

UNIT-II

DIVIDE AND CONQUER

- 1) Explain Divide and Conquer in detail. **(BTL – II,V)**
- 2) Explain Divide and Conquer applications in detail. **(BTL – II,V)**
- 3) Explain Recursive Binary search algorithm with suitable examples.
(BTL – II, V)
- 4) Write the algorithm for Iterative Binary search. **(BTL- I)**
- 5) Derive the time complexity of Binary search algorithm. **(BTL – V)**
- 6) Explain Recursive Maximum and Minimum algorithm with suitable examples. **(BTL – II,V)**
- 7) Derive the time complexity of Maximum and Minimum algorithm.
(BTL – V)
- 8) Illustrate the tracing of Merge sort algorithm for the following set of numbers: 25,10,72,18,40,11,64,58,32,9. **(BTL – II)**
- 9) Write the Recursive algorithm for Merge sort and derive the time complexity of Merge sort. **(BTL - I)**
- 10) Illustrate the tracing of Quick sort algorithm for the following set of Numbers: 25,10,72,18,40,11,64,58,32,9. **(BTL – II)**
- 11) Explain Recursive Quick sort algorithm with suitable example.
(BTL – II, V)
- 12) Derive the Best, Average and Worst case time complexities of Quick sort algorithm. **(BTL – V)**
- 13) Contrast the Quick sort with Merge sort. **(BTL – II, IV)**
- 14) Explain the time complexity of insertion sort.
Discuss best and worst time complexities **(BTL – II, V, VI)**
- 15) Explain the time complexity of bubble sort.
Discuss best and worst time complexities **(BTL – II, V, VI)**