



Daffodil International University
Faculty of Science & Information Technology
Department of Information Technology & Management
Final Examination, Spring 2025

Course Code: ITM121; Course Title: Structured Programming
Sections & Teachers: All

Time: 2:00 Hrs

Marks: 40

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1.	a)	Write a program for <u>addition of two matrices</u> of any order in C. The two matrices must be taken input from the user.	[Marks-5]	CO-3 Level-3
	b)	What is an array and how to declare an array in C? Provide some example scenarios where the concept of array can be used.	[Marks-5]	CO-3 Level-1
2.	a)	<u>SALPPPBARIPPKAPPDHAPPP</u> Consider the given string. Two prominent districts of Bangladesh are hidden in the string. Your task is to retrieve any one of the district names from the string. Additionally you have to check if the length of your extracted district is greater than 6 or not using appropriate string manipulation function.	[Marks-5]	CO-3 Level-3
	b)	Write a program in C to print individual characters of a string in reverse order.	[Marks-5]	
3.	a)	Maintain a record of 200 books in a library with fields like BookID, Title, Author, Price, and Availability. Create your own structure, initialize the records in runtime and print the records.	[Marks-5]	CO-4 Level-3
	b)	Explain two different operations that are frequently performed on arrays. Demonstrate how strcat() and strcmp() function work in C?	[Marks-5]	CO-4 Level-1
4.	a)	Write a c program to implement and call a user-defined function that will take one number as input and check	[Marks-5]	CO-4

	whether the given number is divisible by 5 or not. If divisible by 5, print "Penta" otherwise print "Regret". (hints: function with arguments but no return).	Level-3
b)	What is the difference between user-defined function and library function? What is the need for a user-defined function.	[Marks-5] CO-4 Level-2