Final Exam Format & Topics

Format: Un-Proctored

The final exam will be non-cumulative and will consist of T/F, multiple-choice (similar to the quizzes), short answer and written questions.
The time limit is 110 minutes and you will have 1 opportunity.

You are allowed to use the following materials:

- Scratch Paper
- One sheet, 8.5x11", double-sided notes (typed or handwritten)
- Students may use any calculator
- Windows Calculator (and MacOS equivalent) "Programmer Mode" is OK!

Topics

- Graph Algorithms - MST, BFS, DFS, Topological Sort, Shortest Path
- Linear programming - Product Mix, Shortest Path Problem, Make change
- Complexity classes (P, NP, NP-complete, NP-hard) and reductions.
- You should be familiar with the following NP-Complete Problems:
  - CIRCUIT-SAT, 3-CNF-SAT, CLIQUE, VERTEX-COVER, HAM-CYCLE, TSP, SUBSET-SUM, INDEPENDENT SET, LONG-PATH, HAM-PATH, K-COLOR, KNAPSACK, Bin Packing
- Approximation Algorithms - TSP, Bin Packing, Vertex Cover.