. Specify the use of goto statement.
8. Explain the use of enumeration.
9. Differentiate between pointer (*) and address (&) operators.
10. What are the advantages of using macro definition in a program? (1 x 10 = 10)

SECTION – BAnswer **any eight** Questions. Each question carries **2** marks

11. Draw a flowchart to find factorial of a number.
12. What is machine language? How does machine language differ from high level languages?
13. Describe various assignment operators in C.
14. What is register variable? Explain.
15. Write a program to find absolute value of a number.
16. Compare the while loop and do while loop.
17. Give the syntax of malloc , calloc and realloc functions?
18. What is a self-referential structure? Explain.
19. Explain fopen function and list file modes available in C.
20. Explain header files and library functions. (2 x 8 = 16)

SECTION – C

Answer **any five** Questions. Each question carries **5** marks

21. Write algorithm for linear search and binary search.
22. What is looping? Describe different forms of looping in C.
23. Explain the concept of call by value and call by reference with the help of example program.
24. What are the commonly used I/O functions in C? Explain.
25. Write a program using function to test whether a given string is palindrome or not.
26. With suitable example discuss pointer arithmetic in C.
27. Define structure and union. Also compare. (5 x 5 = 25)

SECTION – D

Answer **any two** Questions. Each question carries **12** marks

28. Explain different type of operators in C.
29. Give flowchart and C program to find maximum and minimum of n input numbers. Consider the case of negative numbers also.
30. Write a C program to perform bubble sort for sorting an array of strings.
31. Explain what are command line arguments? Write a C program which copy content of f1.dat to f2.dat using command line arguments. (12 x 2 = 24)
