

B.C.A. Ist Semester Examination, 2023-24

PROGRAMMING IN C

Paper : BC-101

Time : 2 Hours]

[Max. Marks : 70

Note : Attempt any *five* questions. All questions carry equal marks.

1. (A) Explain the basic structure of a C program.
(B) Draw and explain flow chart for finding largest number out of three given numbers
2. (A) Explain the two way selection (if, if-else, nested if-else, cascaded ifelse) in C language with syntax.
(B) Explain the different types of loops in C with syntax and example.
3. (A) Write a program in C to find the area and perimeter of a circle.
(B) Explain the switch statement with syntax and example.
4. What is an array ? Explain the declaration and initialization of one and two dimensional arrays with example.

5. (A) What is call by value ? How it is different from call by reference ?
(B) Write and explain 'C' language program to implement the concept of call by value and call by reference.

6. (A) Write a program to take four integer values as input and print the average.

(B) Write a C program to swap two numbers.

7. Write a C function isprime(num) that accepts an integer argument and returns 1 if the argument is prime, a 0 otherwise. Write a C program that invokes this function to generate prime numbers between the given ranges.

8. (A) What is structure ? How it is different from union ?

(B) Write on the following :

- (i) Symbolic Constants
- (ii) C Tokens
- (iii) Role of data types in C language

