C 82407

(Pages : 2)

Name...

Reg. No.....................................

SECOND SEMESTER B.A./B.Sc. DEGREE EXAMINATION, APRIL 2020

(CBCSS—UG)

B.C.A.

BCA 2B 02—PROBLEM SOLVING USING C

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer all the questions.
Each question carries maximum of 2 marks.
Ceiling 20 marks.

1. Why and when do we use the #define directive ?

2. What is a variable ?

3. What would be the value of a after execution of the following statements ? Explain.

   int a, b = 23 ;

   char c = 'a' ;

   a = b + c ;

4. What is comma (',') and size of operator ?

5. Explain with example the precedence of operators in arithmetic operations.

6. Write a program to enter a number and carry out modular division operation by 2, 3 and 4 and display the remainders in good format.

7. Explain formatted input statements in C.

8. How can we use conditional operator ? Explain.

9. What are the benefits of arrays ?

10. Distinguish between structure and union.

11. Define user defined functions.

12. What are strings ?

Turn over

Section B (Short Essay Type Questions)

Answer **all** *the questions.*
Each question carries 5 marks.
Ceiling 30 marks.

13. Explain the different data types used in C. How could we extend the range of values of basic data types represent ?

14. Write the general syntax and working of Switch statement in C Language.

15. What is sorting ? Write a program in C language to sort an array using bubble sort.

16. What do you mean by scope of a variable ? What are local and global variables ? Give examples.

17. Write a C program to find the factorial of a given number using recursion. Explain.

18. What is the use of pointers ? Discuss concept of declaration and initialization of pointers.

19. What is file ? What are their advantages ?

Section C (Essay Type Questions)

Answer any **one** *question.*
Question carries 10 marks.

20. a) Define character array. What is the use of character arrays ? (5 marks)

    b) Write a program to find the sum of two matrices using user defined functions ? Pass arguments. (5 marks)

21. What are the different categories of function with suitable examples ? (10 marks)