Saathi

Date ___/___/_____

QUESTIONS DS

MODULE I

1	Distinguish btw linear & non linear DS	3
2	Explain collision resolution methods in Hashing	3
3	short note on Queues and its application	3
4	What is meant by Hashing	3
5	Amortised analysis and Average case analysis	3
6	Disjoint set explain	3
7	Amortised analysis using Accounting methods	6
8	Explain Hashing Functions	6
9	Amortised analysis using Aggregate or any method	6
10	Explain Disjoint set DS and its operations	6

MODULE II

1	What is splay tree? List its rotations	3
2	Concept of suffix tree with an example	6
3	Define Binary search tree	3
4	Characteristics of balanced binary search tree	3
5	Explain AVL Trees	3
6	Explain Red/Black tree with examples	6
7	What is B tree? explain its operation	6

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MODULE III

1. Difference btw min heap & max heap (3)
2. What is meragable heap (3)
3. Characteristics of Fibonacci heap (3)
4. Give a valid Binomial heap with nodes 3, 5, 7, 10, 12, 15 (3)
5. Describe Binomial Heap with example (6)
6. Describe Fibonacci Heap with example (6)
7. Explain how Deletekey is Performed in Binomial and Fibonacci (6) and finding and what is the amortized ope cost ?

MODULE IV

1. What is minimum cost spanning tree (3)
2. What is strongly connected components (3)
3. Compare • BFS & DFS (2)
4. What is topological sort in a graph (3)
5. Describe adjacency matrix representation of a graph (3)
6. Explain prims algorithm with example (6)
7. Describe Dijkstra single source shortest algorithm (6)
8. What is min spanning tree ? Explain kruskal algorithm to find min spanning tree (6)
9. Explain strongly connected components : And How can you find strongly connected compons (6)
10. Explain BFS with example (6)

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MODULE 5

(1)	what is Blockchaining or Blockchain	(3)
(2)	what is contract data	(3)
(3)	what is smart contract	(3)
(4)	Explain transaction model in blockchain Technology	(3)
(5)	what is Blockchain datastructure	(3)
(6)	what are blockchain datatypes	(3)
(7)	Explain blockchain Architecture in detail	(6)
(8)	Explain problems to be solved in Blockchain analysis	(6)
(9)	Explain Datastructure & Datatypes in Blockchain	(6)
(10)	Advantages & disadvantages of blockchain	(6)