

## MAHARAJA INSTITUTE OF TECHNOLOGY MYSORE

Dept. of Computer Science and Engineering

1st Internal Assessment 2nd Semester Sub. Name: POP using-C (BPOPS203)

Schedule: 09/05/2024 and 9:30-10:45am

Total Marks: 30

Instruction to students: Answer one complete question, selecting one from each part.

Q.	No.	Question Description	M	BTL	COs				
Part-A									
I	a	Define Computer? With a neat block diagram explain basic organization of a computer?	8	LI	СОІ				
	b	Explain in detail, the formatted Input function supported by C language with examples?	7	L2	CO2				
OR									
2	a	What are input device and output device? List and explain ONE input and output devices?	8	LI	COI				
	ь	Explain in detail, the formatted output function supported by C language with examples?	7	L2	CO2				
Part-B									
3	a	With an illustration, explain the general structure of typical C program?	8	LI	COI				
	b	Write a C program or algorithm to compute simple interest and display with appropriate messages?  [NOTE:SI=(Principle,Amount X RateOfInterest X Time)/100.0]	7	L2	CO2				
OR									
4	a	Define data type? Explain the different data types supported by C with examples?	8	LI	COI				
	b	Write a C program or algorithm to find the larger of given two numbers using conditional operator (Temary operator)?	7	L2	CO2				



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Dept. of Computer Science and Engineering

2<sup>ND</sup> Internal Assessment 2<sup>nd</sup> Semester Sub. Name: POP using-C (BPOPS203)

Schedule: 11 /06/2024 and 9:30-10:45am

Total Marks: 30

Q. No. Question Description M B					
ν.	110.	Part-A	IVI	BTL	COs
1	a	Identify all conditional control statements used in C. Illustrate the usage of any two of these statements with appropriate syntax	8	L3	CO2
	b	and examples.  Write flowchart and a C program to print the following pattern.  1 22 333 4444 55\$55	.7	L4	CO3
		OR.			
2	a	Compare the working of for, while and do while along with their syntax.	8	L3	CO2
	b	Write flowchart and a c program to an electricity board charges the following rates for the use of electricity: for the first 200 units 80 paisa per unit: for the next 100 units 90 paisa per unit: beyond 300 units Rs 1 per unit. All users are charged a minimum of Rs. 100 as meter charge. If the total amount is more than Rs 400, then an additional surcharge of 15% of total amount is charged. Write a program to read the name of the user, number of units consumed and print out the charges.	7	L4	CO3
		Part-B			
3	a	Analyze the concept of arrays in C programming. Demonstrate with a detailed example how to declare and initialize a one-dimensional array.	8	L3	CO4
	b	Implement Matrix multiplication and validate the rules of multiplication.	7	L4	CO4
		OR			
4	a	Examine the concept of functions in C programming. Illustrate the syntax for function declaration, function call, and function definition with an example.	8	L3	CO4
	b	Analyze the different storage classes supported in C programming. Provide a detailed explanation of each storage class along with their syntax	7	L4	CO4



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## MAIIARAJA INSTITUTE OF TECHNOLOGY MYSORE

Dept. of Computer Science and Engineering

3<sup>rd</sup> Internal Assessment 2<sup>nd</sup> Semester Sub. Name:

POP using-C (M23BPOPS203)

Schedule: 16/07/2024 and 9:30-10:45am

Total Marks: 30

Instruction to students. Answer one complete question, selectin some from each part

Q. No.		Question Description	M	BTL	COs				
	Part-A								
	a	List out String handling functions in C and explain any 4 with example for each.	7	L2	CO1				
	b	Show the memory representation of array of strings and explain the following with respect to array of strings:  i) Array of String Declaration  ii) Array of String Initialization.	8	L3	CO3				
OR									
	а	List out the rules for arithmetic operations on Pointers in C.	7	L2	Ç01				
2	b	Show the usage of the following with example for each:  i. NULL Pointers  ii. Generic Pointers  iii. Using pointers as function arguments.	8	L3	CO3				
		Part-B							
3	a	Use the following techniques with respect to passing structures to functions as arguments:  i) Passing Individual Members  ii) Passing Entire Structure  iii) Passing address of the Structure	7	L3	CO3				
-	b	Write functions to implement string operations such as compare, concatenate, and find string length. Use the parameter passing techniques.	8	L4	CO4				
		OR		· · · · · ·					
4	а	Using appropriate Code/Diagram discuss the following with appropriate examples with respect to files in C:  i) Detecting End-of-File  ii) Types of Streams in C	7	L3	CO3				
	b	Write a C program to copy the content from one file to another file.	8	L4	CO4				