TCS NQT Part B – Mock Test Paper (Advanced Aptitude + Coding)

Instructions: - Total Time: 115 minutes - Section 1: Advanced Quantitative & Reasoning (25 minutes, 16 questions) - Section 2: Coding (90 minutes, 2 questions) - Attempt all questions carefully. No negative marking.

Section 1: Advanced Quantitative & Reasoning (16 Questions, 25 min)

1. Number Series: Find the next number: 2, 6, 12, 20, 30, ?

2. Probability: A box has 5 red, 3 blue, and 2 green balls. Probability of picking a red or green ball?

3. Time & Work: A can do a job in 12 days, B in 15 days. Working together, how many days to finish?

4. Geometry: Find the area of a triangle with base 10 cm and height 8 cm.

5. Data Interpretation: Table of sales over 5 months. Find average sales.

6. Logical Puzzle: 5 friends sitting in a row with conditions (given). Find the position of X.

7. Ratio & Proportion: Divide 120 in the ratio 3:5:4.

8. Permutation & Combination: How many ways to arrange 5 books on a shelf?

9. Syllogism: Statements: All A are B. Some B are C. Conclusion?

10. Coding Logic (Non-programming): Predict output of given pseudo-code logic.

11. Algebra: Solve: 3x + 7 = 25.

12. Mensuration: Volume of cuboid with l=5, b=3, h=2.

13. Sequence Puzzle: Fill the blanks: 5, 11, 23, 47, ?

14. Inequalities: Solve: x/3 + 5 > 9.

15. Clocks: Angle between hour and minute hand at 3:20.

16. Advanced Reasoning: Find missing figure in 3x3 matrix pattern.

Section 2: Coding (2 Questions, 90 min)

1. Problem Statement: Write a program to find the longest subarray with sum equal to 0. - Input: Integer array. - Output: Length of longest subarray. - Constraints: 1 <= N <= 10^5, -10^9 <= arr[i] <= 10^9.

2. Problem Statement: Given a string S, find the number of palindromic substrings. - Input: String S (length <= 10^4) - Output: Number of palindromic substrings. - Note: Substrings with different start/end indices are counted separately.

Teacher/Student Notes: - Solve all advanced aptitude questions within 25 minutes. - Coding questions require optimized solutions to handle large input constraints. - This mock is designed based on previous year Part B NQT questions with higher difficulty level.