# Unit 14 - Week 12 : Summary



## Assignment 12

**The due date for submitting this assignment has passed.**
**As per our records you have not submitted this assignment.**

**Due on 2020-04-22, 23:59 IST.**

1) What amongst the following keyword is most related to the randomized Quicksort Algorithm? *1 point*

- Probabilistic method
- Tail Bounds
- Markov Chains
- Randomization over the choice of pivots

No, the answer is incorrect.
Score: 0

Accepted Answers:
*Randomization over the choice of pivots*

2) What amongst the following can be considered as a selling point of the randomized 3 SAT algorithm? *1 point*

- Expected Polynomial Running Time
- Sub exponential worst case running time
- The expected runtime is exponential but significantly less than the naive brute force algorithm.
- The error probability is zero.

No, the answer is incorrect.
Score: 0

Accepted Answers:
*The expected runtime is exponential but significantly less than the naive brute force algorithm.*

3) Which of the following problems involved the use of probabilistic method? *1 point*

- All Pair Shortest Path
- Primality Testing
- Dominating Set problem
- Median Find

No, the answer is incorrect.
Score: 0

Accepted Answers:
*Dominating Set problem*

4) Which of the following problems involved the use of Chernoff Bound? *1 point*

- Median Find
- Primality Testing
- Permutation routing on a hypercube
- Minimal Spanning Tree

No, the answer is incorrect.
Score: 0

Accepted Answers:
*Permutation routing on a hypercube*

5) Which of the following problems did not involve the use of Markov Chains? *1 point*

- 3 SAT
- Counting the number of perfect matchings in a bipartite graph
- Permutation routing on a hypercube
- Space bounded Graph Connectivity

No, the answer is incorrect.
Score: 0

Accepted Answers:
*Permutation routing on a hypercube*