

DATA STRUCTURE AND ALGORITHMS LABORATORY(DSAL)**SAMPLE ORAL QUESTIONS 2021-22****Unit-1 (Group-A)**

1. Define Hashing, Hashing Function, Hash Table, Collision, Rehashing and Perfect Hash function, Hash key.
2. What are the issues in hashing.
3. What are the Types of Hashing Functions?
4. What are the types of Hashing?
5. Difference between Hashing With Replacement and without replacement.

Unit-2 (Group-B)

1. Define various terminology of Trees?
2. What are the properties of Binary tree?
3. What are the different Tree traversal Operation?
4. Define Binary Search Tree and its operations?
5. Define Threaded BST and its operations?
6. What are the algorithms for inorder, preorder and postorder traversal?

Unit-3 (Group-C)

1. Define various terminology of Graph?
2. Define Adjacency Matrix and List with its example?
3. What is Minimum Spanning Tree and its types?
4. What is algorithms/steps for Prim's and Kruskal's Algorithms?
5. State concept of Dijkstra's Single source shortest path?
6. What are the way to represent graph?
7. What do you mean by Greedy Approach?

Unit-4 (Group-D)

1. Difference between Static and Dynamic Tree Table?
2. What is Weight Balance Tree and Height Balance Tree with example?
3. What is long form of OBST, AVL, RBT, KD and AA tree?
4. What are the rotations for AVL Tree with an example?
5. What do you mean by Dynamic Programming Approach?

Unit-5

1. What is Indexing and Multiway Tree?
2. What are various Indexing Techniques?
3. What is B Tree and its operations?
4. What is B+ Tree and its operations?

Unit-6 (Group-F)

1. Define File, Record, Fields and Directory, Index?
 2. What are the primitives Operations of Files?
 3. What is Sequential File Organization and its operations?
 4. What is Index File Organization and its operations?
 5. What is Linked File Organization and its operations?
 6. List different types of indices?
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NOTE :

- These are some sample questions for DSAL Practical for reference. Questions are based on theory unit and practical as per group.
- You should also prepare program logic for oral as program you have implemented in (Python, C++ and Java)
- You should know some basic programming concept of Python, C++ and Java.(Structure, Syntax, Inbuilt function/methods, Library function, Header files etc). which you have used in your program impmentation.