

RB-1843

Second Year B. C. A. (Sem. III) Examination April/May - 2010

303-Advance 'C' & Data Structure

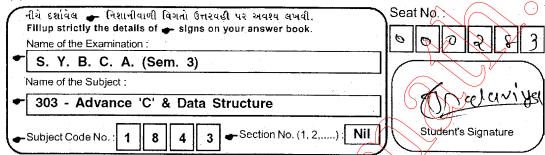
Time	:	3	Hours]
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[Total Marks : 70

Instructions:

(1)

13



- (2) All questions are compulsory.
- Figures to the right indicate full marks. (3)
- **(4)** Trace an algorithm with suitable example.
- 1 Answer the following questions: (any ten)

10

- What is Priority Queue?
- Define data structure. List advantages of data structure.
- What is the difference between rewind(fp) and fseek (iii) (fp, OL, 0).
- Justify it. Function should return one value.
- (v) List out the computer application of stack.
- (vi) What is the difference between dynamic memory allocation and static memory allocation with example.
- (vii) What is function chaining? How recursion differs from normal function chaining?
- (wii) What is self referential structure? Explain with example.
- (ix) List out the limitations of singly linked list.
- What is the difference between array of pointer and pointer to array?
- What is the meaning of command line argument in File handling? How it works?

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2	(a) .	Explain Recursion with proper example. State its Pros and Cons. Write a Recursive function to find factorial	8
	(b)	of given number. Explain D-Queue with its advantages. Write an algorithm to insert and delete in output restricted D-Queue	7/ 1e.
		OR	
2	(a)	Write a program to create a structure Cricket contain the fields (playername, teamname, bat_score).develop functions to insert the record, display the record, sort	8
	(b)	the records teamname wise. Give the difference between call by value and call by reference. Explain with suitable example.	7
	,	by reference. Explain with suitable example.	
3	(a)	What is stack? Write algorithms for all the stack operations.	8
*	(b)	How to pass and access pointer to structure in function with example.	7
Ť		OR	
×	(a)	Explain circular queue. Give the algorithm for	8
	(b)	insertion and deletion in a circular queue. What is function? Difference between user define	7
. .		and built in function. Explain elements and category of user define function.	
4	(a)	Write a program to perform following operations on doubly linked list:	8
		(i) insert at given position(ii) delete particular value(iii) display the list.	
	(b)	List out all Input/output functions of file. Explain in brief with example.	7
	/	OR	
4	(a)	Write a program to implement circular queue using	8
	(b)	doubly linked list. With operations to insert and delete. List out all functions of random access file. Explain in brief with example.	7
(5	Writ	e short notes: (any three)	15
	(i) //	Non primitive data structures	. 9
	(ii)	Binary search	
	(iii) (iv)	Memory representation of Array Quick sort	