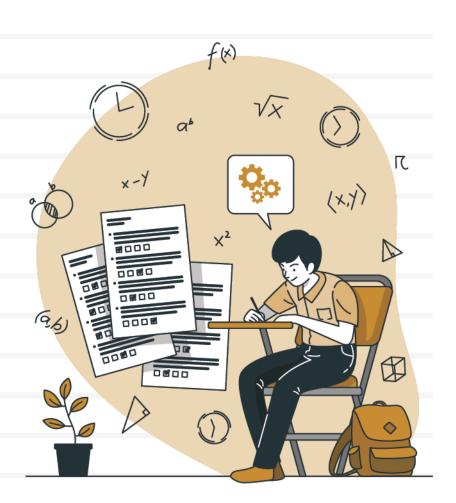# SUNSTONE

UNIT 1

Assignment 1–B

Assignment 1-B

Note: Attempt any two questions [10 Marks Each]

Q1. Investigate the impact of including unnecessary header files in a C program. Write a program that includes unnecessary header files, and analyze the resulting compilation time.

Q2. Develop a C program that simulates a simple calculator with a menu-driven interface using a switch statement. The program should allow the user to choose between addition, subtraction, multiplication, and division operations. Implement error handling for invalid input.

Q3. Compare the performance of different loop constructs (for loop, while loop, and do-while loop) in C programming by writing a program that performs a time-intensive operation using each loop construct. Measure and analyze the execution time for each loop.