

Saraswati Mahila Mahavidyalaya, Palwal

Lesson Plan :-

Name of the Assistant/Associate Professor: Ms. Hemlata

Class and Section: BCA IInd year

Name of subject: Data structure - II. (T)

Subject Lesson Plan : 18 weeks (from January 2018 to April 2018)

(Note: Prepare as per list of holidays declared by Haryana govt.)

WEEK 1
ASSIGNMENT:
WEEK 1, DAY 1, DATE :01/01/2018(MONDAY)
Basic Tree concepts
WEEK 1, DAY 2, DATE :02/01/2018(TUESDAY)
continue - - -
WEEK 1, DAY 3, DATE :03/01/2018(WEDNESDAY)
continue - - -
WEEK 1, DAY 4, DATE :04/01/2018(THURSDAY)
Header Node
WEEK 1, DAY 5, DATE :05/01/2018(FRIDAY)
Holiday on account of Guru Govind Singh's Birthday
WEEK 1, DAY 6, DATE :06/01/2018(SATURDAY)

Threads in tree

WEEK 2

ASSIGNMENT:

WEEK 2, DAY 1, DATE :08/01/2018(MONDAY)

Continue...

WEEK 2, DAY 2, DATE :09/01/2018(TUESDAY)

Binary Search tree

WEEK 2, DAY 3, DATE :10/01/2018(WEDNESDAY)

Searching in BST

WEEK 2, DAY 4, DATE :11/01/2018(THURSDAY)

Insertion in BST

WEEK 2, DAY 5, DATE :12/01/2018(FRIDAY)

Deletion in BST

WEEK 2, DAY 6, DATE :13/01/2018(SATURDAY)

AVL Search tree

WEEK 3

ASSIGNMENT:

WEEK 3, DAY 1, DATE : 15/01/2018 (MONDAY)

Class test : BST

WEEK 3, DAY 2, DATE : 16/01/2018 (TUESDAY)

Insertion in BST (AVL)

WEEK 3, DAY 3, DATE : 17/01/2018 (WEDNESDAY)

Deletion in BST (AVL)

WEEK 3, DAY 4, DATE : 18/01/2018 (THURSDAY)

Algo. Explanation of Insert & Deletion
in AVL

WEEK 3, DAY 5, DATE : 19/01/2018 (FRIDAY)

m-way search tree.

Assignment :- BST :

WEEK 3, DAY 6, DATE : 20/01/2018 (SATURDAY)

Searching in m-way search tree (Algo)

WEEK 4

ASSIGNMENT:

WEEK 3, DAY 1, DATE : 22/01/2018 (MONDAY)

Holiday on account of Basant Panchmi.
WEEK 4, DAY 2, DATE :23/01/2018(TUESDAY)
Insertion in m-way search tree. (Algo.)
WEEK 4, DAY 3, DATE :24/01/2018(WEDNESDAY)
Holiday on account of Sir Chotu Ram Jayanti.
WEEK 4, DAY 4, DATE :25/01/2018(THURSDAY)
deletion in m-way search tree (Algo.)
WEEK 4, DAY 5, DATE :26/01/2018(FRIDAY)
Holiday on account of Republic Day.
WEEK 4, DAY 6, DATE :27/01/2018(SATURDAY)
B-tree, Searching (Algo.)
WEEK 5
ASSIGNMENT:
WEEK 5, DAY 1, DATE :29/01/2018(MONDAY)
class - Test :- m-way search tree.
WEEK 5, DAY 2, DATE :30/01/2018(TUESDAY)
Insertion & deletion in m-way search tree. (Algo.)
WEEK 5, DAY 3, DATE :31/01/2018(WEDNESDAY)
Holiday on account of Guru Ravi Dass Jayanti
WEEK 5, DAY 4, DATE :01/02/2018(THURSDAY)
continue (Algo Explanation).

WEEK 5, DAY 5, DATE :02/02/2018(FRIDAY)

B+ tree - Explanation

WEEK 5, DAY 6, DATE :03/02/2018(SATURDAY)

Huffman's Algorithm.

WEEK 6

ASSIGNMENT:

WEEK 6, DAY 1, DATE :05/02/2018(MONDAY)

Implementation of Huffman Algo.

WEEK 6, DAY 2, DATE :06/02/2018(TUESDAY)

General tree. Explanation.

WEEK 6, DAY 3, DATE :07/02/2018(WEDNESDAY)

Introduction to Graph.

WEEK 6, DAY 4, DATE :08/02/2018(THURSDAY)

continue - - -

Assignment :- m-way search tree

WEEK 6, DAY 5, DATE :09/02/2018(FRIDAY)

continue...

WEEK 8

ASSIGNMENT:

WEEK 8, DAY 1, DATE :19/02/2018(MONDAY)

continue - - -

WEEK 8, DAY 2, DATE :20/02/2018(TUESDAY)

continue - - -

WEEK 8, DAY 3, DATE :21/02/2018(WEDNESDAY)

continue - - -

WEEK 8, DAY 4, DATE :22/02/2018(THURSDAY)

Traversal of graph (DFS).

WEEK 8, DAY 5, DATE :23/02/2018(FRIDAY)

BFS.

Assignment :- Warshall Algorithm

WEEK 8, DAY 6, DATE :24/02/2018(SATURDAY)

Difference b/w DFS & BFS

WEEK 9
ASSIGNMENT:
WEEK 9, DAY 1, DATE :26/02/2018(MONDAY)
Test on :- Warshall and Dijkstra Algo.
WEEK 9, DAY 2, DATE :27/02/2018(TUESDAY)
Topological Sorting
WEEK 9, DAY 3, DATE :28/02/2018(WEDNESDAY)
VACATION -II
WEEK 9, DAY 4, DATE :01/03/2018(THURSDAY)
VACATION -II
WEEK 9, DAY 5, DATE :02/03/2018(FRIDAY)
VACATION -II
WEEK 9, DAY 6, DATE :03/03/2018(SATURDAY)
VACATION -II
WEEK 10
ASSIGNMENT:
WEEK 10, DAY 1, DATE :05/03/2018(MONDAY)
Implementation of topological Sorting.

WEEK 10, DAY 2, DATE :06/03/2018(TUESDAY)

Discussion on Operations on Graph.

WEEK 10, DAY 3, DATE :07/03/2018(WEDNESDAY)

Sorting :- Internal & External Sorting

WEEK 10, DAY 4, DATE :08/03/2018(THURSDAY)

Radix sort, Heap sort without Algo.

WEEK 10, DAY 5, DATE :09/03/2018(FRIDAY)

Merge Sort (Algo)

WEEK 10, DAY 6, DATE :10/03/2018(SATURDAY)

Quick Sort (Algo)

WEEK 11

ASSIGNMENT:

WEEK 11, DAY 1, DATE :12/03/2018(MONDAY)

Tournament sort.

WEEK 11, DAY 2, DATE :13/03/2018(TUESDAY)

Test on Sorting

WEEK 11, DAY 3, DATE :14/03/2018(WEDNESDAY)

Searching : Linear Search.

WEEK 11, DAY 4, DATE :15/03/2018(THURSDAY)

Implementation of Linear Search.

WEEK 11, DAY 5, DATE :16/03/2018(FRIDAY)

Binary Search (Algo)

WEEK 11, DAY 6, DATE :17/03/2018(SATURDAY)

Comparison of various sorting algo.
on the basis of their complexity.

WEEK 12

ASSIGNMENT:

WEEK 12, DAY 1, DATE :19/03/2018(MONDAY)

Comparison of various searching algo.
on the basis of their complexity.

WEEK 12, DAY 2, DATE :20/03/2018(TUESDAY)

Revision & Discussion of Searching

WEEK 12, DAY 3, DATE :21/03/2018(WEDNESDAY)

files :- Physical Storage Devices & their Characteristics

WEEK 12, DAY 4, DATE :22/03/2018(THURSDAY)

continue . . .

WEEK 12, DAY 5, DATE :23/03/2018(FRIDAY)

Holiday on account of Shahidi diwas.

WEEK 12, DAY 6, DATE :24/03/2018(SATURDAY)

Attributes of a file v/s fields, records

WEEK 13

ASSIGNMENT:

WEEK 13, DAY 1, DATE :26/03/2018(MONDAY)

fixed & variable length records.
Primary & secondary keys.

WEEK 13, DAY 2, DATE :27/03/2018(TUESDAY)

classification of files.

WEEK 13, DAY 3, DATE :28/03/2018(WEDNESDAY)

Continue

WEEK 13, DAY 4, DATE :29/03/2018(THURSDAY)

Holiday on account of Mahavir jayanti.

WEEK 13, DAY 5, DATE :30/03/2018(FRIDAY)

File operations

WEEK 13, DAY 6, DATE :31/03/2018(SATURDAY)

Comparison of Various types of files

WEEK 14

ASSIGNMENT:

WEEK 14, DAY 1, DATE :02/04/2018(MONDAY)

File Organisation : Serial

WEEK 14, DAY 2, DATE :03/04/2018(TUESDAY)

Sequential file Organisation

WEEK 14, DAY 3, DATE :04/04/2018(WEDNESDAY)

Index sequential

WEEK 14, DAY 4, DATE :05/04/2018(THURSDAY)

Random accen / piseet

WEEK 14, DAY 5, DATE :06/04/2018(FRIDAY)

continue...

Assignment:- Sorting

WEEK 14, DAY 6, DATE :07/04/2018(SATURDAY)

Inverted...

WEEK 15

ASSIGNMENT:

WEEK 15, DAY 1, DATE :09/04/2018(MONDAY)

Multi-list Organisation

WEEK 15, DAY 2, DATE :10/04/2018(TUESDAY)

class Test on file organisation

WEEK 15, DAY 3, DATE :11/04/2018(WEDNESDAY)
Hashing - Introduction
WEEK 15, DAY 4, DATE :12/04/2018(THURSDAY)
Hashing functions
WEEK 15, DAY 5, DATE :13/04/2018(FRIDAY)
continue
WEEK 15, DAY 6, DATE :14/04/2018(SATURDAY)
Holiday on account of Vaisakhi & Dr B.R. Ambedkar's Jayanti.
WEEK 16
ASSIGNMENT:
WEEK 16, DAY 1, DATE :16/04/2018(MONDAY)
collision resolution methods. Assignment :- Hashing functions
WEEK 16, DAY 2, DATE :17/04/2018(TUESDAY)
continue
WEEK 16, DAY 3, DATE :18/04/2018(WEDNESDAY)

Holiday on account of Maharshi Pasuram Jayanti

WEEK 16, DAY 4, DATE :19/04/2018(THURSDAY)

Revision

WEEK 16, DAY 5, DATE :20/04/2018(FRIDAY)

Revision

WEEK 16, DAY 6, DATE :21/04/2018(SATURDAY)

Revision

WEEK 17

ASSIGNMENT:

WEEK 17, DAY 1, DATE :23/04/2018(MONDAY)

Revision

WEEK 17, DAY 2, DATE :24/04/2018(TUESDAY)

Revision

WEEK 17, DAY 3, DATE :25/04/2018(WEDNESDAY)

Revision

WEEK 17, DAY 4, DATE :26/04/2018(THURSDAY)

Revision

WEEK 17, DAY 5, DATE :27/04/2018(FRIDAY)

Revision

WEEK 17, DAY 6, DATE :28/04/2018(SATURDAY)

Revision

WEEK 18

ASSIGNMENT:

WEEK 18, DAY 1, DATE :30/04/2018(MONDAY)

Revision

Penelope
08/12/17