**CS2003 Data Structures & Algorithms:**

**Portions for CAT 1 (January 2020)**

**Topics for Study and References:**

1. **Module 3 - Data Structures** – **(Ref: Book 1 & 4 - By Weiss)**

Linked list, Stack, Queues, Trees, Binary Search Trees, Heaps**,** Hash Tables

(Algorithms for Insert, Delete and Search)

1. **Module 1 – Algorithms – (Ref: Book 2 – by Levintin & 3 – By Cormen)**

Overview and importance of algorithms and data structures, States of algorithm development for solving a problem, describing the problem, identifying a suitable technique, Design of an Algorithm.

**Model of the questions:**

1. Design suitable data structure for a given problem (Module 3)
2. Write algorithms for insertion/deletion/search for the given data structures (Module 3)
3. Given an algorithm, describe the problem that it solves (Module 1)
4. Given a problem, design an algorithm (Module 1)
5. Problems related to data structures (Module3)