

DEPARTMENT:BCA

SUBJECT:COMPUTERALGORTHIM

STAFF:VIDHYALAKSHMI

PART:A

1. Define Algorithm.Give an example.
2. Explain Pseudocode with example.
3. How to Analyze Algorithm?
4. Write Matrix Multiplication Algorithm and explain about its Time Complexities
5. Write about Divide and Conquer technique.
6. Compare Merge sort and Quick sort.
7. How complexity of divide and conquer technique obtained?
8. Trace merge sort and quick sort algorithm using following number

4	2	8	3	6	1	17
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9. Write a general method of greedy technique.
10. Give the difference between o/ 1 knapsack and fractional knapsack.
11. Write shortest path algorithm.
12. Find solution for fractional knapsack problem

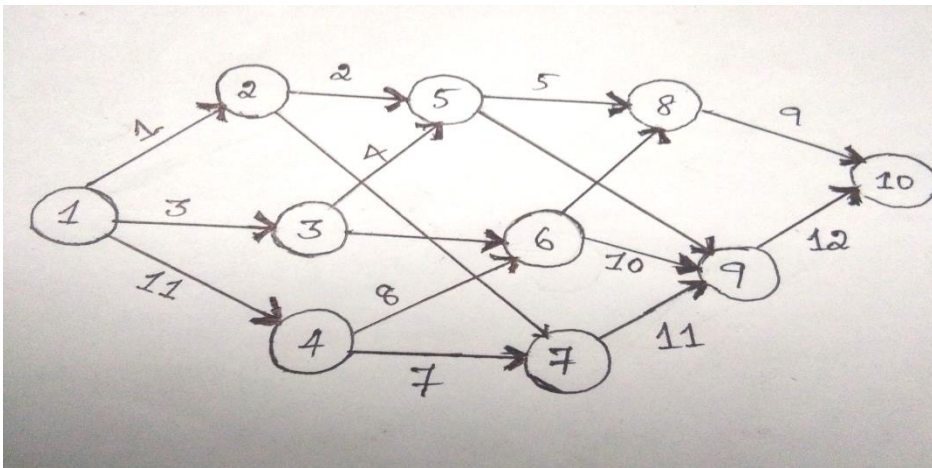
W=20	p1	p2	p3	w1	w2	w3
	25	24	15	18	15	10

13. Using above problem find solution for 0/1 knapsack problem

14. Briefly explain about dynamic programming strategy.

15. Write the multistage graph algorithm?

16.) Write the solution for multistage graph in both approach.



17. With own example define travelling salesperson problem .

18. Narrate some problems using dynamic techniques.

19. Write about Backtracking general method.

20. Write Depth First Search Algorithm.

21. Explain Breadth First Search Algorithm.

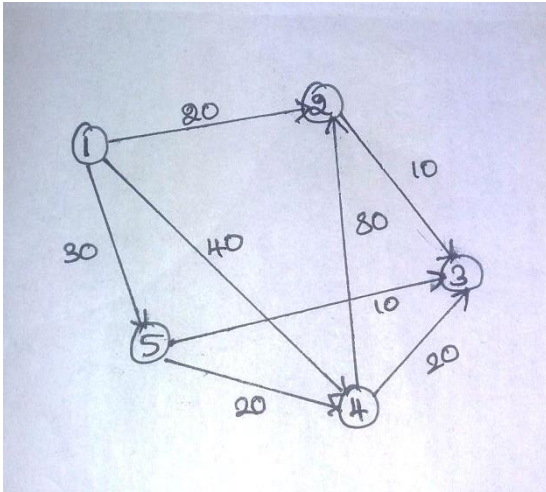
PART:B

22. Explain Asymptotic Notation With Neat Diagram.

23. Write About Time And Complexity of an algorithm

24. Explain Mergesort using divide and conquer technique in detail.

25. Discuss about Strassen's matrix multiplication in detail with example.
26. How divide and conquer technique is applied in Quicksort ? Explain .
27. With example discuss shortest path algorithm.
28. Explain knapsack problem algorithm using greedy technique.
29. Find solution for shortest path for below diagram and trace algorithm.



30.

31. Write about travelling salesman problem in detail.
32. With example explain Depth First Search Algorithm.
33. Write about Breadth First Search.
34. Explain the multistage graph algorithm with example.