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## **COER University**

## END SEMESTER EXAMINATION, EVEN SEM 2022-23

Time : 3 hours

Program Name : B.TECH (CE,ME, EEE)

Total Marks : 100

: II Semester

Course Name : Programming for Problem Solving Course Code : BTCS205

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

		CO	BL	
Q. No 1	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO 1	1	-
(a)	What are the components of a computer system, and how do they work together to		-	
	perform computations?	CO 1	1	-
(b)	What is an operating system, and what are its primary functions?	CO 1	2	1
(c)	Explain a general structure of C program with an example.	01	-	-
(0)	Explain a general structure of C program ming languages?	CO 1	1	
(d)	What are the different types of computer programming languages.	CO 1	1	
(e)	Define local and global variables.		-	

The section Carries 5 Marks	CO	BL
Attempt Any Four Parts. Each Question Carries 5 Harks	CO 2	1
Discuss the various types of relational operators and provide examples of their usage		
in programming.	CO 2	2
Explain the concept of operator precedence and associativity in programming, and		-
how it affects the order in which expressions are evaluated.	CO 2	1
Define algorithm Explain its characteristics.	CU 2	-
Define algorithm. Explain as entry controlled and exit controlled loop with example?	CO 2	1
State the difference between entry controlled and entre controlled and e	CO 2	1
What is constant? Explain different types of C constant.		-
	Attempt Any Four Parts. Each Question Carries 5 Marks. Discuss the various types of relational operators and provide examples of their usage in programming. Explain the concept of operator precedence and associativity in programming, and how it affects the order in which expressions are evaluated. Define algorithm. Explain its characteristics. State the difference between entry controlled and exit controlled loop with example? What is constant? Explain different types of C constant.	Attempt Any Four Parts. Each Question Carries 5 Marks.CODiscuss the various types of relational operators and provide examples of their usage in programming.CO 2Explain the concept of operator precedence and associativity in programming, and how it affects the order in which expressions are evaluated.CO 2Define algorithm. Explain its characteristics.CO 2State the difference between entry controlled and exit controlled loop with example?CO 2What is constant? Explain different types of C constant.CO 2

	Durte Fact Question Carries 5 Marks.	CO	BL
Q. No 3	Attempt Any Four Parts. Each Question Carries of Hartes	CO 3	2
(a)	Explain the basic sorting algorithms such as Bubble sort, insertion sort, and selection		
	sort.	CO 3	2
(b)	Write a C program to show now alray can be used us a reference in functions?	CO 3	2
(c)	Explain call by value, and how does it differ from can by reference in reference.	CO 3	2
(d)	What are basic data types in C? write the significance of eden data of per-	CO 3	2
(e)	Write the syntax and initialization procedure for a three dimensional array		

	The Parts Each Question Carries 10 Marks.	CO	BL
Q. No 4	Attempt Any Two Parts. Each Question carries 10 rights functions like	CO 4	2
(a)	How do you allocate and deallocate memory dynamically using functions like		
(-)	malloc() and free()?	CO 4	2
(b)	Define a recursion. Write a C recursive function for multiplying two integers where w		-
	function call is passed with two integers m and n.	00.4	2
(c)	Illustrate the most commonly used string handling functions in C? How do you use	CO 4	2
	them?		

	The Parts Each Question Carries 10 Marks	CO	BL	
Q. No 5	Attempt Any Two Parts. Each Question Carries 10 Harton	CO 5	2	1
(a)	Explain enumerations in C? How do they differ from other data types?	CO 5	2	
(b)	Discuss about the modes of file handling.		2	1
(c)	Formulate program in C that appends data to an existing file.	05	2	]

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