## **YOS Exam Syllabus 2023**

In the exam, 80 questions will be asked: 40 Mathematics, 10 Geometry and 30 General Ability and Logic. The exam will be held in a single session and its total duration is 130 minutes.

Mathematics			
1	Basic Concepts		
2	Division and divisibility		
3	Numbers (integers, rational numbers, decimal numbers, exponential numbers, rooted		
	numbers)		
4	Ratio- Proportion		
5	Factorization		
6	First-degree equations and systems of equations, second-degree equations		
7	First order inequalities		
8	Absolute value		
9	Sets		
10	Functions		
11	Permutation		
12	Combination		
13	Binomial		
14	Probability		
15	Parabola		
16	Polynomials		
17	Complex numbers		
18	Logarithm		
19	Trigonometry		
20	Derivatives (Only derivatives of polynomial functions, excluding higher order derivatives)		
21	Limit (Only the indeterminate forms that can be removed by factoring the numerator and the		
	denominator)		
22	Integration (Only integral of polynomial functions, excluding volume calculation)		
Geometry			
1	Angle in the plane		
2	Circle (area, length and angle)		
3	Triangle (length, area, angle, similarity, bisector, median)		
4	Square (length, area, angle)		
5	Rectangle (length, area, angle)		
6	Parallelogram (length, area, angle)		
7	Trapezoid (length, area, angle)		
8	Regular polygon (length, area, angle)		
9	Analytical Geometry		
	General Ability		

1	Shape Complement (According to the relevance given in the first line which shape complements the second line, according to the relevance given in the first and second line which shape complements the third line)
2	Finding the different shape
3	The relation of letters and numbers
4	The relation of numbers and shapes
5	Finding the requested in a letter chart
6	Shape additions
7	Which shape complements in series of shapes
8	Shape equations (scales), shape equations (charts)
9	Shape join
10	Finding the missing piece (which shape should be replaced by the question mark in the 3×3 matrix)
11	Cube expansion
12	Complementing shapes
13	Finding the rule among numbers (generating numbers)
14	Number sequences, and number sequences pattern
15	Shape pattern
16	Equation systems with shapes
17	Rotating the shape
18	Finding the rule in numbers in a shape
19	Finding the rule related to numbers