Question 1: In Prim's algorithm, we start with the root vertex r; it can be any vertex.

- ✓ TRUE
- FALSE

Question 2: You have an adjacency list for G, what is the time compexity to compute Graph transpose G^T?

- ✓ (V+E)
- V.E
- V
- E

Question 3: In strong components algorithm, first of all DFS is run for computing finish times of vertices.

- ✓ TRUE
- FALSE

Question 4: We can use the optimal substructure property to devise a _____ formulation of the edit distance problem.

- Selective
- Optimum
- Iterative
- ✓ Recursive

Question 5: Although it requires more complicated data structures, Prim's algorithm for a minimum spanning tree is better than Kruskal's when the graph has a large number of vertices.

- ✓ TRUE
- FALSE

Question 6: According to parenthesis lemma. vertex u is a descendent of v vertex if and only if,

- ✓ [d[u], f[u]] ⊆ [d[v], f[v]]
- [d[u], f[u]] ⊇ [d[v], f[v]]
- Unrelated
- Disjoint

Question 7: The _____ given by DFS allow us to determine whether the graph contains any cycles.

- Order
- ✓ Time stamps