**4-Month Preparation Plan for Coding Interview**

**Month 1: Foundation and Core Concepts**

* Weeks 1-4:
  + Focus on basic data structures (arrays, linked lists, stacks, queues) and algorithms (sorting, searching).
  + Schedule: Select 2-3 key topics each week. Allocate one session for theory and others for problem-solving.

**Month 2: Intermediate Topics and Language Proficiency**

* Weeks 1-4:
  + Dive into intermediate data structures (trees, graphs) and algorithms (dynamic programming basics, greedy algorithms).
  + Schedule: Continue the 2-3 topics per week approach, including coding practice in your preferred language.

**Month 3: Advanced Topics and Problem Solving**

* Weeks 1-4:
  + Advance to complex topics and intensify problem-solving practice.
  + Schedule: Use each session to solve problems on platforms like LeetCode, gradually increasing difficulty.

**Month 4: Mock Interviews, Review, and Practice**

* Weeks 1-2:
  + Focus on mock interviews using platforms like Pramp.
* Weeks 3-4:
  + Final review and problem-solving practice, revisiting challenging problems.

To provide you with relevant LeetCode questions that align with the topics and questions in your exam, I'll list them based on the key areas such as data structures, algorithms, and problem-solving. Here are some recommended LeetCode questions:

**Data Structures**

1. **Arrays and Strings**
   * Two Sum
   * Best Time to Buy and Sell Stock
   * Contains Duplicate
   * Product of Array Except Self
   * Longest Substring Without Repeating Characters
2. **Linked Lists**
   * Reverse a Linked List
   * Merge Two Sorted Lists
   * Linked List Cycle
3. **Trees**
   * Binary Tree Inorder Traversal
   * Validate Binary Search Tree
   * Binary Tree Level Order Traversal
   * Maximum Depth of Binary Tree
4. **Graphs**
   * Number of Islands
   * Course Schedule
   * Clone Graph

**Algorithms**

1. **Sorting and Searching**
   * Merge Intervals
   * Search in Rotated Sorted Array
   * First Bad Version
2. **Dynamic Programming**
   * Climbing Stairs
   * Coin Change
   * Longest Increasing Subsequence
   * Word Break
3. **Backtracking**
   * Subsets
   * Permutations
   * Combination Sum
4. **Greedy Algorithms**
   * Jump Game
   * Best Time to Buy and Sell Stock II
   * Assign Cookies

**Problem Solving**

1. **General Problem Solving**
   * Valid Parentheses
   * Daily Temperatures
   * Task Scheduler
   * K Closest Points to Origin