

14.	Linked list is an example for _____ data structure.	CO3	K2
15.	The data structure which restricts insertion and deletion in the middle is _____	CO3	K2
16.	The prefix form of $A+(B*C)/(D-E)$ is _____.	CO4	K2
17.	The structure used to represent hierarchical relationship between elements is _____	CO4	K2
18.	A terminal node is called as _____.	CO4	K2
19.	A Graph is _____ if there is a path between any two of its nodes.	CO4	K2
20.	The disadvantage of linear probing is _____	CO4	K2
Q. No.	SECTION B Answer all the questions (4 x 5=20)	CO	KL
21.	a) How do you experiment the efficiency of an algorithm? Discuss. (OR) b) What is ADT? Differentiate Data structures and ADT with suitable example for each.	CO1	K3
22.	a) With a neat sketch explain circular linked list with suitable example. (OR) b) What is recursion? Relate and explain how recursion is implemented by stack.	CO2	K3
23.	a) Distinguish the queue operations enqueue and dequeue with suitable example. (OR) b) Analyse open addressing hashing technique.	CO3	K4
24.	a) Mention the different operations that can be performed on graphs and explain it. (OR) b) Explicate the shortest path algorithm.	CO4	K4
Q. No.	SECTION C Answer all the questions (5 x 12=60)	CO	KL
25.	a) Enumerate with example the linear search algorithm and the method of computing the complexity. (OR) b) Show how insertion sort is performed.	CO1	K1
26.	a) Demonstrate the following operations: traversing, searching and inserting into an array. (OR) b) Explain the method of inserting and deleting a given item in a linked list.	CO2	K2

27.	a) Define Stack and illustrate the possible operations that can be performed on it. (OR) b) Let P be an arithmetic expression: $(3+6)*(2-4)+7$. Apply the algorithm to transfer infix expression to postfix.	CO3	K3
28.	a) What are the standard ways of traversing a binary tree? Analyze the traversal algorithms with example. (OR) b) Explicate Heap sort algorithm.	CO4	K4
29.	a) Appraise the methods of traversing a Graph with suitable example. (OR) b) Delineate the hashing techniques.	CO5	K5
