

22/103-C
B.C.A. (First Semester)
Examination, 2022

Paper : Third

B.C.A. - 103

**(Programming Principles and
 'C' Language)**

Time : Three Hours / [Maximum Marks : 70

Note : Attempt questions from **all** sections as per instructions.

Section-A

(Very Short Answer Type Questions)

Note : Attempt **all** parts of this question in about 50 words. $1\frac{1}{2} \times 10 = 15$

1. (i) Define Algorithm.
- (ii) Define instruction and program.
- (iii) Describe about variable and constant.

P.T.O.

- (2)
(iv) What do you mean by Loop.
- (v) Write syntax of switch statement.
- (vi) How to initialize array.
- (vii) Describe about Nesting of function.
- (viii) Define pointer.
- (ix) Define structure.
- (x) Describe about file and Directory.

Section-B

(Short Answer Type Questions)

Note : Attempt **all** questions. Give answer of each question in about 200 words.

$7 \times 5 = 35$

2. Write a C program to perform addition of two numbers.

OR

Describe about History of C and basic structure of C programming.

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- (2)
- (iv) What do you mean by Loop.
 - (v) Write syntax of switch statement.
 - (vi) How to initialize array.
 - (vii) Describe about Nesting of function.
 - (viii) Define pointer.
 - (ix) Define structure.
 - (x) Describe about file and Directory.

Section-B

(Short Answer Type Questions)

Note : Attempt **all** questions. Give answer of each question in about 200 words.

7×5=35

2. Write a C program to perform addition of two numbers.

OR

Describe about History of C and basic structure of C programming.

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- (3)
3. Differentiate between Break and continue statements.

OR

- Write C program to calculate factorial of given number.
4. Write C program to calculate addition of two matrix.

OR

Define Array. How to initialize one and two dimensional array. Write advantages and disadvantages of array.

5. Define function prototype. Describe about function return value and their type.

OR

Write C program to print fibonacci series using function.

6. Explain Dynamic memory allocation.

OR

Describe about Error handling in file.

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P.T.O.

(4)
Section-C

(Long Answer Type Questions)

Note : Attempt any **two** questions in about 500 words. $10 \times 2 = 20$

- ✓ 7. Differentiate between structure and union with example.
8. Write C program to calculate prime number between 1 to 500.
- ✓ 9. Write C program to calculate sum of digit of any number using function.
- ✓ 10. Differentiate between for, while and do-while loop with example.
11. Define Operator. Describe about operator precedence and associativity of operators.