NON-VERBAL REASONING -SERIES(ENGLISH)

Q1: A pattern of squares is shown below. What will be the next square in the series?

Long Method: To solve this, we need to observe the pattern carefully. In the given series, each square increases in size by adding an extra row and column of smaller squares to the right and bottom of the previous square. Counting the number of squares in each square, we see that the first square has 9 squares, the second square has 16 squares, and the third square has 25 squares. So, the next square will have 36 squares. Drawing it out or visualizing it will help in understanding the pattern.

Short Method: The number of squares in each square of the series follows a sequence of perfect squares: 3^2, 4^2, 5^2, ... So, the next square will be 6^2 = 36 squares.

Q2: What comes next in the series: 2, 5, 11, 23, ?

Long Method: To find the next number in the series, we need to observe the pattern. Looking at the differences between consecutive numbers, we see that the difference between 2 and 5 is 3, between 5 and 11 is 6, between 11 and 23 is 12. This suggests that each number in the series is doubled and then 1 is added. So, the next number would be 23*2 + 1 = 47.

Short Method: The pattern here is each number is doubled and then 1 is added. So, the next number would be 23*2 + 1 = 47.

Q3: Find the missing number in the series: 6, 13, 28, 59, ?

Long Method: To find the missing number, we need to understand the pattern in the series. Looking at the differences between consecutive numbers, we see that the difference between 6 and 13 is 7, between 13 and 28 is 15, between 28 and 59 is 31. The differences appear to be increasing by doubling and then adding 1. So, the next difference would be 31*2 + 1 = 63. Adding this to 59, we get 59 + 63 = 122.

Short Method: The pattern here is each difference between consecutive numbers is doubling and then 1 is added. So, the next difference would be 31*2 + 1 = 63. Adding this to 59, we get 122.

Q4: In the sequence 3, 9, 27, 81, what comes next?

Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 81*3 = 243.

Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 81*3 = 243.

Q5: What is the next shape in the series: Triangle, Square, Pentagon, Hexagon, ?

Long Method: To find the next shape, we need to observe the pattern. The shapes are increasing in the number of sides they have. A triangle has 3 sides, a square has 4 sides, a pentagon has 5 sides, and a hexagon has 6 sides. So, the next shape would be a heptagon, which has 7 sides.

Short Method: The pattern here is each shape is increasing by one side. So, the next shape would be a heptagon, which has 7 sides.

Q6: What is the next number in the series: 1, 4, 9, 16, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is the square of consecutive integers (1^2, 2^2, 3^2, 4^2). So, the next number would be 5^2 = 25.

Short Method: The pattern here is each number is the square of consecutive integers. So, the next number would be 5^2 = 25.

Q7: What comes next in the series: 2, 6, 18, 54, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 54*3 = 162.

Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 54*3 = 162.

Q8: In the sequence 5, 10, 20, 40, what comes next?
Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is being multiplied by 2 to get the next number. So, the next number would be 40*2 = 80.

Short Method: The pattern here is each number is being multiplied by 2 to get the next number. So, the next number would be 40*2 = 80.

Q9: What is the next letter in the series: A, C, F, J, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The letters are increasing alphabetically, but the difference between consecutive letters is increasing by 1 each time (1, 2, 3, 4). So, the next letter would be M.

Short Method: The pattern here is each letter is increasing alphabetically, with the difference between consecutive letters increasing by 1 each time. So, the next letter would be M.

Q10: What is the next shape in the series: Circle, Square, Triangle, Pentagon, ?

Long Method: To find the next shape, we need to observe the pattern. The shapes are increasing in the number of sides they have. A circle technically has infinite sides, a square has 4 sides, a triangle has 3 sides, and a pentagon has 5 sides. So, the next shape would be a hexagon, which has 6 sides.

Short Method: The pattern here is each shape is increasing by one side. So, the next shape would be a hexagon, which has 6 sides.

Q11: What comes next in the series: 3, 5, 9, 15, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 1 each time (2, 4, 6). So, the next difference would be 8. Adding 8 to 15 gives us 23.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 1 each time. So, the next difference would be 8. Adding 8 to 15 gives us 23.

Q12: In the sequence 4, 12, 36, 108, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 108*3 = 324.

Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 108*3 = 324.

Q13: What comes next in the series: 2, 12, 30, 56, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 4 each time (10, 18, 26). So, the next difference would be 34. Adding 34 to 56 gives us 90.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 4 each time. So, the next difference would be 34. Adding 34 to 56 gives us 90.

Q14: What is the next letter in the series: B, D, H, P, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The differences between consecutive letters are increasing by 2 each time (2, 4, 6). So, the next difference would be 8. Adding 8 to P gives us X.

Short Method: The pattern here is the differences between consecutive letters are increasing by 2 each time. So, the next difference would be 8. Adding 8 to P gives us X.

Q15: What comes next in the series: 1, 6, 15, 28, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 2 each time (5, 9, 13). So, the next difference would be 17. Adding 17 to 28 gives us 45.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 2 each time. So, the next difference would be 17. Adding 17 to 28 gives us 45.

Q16: In the sequence 2, 6, 24, 120, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is being multiplied by a consecutive integer (*2*3, 6*4, 24*5*). So, the next number would be 120*6 = 720.

Short Method: The pattern here is each number is being multiplied by a consecutive integer. So, the next number would be 120*6 = 720.

Q17: What comes next in the series: 1, 4, 10, 22, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 3 each time (3, 6, 12). So, the next difference would be 18. Adding 18 to 22 gives us 40.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 3 each time. So, the next difference would be 18. Adding 18 to 22 gives us 40.

Q18: What is the next shape in the series: Circle, Square, Triangle, Pentagon, ?
Long Method: To find the next shape, we need to observe the pattern. The shapes are increasing in the number of sides they have. A circle technically has infinite sides, a square has 4 sides, a triangle has 3 sides, and a pentagon has 5

Short Method: sides. So, the next shape would be a hexagon, which has 6 sides.
Short Method: The pattern here is each shape is increasing by one side. So, the next shape would be a hexagon, which has 6 sides.

Q19: What comes next in the series: 3, 8, 15, 24, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 2 each time (5, 7, 9). So, the next difference would be 11. Adding 11 to 24 gives us 35.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 2 each time. So, the next difference would be 11. Adding 11 to 24 gives us 35.

Q20: In the sequence 1, 5, 13, 25, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is the sum of the previous number and the next odd number (1+4, 5+8, 13+12). So, the next odd number would be 16. Adding 25 and 16 gives us 41.

Short Method: The pattern here is each number is the sum of the previous number and the next odd number. So, the next odd number would be 16. Adding 25 and 16 gives us 41.

Q21: What comes next in the series: 2, 7, 17, 32, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 2 each time (5, 10, 15). So, the next difference would be 20. Adding 20 to 32 gives us 52.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 5 each time. So, the next difference would be 20. Adding 20 to 32 gives us 52.

Q22: What is the next shape in the series: Circle, Triangle, Square, Pentagon, ?
Long Method: To find the next shape, we need to observe the pattern. The shapes are increasing in the number of sides they have. A circle technically has infinite sides, a triangle has 3 sides, a square has 4 sides, and a pentagon has 5 sides. So, the next shape would be a hexagon, which has 6 sides.

Short Method: The pattern here is each shape is increasing by one side. So, the next shape would be a hexagon, which has 6 sides.

Q23: What comes next in the series: 4, 10, 22, 46, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 2 each time (6, 12, 24). So, the next difference would be 48. Adding 48 to 46 gives us 94.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 2 each time. So, the next difference would be 48. Adding 48 to 46 gives us 94.

Q24: In the sequence 3, 8, 16, 27, ?

Long Method: To find the next number in the sequence, we need to observe the pattern. The differences between consecutive numbers are increasing by 1 each time (5, 8, 11). So, the next difference would be 14. Adding 14 to 27 gives us 41.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 1 each time. So, the next difference would be 14. Adding 14 to 27 gives us 41.

Q25: What comes next in the series: 1, 4, 11, 26, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 3 each time (3, 7, 15). So, the next difference would be 27. Adding 27 to 26 gives us 53.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 3 each time. So, the next difference would be 27. Adding 27 to 26 gives us 53.

Q26: What is the next letter in the series: A, C, G, M, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The differences between consecutive letters are increasing by 3 each time (2, 4, 6). So, the next difference would be 8. Adding 8 to M gives us U.

Short Method: The pattern here is the differences between consecutive letters are increasing by 3 each time. So, the next difference would be 8. Adding 8 to M gives us U.

Q27: What comes next in the series: 2, 5, 13, 38, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 3 each time (3, 8, 25). So, the next difference would be 48. Adding 48 to 38 gives us 86.

Short Method: The pattern here is the differences between consecutive numbers are increasing exponentially. So, the next difference would be 48. Adding 48 to 38 gives us 86.

Q28: In the sequence 4, 10, 22, 46, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. The differences between consecutive numbers are increasing by 6 each time (6, 12, 24). So, the next difference would be 48. Adding 48 to 46 gives us 94.

Short Method: The pattern here is the differences between consecutive numbers are increasing

exponentially. So, the next difference would be 48. Adding 48 to 46 gives us 94.

Q29: What comes next in the series: 1, 3, 9, 27, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 27*3 = 81.

Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 27*3 = 81.

Q30: What is the next letter in the series: A, E, I, O, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The vowels are in alphabetical order (AEIO) but with a gap of two letters between each vowel. So, the next vowel would be U.

Short Method: The pattern here is the vowels are in alphabetical order with a gap of two letters between each vowel. So, the next vowel would be U.

Q31: What comes next in the series: 2, 5, 12, 27, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 3 each time (3, 7, 15). So, the next difference would be 31. Adding 31 to 27 gives us 58.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 4 each time. So, the next difference would be 31. Adding 31 to 27 gives us 58.

Q32: In the sequence 1, 3, 9, 27, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 27*3 = 81.

Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 27*3 = 81.

Q33: What comes next in the series: 2, 6, 24, 120, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by a consecutive integer (*2*3, *6*4, *24*5). *So, the next number would be 120*6 = 720.

Short Method: The pattern here is each number is being multiplied by a consecutive integer. So, the next number would be 120*6 = 720.

Q34: What is the next shape in the series: Circle, Triangle, Square, Pentagon, ?
Long Method: To find the next shape, we need to observe the pattern. The shapes are increasing in the number of sides they have. A circle technically has infinite sides, a triangle has 3 sides, a square has 4 sides, and a pentagon has 5 sides. So, the next shape would be a hexagon, which has 6 sides.

Short Method: The pattern here is each shape is increasing by one side. So, the next shape would be a hexagon, which has 6 sides.

Q35: What comes next in the series: 1, 5, 13, 25, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is the sum of the previous number and the next odd number (1+4, 5+8, 13+12). So, the next odd number would be 16. Adding 25 and 16 gives us 41.

Short Method: The pattern here is each number is the sum of the previous number and the next odd number. So, the next odd number would be 16. Adding 25 and 16 gives us 41.

Q36: What is the next letter in the series: A, C, G, M, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The differences between consecutive letters are increasing by 3 each time (2, 4, 6). So, the next difference would be 8. Adding 8 to M gives us U.

Short Method: The pattern here is the differences between consecutive letters are increasing by 3 each time. So, the next difference would be 8. Adding 8 to M gives us U.

Q37: What comes next in the series: 2, 5, 13, 38, ?
Long Method: To find the next number in the series, we need to observe the pattern. The differences between consecutive numbers are increasing by 3 each time (3, 8, 25). So, the next difference would be 48. Adding 48 to 38 gives us 86.

Short Method: The pattern here is the differences between consecutive numbers are increasing exponentially. So, the next difference would be 48. Adding 48 to 38 gives us 86.

Q38: In the sequence 4, 10, 22, 46, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. The differences between consecutive numbers are increasing by 6 each time (6, 12, 24). So, the next difference would be 48. Adding 48 to 46 gives us 94.

Short Method: The pattern here is the differences between consecutive numbers are increasing exponentially. So, the next difference would be 48. Adding 48 to 46 gives us 94.

Q39: What comes next in the series: 1, 3, 9, 27, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 27*3 = 81.
Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 27*3 = 81.

Q40: What is the next letter in the series: A, E, I, O, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The vowels are in alphabetical order (AEIO) but with a gap of two letters between each vowel. So, the next vowel would be U.

Short Method: The pattern here is the vowels are in alphabetical order with a gap of two letters between each vowel. So, the next vowel would be U.

Q41: What comes next in the series: 2, 4, 8, 16, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by 2 to get the next number. So, the next number would be 16*2 = 32.

Short Method: The pattern here is each number is being multiplied by 2 to get the next number. So, the next number would be 16*2 = 32.

Q42: In the sequence 1, 4, 9, 16, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. Each number is the square of consecutive integers (1^2, 2^2, 3^2, 4^2). So, the next number would be 5^2 = 25.

Short Method: The pattern here is each number is the square of consecutive integers. So, the next number would be 5^2 = 25.

Q43: What comes next in the series: 3, 7, 15, 31, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by 2 and then 1 is added to the result. So, the next number would be (31*2) + 1 = 63.

Short Method: The pattern here is each number is being multiplied by 2 and then 1 is added to the result. So, the next number would be (31*2) + 1 = 63.

Q44: What is the next shape in the series: Triangle, Circle, Square, Pentagon, ?
Long Method: To find the next shape, we need to observe the pattern. The shapes are increasing in the number of sides they have. A triangle has 3 sides, a circle technically has infinite sides, a square has 4 sides, and a pentagon has 5 sides. So, the next shape would be a hexagon, which has 6 sides.

Short Method: The pattern here is each shape is increasing by one side. So, the next shape would be a hexagon, which has 6 sides.

Q45: What comes next in the series: 4, 12, 36, 108, ?
Long Method: To find the next number in the series, we need to observe the pattern. Each number is being multiplied by 3 to get the next number. So, the next number would be 108*3 = 324.

Short Method: The pattern here is each number is being multiplied by 3 to get the next number. So, the next number would be 108*3 = 324.

Q46: In the sequence 1, 5, 13, 29, ?
Long Method: To find the next number in the sequence, we need to observe the pattern. The differences between consecutive numbers are increasing by 4 each time (4, 8, 16). So, the next difference would be 32. Adding 32 to 29 gives us 61.

Short Method: The pattern here is the differences between consecutive numbers are increasing by 4 each time. So, the next difference would be 32. Adding 32 to 29 gives us 61.

Q47: What is the next letter in the series: A, D, I, P, ?
Long Method: To find the next letter in the series, we need to observe the pattern. The differences between consecutive letters are increasing by 3 each time (3, 5, 7). So, the next difference would be 9. Adding 9 to P gives us Y.

Short Method: The pattern here is the differences between consecutive letters are increasing by 3 each time. So, the next difference would be 9. Adding 9 to P gives us Y.