

S.E.(Computer Engineering)
DATA STRUCTURES AND ALGORITHMS
(2019Pattern) (Semester-II)

1. Write short note on dijkstra's algorithm.
2. Explain adjacency list and adjacency matrix.
3. Show the result of inserting 10,12, 1,14,6,5,8,15,3,9,7,4,13 and 2 one at a time, into empty binary heap. After creating such heap delete the element 8 from heap, how do you repair the heap?
4. Write short note on sequential file organization.
5. Explain any three operations carried out on sequential files.
6. Write short note on AVL tree with example
7. State and Explain the various modes of opening the file in C or C++.
8. Explain in brief sequential file organization.
9. Draw max heap. Draw heap formed from: 30, 60, 35, 70, 35, 50, 80.
10. Explain splay tree with example
11. Write short note on adjacency matrix.
12. Create a 3 ways B- tree by inserting the following data one at a time: 7, 3, 2,9, 1, 12, 4,7,10,10,4,8.