



DM-0785

Second Year B. C. A. (Sem. III) Examination  
September / October – 2006

Data Structure & Advance 'C' : Paper - 303

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दशांशित निशानीवाणी विगतो उत्तरवही पर अवश्य लक्ष्यी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
S. Y. B. C. A. (Sem. 3)

Name of the Subject :  
Data Structure & Advance 'C' - 303

Subject Code No. : 0 7 8 5 Section No. (1, 2,.....): Nil

Seat No. : 0 0 0 2 7 0

Student's Signature

(2) Question - 1 is compulsory.

1 Answer in short :

- (1) Distinguish formal parameter and actual parameter in function. 10
- (2) Explain the parameter of fseek ( ) in file
- (3) Which condition is necessary in recursion ?
- (4) What are the advantages of link list over array ?
- (5) What is thread ? What is the advantage of using thread binary tree ?
- (6) List non-primitive data structure.
- (7) What is priority queue ?
- (8) What is simulation ?
- (9) We can return more than one value from function. Justify it.
- (10) What is the use of pop ( ) in stack ?

(a) Write a program to add and multiply two matrices using function with proper parameter. 7

(b) Explain dqueue and write algorithm for input and output operations of dqueue. Explain it with proper example. 8

OR

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2 (a) Explain advantages of recursion. Write a program to find factorial of given no using recursion. 7

17 (b) Define stack and write an algorithm to convert infix to prefix. 279  
280 some man 8

3 (a) Write a menu driven program to perform following task in singly link list : 7

- (1) Add node at end
- (2) Add after specific position
- (3) Display.

(b) Write a note on priority queue with suitable example. 8  
312-314 OR

(b) Write a note on time driven simulation. 8

4 (a) What is Binary search tree ? Write an algorithm to delete item in Binary search tree. 7  
355-357

(b) Differentiate between internal sorting and external sorting. Explain selection sort algorithm with suitable example. 8  
626-647  
520-503  
OR

(b) Write an algorithm to implement the frequency count of every character of a given string using binary search tree. 8

5 Attempt any three : 15

(1) Explain Garbage collection 96-101

(2) Write a note on Divide and Conquer 95-101

W92 (3) Insertion SORT

(4) 2-3 tree.  
333