	(58)	Seat No!SARDA	No. of Printed Pages ; 2		
Date	e:19 -10-2		F.Y.B.C.A. (Sem- 2) Programming and Introduction to Data Structure ne: 2.00 pm - 5.00 pm Marks: 70		
Q-1	1 (Select the correct option for	the following questions.	ļ	
	(1)	Which operator is used with a p contained in the pointer? A. Address (&)	ointer to access the value of the variable whose address is B. Indirection (*)		
		C. Assignment (=)	D. Selection (->)		
	(2)	Which of the following defines a	pointer variable to an integer?		
		A. int &ptr	B. int **ptr;		
		C. int *ptr;	D. int &&ptr		
	(3)	Which of the following allows a	portion of memory to be shared by different types of data?		
		A. Array	B. Union		
		C. Structure	D. File		
	(4)	Which one of the following is va	lid for opening a file for only reading?		
i	;	A. fileOpen (filename, "r");	B. fopen (filename, "read");		
		C. fopen (filename, "r");	D. fileOpen (filename, "ra");		
1.4	(5)	The term "push" and "pop" is rel	ated to the?		
	, ,	A. array	B. stack		
		C. queue	D. All of these		
	(6)	When new data are to be insert situation is usually called?	ed into a data structure, but there is no available space; this		
•		A. underflow	B. housefull		
		C. overflow	D. saturated)	
	(7)	A data structure that contains bo	th data field and pointer field is known as		
		A. Queue	B. Tree		
		C. Stack	D. Linked List		
	(8)	In data structure, insertion and deletion of elements occur at both end.			
		A. Stack	B. Priority Queue		
		C. Queue	D. Deque		
	(9)	a stack is known as	e the value of an element at a particular position from a top of		
		A. Push	B. Peep		
		C. Pop	D. Change		
	(10)	Δ linked list is type of dat	a structure/		

B. Non-Linear

D. None of the Above

A. Linear

C. Both (A) and (B)

-2	Do as directed. (ATTEMPT ANY TEN)		
	(1) Differentiate between '*' and '&' operators in pointers	20	
	 (2) List out benefits of pointers. (3) What is scale factor? Explain with example in brief. (4) Differentiate: structure and union. (5) List file modes available to manage the file in C. (6) Explain the fclose() function with example. 		
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(What is Data structure? List out different applications of data Structure		
()	(10) What is a doubly Linked list?		
(1			
(1			
	Write a note on Dynamic memory allocation.		
		10	
		i i	
	value of variable through pointer type variable?	10	
A	A Explain array of structures using suitable examples.		
В	Explain the all the modes of file management with example.	5	
	OR	5	
A	What is structure? Explain its definition, declaration and assigning values to members of structure.	5	
B	Write note on: pointer to structure.		
		5	
	also write their algorithm.	10	
A	OR Explain that		
	Write description of the structure briefly.	5	
		5	
	Write an algorithm to insert an element into a simple queue.	5	
L)	write an algorithm to delete an element from a simple queue.	5	
A	OR		
	Write a plant at the beginning of a Singly linked list.	5	
,	Write a short note on Singly linked List.		
		J	
	() () () () () () () () () () () () () ((1) Differentiate between '*' and '&' operators in pointers. (2) List out benefits of pointers. (3) What is scale factor? Explain with example in brief. (4) Differentiate: structure and union. (5) List file modes available to manage the file in C. (6) Explain the fclose() function with example. (7) Draw the Hierarchical Structure of Data Structure. (8) Differentiate: primitive and non primitive data structure. (9) What is Data structure? List out different applications of data Structure. (10) What is a doubly Linked list? (11) Define: Circular Queue and Deque. (12) What is a Queue? Give examples. Write a note on Dynamic memory allocation. OR Define pointer variable. How can we declare and initialize pointer variable? How can we access value of variable through pointer type variable? A Explain array of structures using suitable examples. B Explain the all the modes of file management with example. OR A What is structure? Explain its definition, declaration and assigning values to members of structure. Explain a STACK with an example. Write down all the operations performed over a stack and also write their algorithm. OR Explain the linear and non linear data structure briefly. Write down advantages of data structure. Write an algorithm to insert an element into a simple queue. OR Write an algorithm to insert an element at the beginning of a Singly linked list	

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