NEW

2016

BCA

2nd Semester Examination

DATA STRUCTURE LAB

PAPER—1296 (SET-1)

(PRACTICAL)

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *two* questions *lottery basis* : 2×25

1. Write a program to check nesting of parentheses using stack. 25

2. Write a program to create a linked list and find an element from the list. 25

3. Write a program to sort a set of numbers using selection sort technique. 25

4. Write a program of quick sort technique. 25

5. Create double linked list and reverse it. 25

6. Write a program to check whether a string is palindrome or not using STACK. 25

7. Write a program to evaluate a valid postfix expression (eg. 45 + as input and 9 as output). 25

8. Write a program to insert nodes and display the nodes in reverse order using single linked list. 25

9. Write a program to find largest element using double linked list. 25

10. Write a program to delete a node at any position from a circular linked list. 25

11. Write a program to collect statistics of a source file like total lines, total number of blanks and total number of lines ending with semicolons. 25

12. Write a program to remove duplicate nodes from a linked list.

(eg. $4 \rightarrow 5 \rightarrow 6 \rightarrow 5$ as input and $4 \rightarrow 5 \rightarrow 6$ as output) 25

Practical Note Book — 05

Viva Voce — 15

Internal Assessment — 30

———

NEW

2016

BCA

2nd Semester Examination

DATA STRUCTURE LAB

PAPER—1296 (SET-2)

(PRACTICAL)

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any *two* questions *lottery basis* : 2×25

1. Write a program to sort a list of elements using merge sort technique. 25

2. Write a program of string reverse using stack. 25

3. Write a program to implement infix to postfix conversion. 25

4. Write a program to display alternate nodes of a linked list. 25

5. Write a program to enlist the common elements of two linked lists. 25

6. Write a program to create a binary search tree from the list 35, 5, 45, 0, 1, 30. 25

7. Write a program of stack using linked list. 25

8. Compare two string without using strcmp ( ). 25

9. Write program to create a linked list an insert an element into the list. 25

10. Write a program to sort set of integers applying insertion sort. 25

11. Create a doubly linked list and insert an element at begning. 25

12. Create a BST and Trayerse post order. 25

Practical Note Book — 05

Viva Voce — 15

Internal Assessment — 30

———