**UNIT I BASICS OF C PROGRAMMING**

**PART-A**

1. Write about features and applications of C?
2. Define the rules for writing identifier names in c?
3. List down the formatted and unformatted I/O functions available?
4. Define variable?
5. Define Data type and its types?
6. Define Operator and Operand? Give example?
7. How many bytes are occupied by the int, char, float, long int & double?
8. What is the difference between while and do while statement?
9. What is ternary Operator?
10. What is the difference between continue and break in C?

**PART-B**

1. Discuss in detail about various operators used in C with an example.
2. Explain briefly the formatted and unformatted I/O functions.
3. Write about types of Decision-making statements and discuss with example.
4. Explain a structure of a C program. What are the advantages and applications of C language?
5. Write a program for the following:

a) To check whether a number is prime or not.

b) To find the digits of a number.

c) To find the sum of first n integers.

d) To check whether a given number is a Armstrong number or not.

**UNIT II ARRAYS AND STRINGS**

**PART-A**

1. Define an Array and its Types with an Example.
2. Write the Difference between one dimensional and two-dimensional array.
3. Write the Syntax for declaring two dimensional arrays.
4. Why don’t we use the & symbol while reading string through scanf?
5. List out four predefined functions for string manipulation.
6. Write syntax for string declaration with an example
7. What is sorting? and why it is necessary?
8. What is linear search? Write its advantages and disadvantages
9. What is binary search? Write its advantages and disadvantages
10. How can you assign one array to another array?

**PART-B**

1. Explain string handling functions strcat(), strcpy() & strcmp()with syntax and example.
2. Writes notes on arrays and its types with example.
3. Explain about linear search and binary search in detail.
4. What is meant by sorting. Write a C program to implement selection sort.
5. Write a c program
6. To print an array in a reverse order.
7. To check the given string is palindrome or not.
8. To perform matrix addition
9. To count no of occurrences of a particular character in a string.