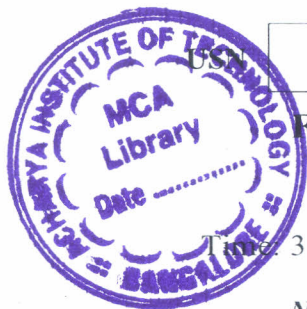




First Semester MCA Degree Examination, Dec.2024/Jan.2025

Programming and Problem Solving in C

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.**2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1				M	L	C
Q.1	a.	Explain the characteristics of C programming language		8	L2	CO1
	b.	Explain the structure of C program		5	L2	CO1
	c.	List the uses of C Language.		7	L2	CO1
OR						
Q.2	a.	Explain the various forms of if statement with examples		12	L2	CO1
	b.	With example explain while,do-while,for loops		8	L2	CO1
Module – 2						
Q.3	a.	Define array. Give syntax of 1-D array.Explain the operations on array.		10	L2	CO2
	b.	Give 2-D array syntax. Write C program to multiply two matrices.		10	L2	CO3
OR						
Q.4	a.	Define string with example. Explain the string taxonomy		08	L2	CO3
	b.	Explain the various string operations		05	L2	CO3
	c.	Write a C program search element in an array using linear search.		07	L2	CO3
Module – 3						
Q.5	a.	Define a Function. Differentiate between call by value and call by reference.		8	L3	CO4
	b.	Define recursive function .write a C program to find the factorial of function using recursive function.		7	L3	CO4
	c.	Write a C program to swap a two numbers by call by value.		5	L3	CO4
OR						
Q.6	a.	Write a C program to find the mean of N numbers using arrays and pointers		10	L3	CO3
	b.	Write a C program to add two matrices using pointers.		10	L3	CO3
Module – 4						
Q.7	a.	Define Structure. Give syntax of Structure.		5	L2	CO5
	b.	Write a C program using structure to read and display student information.		10	L2	CO5
	c.	Explain nested structure with example.		5	L2	CO5
OR						
Q.8	a.	Define Union. Give the syntax of Union.		5	L2	CO5
	b.	Explain the various storage classes		10	L2	CO5
	c.	Write a short note typedef.		5	L2	CO5

Module – 5					
Q.9	a.	Define a File. List and explain the operations on file	10	L2	CO1
	b.	Write a note on	10	L2	CO1
		1. fscanf() 3.fgetc() 2. fgets() 4. fread()			
OR					
Q.10	a.	Write a note on :	10	L2	CO1
		1. Fprintf() 2. Fputs() 3. Fputc() 4. Fwrite()			
	b	Write a note on :	10	L2	CO1
		1. Fseek() 2. Ftell() 3. Fgetpos() 4. Fsetpos()			
