R19

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
M.Tech I Year I Semester Regular Examinations Jan 2020
ADVANCED DATA STRUCTURES
(Computer Science and Engineering)

Time: 3 hours   Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	**a**	Define Hashing. Explain Review of Hashing and Hash Function.	**6M**
	b	What is Double Hashing technique?	**6M**

OR

2	**a**	What is skip list? Write about open addressing technique.	**6M**
	b	What is chaining? Write about separate chaining and open addressing.	**6M**

UNIT-II

3	**a**	Discuss in brief Binary search trees with an example.	**6M**
	b	With a detailed note on AVL trees with its operations and example.	**6M**

OR

4	**a**	What are 2-3 trees how it works with data structures discuss with an example?	**6M**
	b	Explain Splay- trees with neat diagram.	**6M**

UNIT-III

5	**a**	Discuss the working of Brute force pattern matching.	**6M**
	b	Define Tires and discuss the function Suffix Tries with an example.	**6M**

OR

6	**a**	Explain Standard Tries with an example.	**6M**
	b	Write about The Boyer-Moore Algorithm.	**6M**

UNIT-IV

7	**a**	Explain how to Search a Priority Search Tree works and its operations.	**6M**
	b	Explain k-D Trees with an example.	**6M**

OR

8	**a**	How Two Dimensional Range Searching done in computational geometry explain with an example?	**6M**
	b	What is computational geometry?	**6M**

UNIT-V

9	**a**	Explain where hashing is used in real time with an example.	**6M**
	b	Explain about the Binary Search Tree.What are the rules to create a BST? Give an example.	**6M**

OR

10	**a**	Explain Skip List. Why it is called as a Randomized data structure?	**6M**
	b	Explain the properties of Red Black Trees with an example.	**6M**

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