



R-1863

Second Year B.C.A. (Sem. III) Examination

March / April – 2007

Paper - 303 : Data Structure & Advance 'C'

Time : Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दशविवेक निशान्तीवानी विगतो उत्तरवही पर अवश्य लपवी.
Fillup strictly the details of signs on your answer book.

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

Name of the Subject :
Database Structure & advance 'C' : Paper - 303

Subject Code No. : 1 8 6 3 Section No. (1,2,.....): NIL

Seat No. : [] [] [] [] [] [] [] []

Student's Signature

(2) All questions are compulsory.

ch-6 - 21
ch-5 - 18
ch-4 - 8

1 Answer in short : (any five)

10

- (1) Convert the following infix Expression to postfix.
 - (a) $a * (b+(c-a)/d) - c * d$
 - (b) $p+q * r+(s-p)/(p-(r*s)+q)$
- (2) Explain with an example column major representable of 2-D array.
- (3) Discuss the advantage of linked list over array.
- (4) Explain any two applications of stack with example.
- (5) Explain in brief difference between text and binary file.
- (6) Define Polish and Reverse Polish Expression. Give suitable examples.

2 (a) Write a program to take input of 10 records of student 8 in the file and containing their rno, name, city and provide facility to search for the particular student record in that file.

(b) Explain with example return by reference.

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OR

- 2 (a) What is Stream ? Explain fopen() and fclose() function with example. 8
- (b) Write a program that will find multiplication of all the digits between the given range. 7
(use recursive function)
- 3 (a) Write algorithm to covert Infix expression to Postfix expression and Infix expression. 8
- (b) Define pointer. Explain how pointers are passed to function with example. 7
- OR**
- 3 (a) What is user define function ? How user define function created in 'C' ? Explain it with example.
- (b) Explain priority queue with help of example.
- 4 (a) Write Push () and Pop() functions of stack when stack is implemented with singly linked list. 8
- OR**
- 4 (a) Write a menu driven program to perform following operation on doubley linked list :
- (i) Add a node at specific position
 - (ii) Search a particular value
 - (iii) Define a node containing particular value.
- (b) Explain the threaded representation of binary tree. 7
- 5 Write short notes : (any two) 15
- (1) 2-Way Merge Sort
 - (2) Static Memory Allocation and Dynamic Memory Allocation
 - (3) I/O functions of file.