

Department of Computer Science & Engineering

QUESTION BANK FOR I Semester (Term: Nov 2022- March 2023)

Principles of Programming Using C (PPC18)

TEST Hours: 02

TEST Marks = 10M

Integrated Laboratory: 20M

Continuous Evaluation (Regularity+ Record) = 10M

S.No	List of Programs: Principles of Programming Using C (PPC18)
1.	<ul style="list-style-type: none"> Write a C program to convert temperature given in Celsius to Fahrenheit and Fahrenheit to Celsius. Write a c program to calculate the area and circumference of a circle using PI as a defined constant.
2.	<ul style="list-style-type: none"> Write a C program to calculate the total sales given the unit price, quantity, discount and tax rate. Write a C program to calculate a student's average score for a course with 4 quizzes, 2 midterms and a final. The quizzes are weighted 30%, the midterms 40% and the final 30%.
3.	<ul style="list-style-type: none"> Write a C program to perform a desired arithmetic operations (add, multiply, subtract and divide two numbers) using switch statement. Write and execute a C program to read numbers using keyboard and find the area of triangle, square, circle and rectangle using switch statement and display the result. Write a C program to check whether a character is alphabet, digit, punctuation or white space using simple if and use of the character classification functions found in c-type library.
4.	<ul style="list-style-type: none"> Write a C program to compute the roots of a quadratic equation by accepting the coefficients. Write a C program to read a test score, calculate the grade for the score and print the grade
5.	<ul style="list-style-type: none"> Write a C program to read a number using keyboard, find the factorial of a number using for loop/Recursion and display the result. Write a C program to check whether a given number is palindrome or not using a while loop
6.	<ul style="list-style-type: none"> Write a C program to print square of index and print it. Write a C program to calculate sum and average of elements in an array
7.	<ul style="list-style-type: none"> Write a C program to search an ordered list using binary search. Write a C Program to sort elements in ascending order using bubble sort
8.	<ul style="list-style-type: none"> Write a C Program to find perform addition of two matrices using two dimensional arrays Write a C Program to find product of two matrices using two dimensional arrays
9.	<ul style="list-style-type: none"> Write a C Program to read two number, Find its GCD and LCM using function with arguments and without return type Write a C Program to read a number, Find whether it is prime number or not using function without arguments and without return type
10.	<ul style="list-style-type: none"> Write a C Program read two strings, Combine them without using string built-in functions. Write a C Program read two strings, Compare them without using string built-in functions.

11.	<ul style="list-style-type: none"> Write a C Program to demonstrate the use of built in string functions like strcpy(), strcat(), strcmp() and strlen() Write a C Program to read marks of three students in 3 subjects. Calculate the total marks scored, student wise and subject wise using structure.
12.	<ul style="list-style-type: none"> Write a C Program to swap two numbers using pointers and display the result. Write a C Program to read an array of elements, Compute its sum using pointers.

Note: Student is required to solve one problem from Question Bank and questions are allotted based on lots.

Marks Distribution: 20 Marks

Program Conduction and Result	Write-Up	Execution	Viva/Demo	Change of Program	Continues Evaluation	Total Marks
10M	02M	06M	02M	-2 Marks	10M	20 Marks