

# Placement Preparation Guide

Arithmetic, Reasoning, English, and Coding Important Concepts (15 points each)

# Arithmetic - Important Concepts

- 1. Percentage formula & applications
- 2. Profit, Loss, and Discount formulas
- 3. Simple Interest (SI) and Compound Interest (CI)
- 4. Ratio & Proportion
- 5. Partnership concepts
- 6. Averages
- 7. Mixtures & Alligation
- 8. Time, Speed, and Distance
- 9. Time & Work (Pipes and Cisterns)
- 10. Problems on Ages
- 11. HCF and LCM
- 12. Permutations and Combinations
- 13. Probability
- 14. Geometry basics (Area, Perimeter, Volume)
- 15. Number System (Divisibility, Remainders)

# Reasoning - Important Concepts

- 1. Coding-Decoding
- 2. Blood Relations
- 3. Direction Sense Test
- 4. Syllogisms
- 5. Seating Arrangements (Linear & Circular)
- 6. Puzzles
- 7. Analogies
- 8. Classification (Odd One Out)
- 9. Series (Number, Alphabet, Alphanumeric)
- 10. Inequalities
- 11. Input-Output reasoning
- 12. Data Sufficiency
- 13. Logical Deductions
- 14. Statement & Assumption/Conclusion
- 15. Non-Verbal Reasoning (Figures, Patterns)

# English - Important Concepts

- 1. Reading Comprehension
- 2. Synonyms & Antonyms
- 3. Error Spotting
- 4. Sentence Completion
- 5. Para Jumbles
- 6. Fill in the Blanks
- 7. Idioms and Phrases
- 8. One Word Substitution
- 9. Active & Passive Voice
- 10. Direct & Indirect Speech
- 11. Cloze Test
- 12. Subject-Verb Agreement
- 13. Tenses & Grammar Rules
- 14. Vocabulary Building
- 15. Word Usage in Sentences

# Coding - Important Concepts

- 1. Arrays – Traversal, Searching, Sorting
- 2. Strings – Palindrome, Reverse, Anagrams
- 3. Recursion basics
- 4. Linked List operations
- 5. Stack – Push, Pop, Applications
- 6. Queue – Implementation, Circular Queue
- 7. Binary Trees – Traversals (Inorder, Preorder, Postorder)
- 8. Binary Search Tree (BST) concepts
- 9. Graphs – BFS & DFS
- 10. Hashing concepts
- 11. Sorting Algorithms (Quick, Merge, Heap)
- 12. Searching Algorithms (Binary Search, Linear Search)
- 13. Dynamic Programming basics (Fibonacci, Knapsack)
- 14. Greedy Algorithms (Activity Selection, Huffman coding)
- 15. Complexity Analysis (Time & Space Complexity)