Code No. : A.C-193

Annual Examination, 2020

B.C.A. Part I

Paper 103

[Programming in C]

Time : Three Hours]   [Maximum Marks : 80

Note : *Section 'A', containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.*

Section 'A'

Answer the following very short answer type questions in one or two sentences.   **2×10=20**

1. List any four unary operators in C.

2. What are the rules of a naming a variable in C ?

3. Where is the break statement used in C ?

4. Declare a function with that takes two integers as argument and returns an integer pointer.

5. Name any four library functions of strings.

6. Declare a structure for storing the information of a student.

7. What is a void pointer ?

8. Which functions are used for dynamic memory allocation ?

9. What is the use of the function fseek ?

10. What is the advantage of using conditional compilation directives ?

Section 'B'

Answer the following short answer type questions with word limit 150–200. **4×5=20**

1. Explain the meaning of operator precedence with example.

Or

Write a C program to show the use of one of the relational and one of the logical operators.

2. Write a C program to read three integers and print the value of the largest of them.

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4. Explain the function malloc( ) for memory allocation with the help of an example.
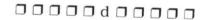
Or

Explain the operations that can be performed on pointers.

5. Write a C program to read the contents of a text file.

Or

Explain the use of command line arguments.

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Or

Write a C program to define a function that will take two integers and return their average.

3. What are structures ? Explain with example.

Or

Write a C program to reverse a string in C.

4. Explain the use of Pointers in C.

Or

Write a C program to display an array by passing it into a function.

5. Explain the following file handling functions :

(a) fopen

(b) fgetc

(c) fscanf

(d) feof

(e) fflush.

Or

What do you mean by preprocessor directives ? Give examples.

Section 'C'

Answer the following long answer type questions with word limit 300–350.   **8×5=40**

1. Explain all the relational operators in C.

Or

Write a C program to demonstrate the use of conditional operator in C.

2. Explain the difference between call by value and call by reference.

Or

Write a C program to display the factorial of any integer using a loop.

3. Write a C program to add two integer matrices of 2 rows and 3 columns.

Or

Explain the difference between structure and union with example.