

SE-sem-IV - old-computers

A O A D

17/12/15

Q.P. Code : 1497

(3 Hours)

[ Total Marks : 100

- N.B. : (1) Question No.1 is compulsory.  
(2) Attempt any **four** out of remaining six questions.

1. (a) Explain asymptotic notations. 10  
(b) Explain binary search with an example. 10
2. (a) Explain strassen's matrix multiplication. 10  
(b) Explain knapsack problem using greedy method. 10
3. (a) Explain kruskal's algorithm to find minimum spanning tree. 10  
(b) Explain quick sort with an example and comment on its complexity. 10
4. (a) Discuss all pair shortest path algorithm and specify its complexity. 10  
(b) Explain travelling salesperson problem with an example. 10
5. (a) Explain 8-queen problem. 10  
(b) Explain tries with an example. 10
6. (a) Explain 15 puzzle problem as an exaple of LC search. 10  
(b) Explain Graph colouring problem. 10
7. Write short notes on : 20
  - (a) Optimal storage on tapes
  - (b) Randomised algorithm
  - (c) Finding min and max using divide and conquer strategy
  - (d) Job sequencing with deadlines.