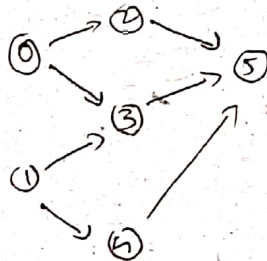18CS42 – Module 2

Super Important

▷ Afnan Manqoee

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Q1. Explain divide and conquer technique. Write a recursive algorithm for finding the maximum and minimum element from a list.

Q2. Apply quick sort to sort the list E, X, A, M, P, L, E in alphabetical order. Draw tree of recursive calls made.

OR

65	70	75	80	85	60	55	50	45

Q3. Discuss Strassen's matrix multiplication and derive its time complexity.

Q4. Explain merge sort Algorithm

Q5. Apply source removal method to obtain topological sort for the given graph:

Q6. Write a recursive algorithm for binary search and calculate time complexity.