**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Session Odd Semester**

**(2018-19)**

**Class: BCA IIIrd Sem Name of the Teacher: Anu Chawla**

**Subject: Data Structures Period : Mon Tues(3rd), Fri-Sat(2nd)**

**Paper : BCA-16-305 Room No : 202**

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| **S. No** | **Date From** | | **Date Upto** | **Topics to be covered** |
| Week 1 | **(For ongoing classes)** | | | Introduction to subject and recap |
| July 24, 2018 | | July 28, 2018 |
| Week 2 | July 30, 2018 | August 4, 2018 | | Data Structure and Data Structure operations. Applications of Data Structure, Basic data Structures. |
| Week 3 | August 6, 2018 | August 11, 2018 | | Introduction, Types of Array, Memory representation, Applications |
| Week 4 | August 13, 2018 | August 18, 2018 | | Introduction to Complexity, operations on arrays |
| Week 5 | August 20, 2018 | August 25, 2018 | | Stacks : Introduction, memory representation, Applications and operations |
| Week 6 | August 27, 2018 | September 1, 2018 | | Linked List :Operations:-traversing, searching, inserting, deleting, operations on linked list |
| Week 7 | September 3, 2018 | September 8, 2018 | | header linked list, circular linked list, polynomial manipulation. |
| Week 8 | September 10, 2018 | September 15, 2018 | | doubly linked list, memory representation, Applications |
| Week 9 | September 17, 2018 | September 22, 2018 | | Queue : Introduction, Types, |
| Week 10 | September 24, 2018 | September 29, 2018 | | Memory Representation and Applications. |
| Week 11 | October 1, 2018 | October 8, 2018 | | Insertion sort, Selection sort, Merge Sort, Quick sort. Comparison of various Searching and Sorting algorithms. |
| **MID SEMESTER EXAMINATION (October 11, 2018 to October 17, 2018)** | | | | |
| Week 12 | October 20, 2018 | October 27, 2018 | | Trees – Definition and Basic concepts, Representation in Contiguous Storage, Binary Tree |
| Week 13 | October 29, 2018 | November 3, 2018 | | Binary Tree Traversal, Searching, Insertion and deletion in Binary trees |
| Week 14 | November 5, 2018 | November 10, 2018 | | Binary Search tree. |
| Week 15 | November 12, 2018 | November 17, 2018 | | Graphs: Introduction, Memory Representation |
| Week 16 | November 19, 2018 | November 22, 2018 | | Graph Traversal (DFS and BFS) |
| Week 17 | November 26, 2018 | December 1, 2018 | | Revision and test |