

WORK PLAN (JANUARY-APRIL 2019)

Course Name: B.Sc.(H) Computer Science

Semester: IV

Paper Code: C-VIII

Paper Name: Design and Analysis of Algorithms

Faculty: Ms. Nikita Jain

WEEK	DATES	LECTURE
1	1-5 January	Basic Design and Analysis techniques of Algorithms, Correctness of Algorithm
2	7-12 January	Iterative technique: Bubble Sort, InsertionSort , Selection sort
3	14-19 January	Divide and Conquer: Merge Sort, Quick Sort
4	21-26 January	Advanced sorting algorithms –Heap sort Quiz 1(24.01.19)
5	28 Jan.- 2 Feb.	Advanced sorting algorithms –Heap sort
6	4-9 February	Greedy Algorithms: Minimum Spanning Trees
7	11-16 February	Greedy Algorithms: Minimum Spanning Trees Class Assignment 1: 16.02.2019
8	18-23 February	Graph Algorithms–Breadth First Search, Depth First Search and its Application Quiz 2(21.02.19)
9	25 Feb.- 2 March	Graph Algorithms–Breadth First Search, Depth First Search and its Application
10	4-9 March	Graph Algorithms–Breadth First Search, Depth First Search and its Application Class Assignment 1 Submission : 09.03.2019
11	11-16 March	Dynamic Programming Class Assignment 2 : 14.03.2019
12	18-24 March	MID-SEMESTER BREAK
13	25-30 March	Dynamic Programming Mid-sem Test(28.03.19)
14	1-6 April	Dynamic Programming
15	8-13 April	Amortized analysis Class Assignment 2 Submission : 09.04.2019
16	15-20 April	Amortized analysis Quiz 3(15.04.19)
17	22-27 April	Revision and problem solving

18	29 April	Dispersal of classes, Preparation Leave and Practical Examinations begin.
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Readings/Reference Texts:

1. T.H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein
Introduction to Algorithms, PHI, 3rd Edition 2009
2. Sarabasse& A.V. Gelder Computer Algorithm – Introduction to Design and Analysis, Publisher – Pearson 3 rd Edition 1999
3. Algorithm Design , Kleinberg amdtardos ,Pearson Publication.