

# SCO INTERNATIONAL OLYMPIAD

## GRADE 4 SYLLABUS

### SCO INTERNATIONAL MENTAL ABILITY OLYMPIAD

Official Syllabus | Class 4

**Designed from Class 4 reasoning-skill pathways and aligned with SCO preparation, practice, reporting, and future-ready analytical growth.**

- Chapter-wise official syllabus for Class 4 Mental Ability preparation
- Learning outcomes focused on logical, verbal, non-verbal, and applied reasoning
- Useful for schools, teachers, parents, and students preparing for SCO Olympiad

Series	Coding	Alphabet	Puzzles	Calendar
Ranking	Analogy	Cubes	Images	Data Suff.

# SCO International Mental Ability Olympiad

## Class 4 Official Syllabus

<b>Class / Grade</b>	Class 4
<b>Subject</b>	Mental Ability
<b>Document Type</b>	Official Syllabus
<b>Prepared For</b>	Students, Parents, Teachers, and Schools
<b>Recommended Format</b>	PDF-ready Word document

### Syllabus Overview

The Class 4 Mental Ability syllabus develops pattern recognition, visual reasoning, direction sense, ranking, coding-decoding, shapes, calendar reasoning, and simple analytical thinking. The aim is to build confidence in reasoning through age-appropriate puzzles, diagrams, tables, and everyday situations.

### Chapter-wise Learning Pathway

Chapter	Chapter Name	Core Learning Outcomes	Typical Question Formats
1	Patterns	Recognize number, shape, and letter patterns and explain the rule used.	missing term, next figure, number pattern, letter pattern
2	Alphabet Test	Use alphabet order, position values, missing letters, dictionary order, and word formation.	dictionary order, letter position, word formation
3	Coding-Decoding	Decode simple substitution, mirror-letter, shift-letter, and symbol-based codes.	mirror code, shift code, symbol code
4	Ranking Test	Find rank from top/bottom, total count, and position-based relationships.	rank from top/bottom, total number in row
5	Mirror Images and Water Images	Identify symmetrical letters, mirror orientation, and water-image style reversals.	symmetry, mirror letters, reflected figures
6	Geometrical Shapes and Solids	Identify 2D and 3D shapes, faces, sides, vertices, and simple visual properties.	sides, faces, vertices, cube/cuboid/sphere/cone

7	Embedded Figures	Find shapes hidden inside larger figures and separate parts from a whole.	hidden shape, part-whole reasoning
8	Direction Sense Test	Use North, South, East, West, right/left turns, and short movement routes.	right/left turns, route tracing, final direction
9	Days and Dates & Possible Combinations	Solve simple calendar, weekday, and combination questions using systematic counting.	weekday shifts, simple combinations, pair counting
10	Analogy and Classification	Compare objects, find odd one out, and group items based on common properties.	odd one out, grouping, similarity and difference

## Exam Blueprint

Section	Question Count	Focus
General Mental Ability	20 questions	Patterns, alphabet, coding, ranking, direction, shapes
Reason and Assertion	5 questions	Statement-reason logic using familiar concepts
Case Study and Applied Reasoning	5 questions	Short school-life situations, tables, diagrams, and calendar logic
Achievers Section	5 questions	Higher-order multi-step reasoning and mixed-skill questions

## Preparation Guidance

- Practise one pattern question and one alphabet/coding question daily.
- Use a compass-style diagram when solving direction questions.
- For ranking questions, remember: rank from bottom = total - rank from top + 1.
- For mirror and embedded figure questions, trace the figure slowly instead of guessing.
- For calendar questions, count day differences and use remainders after division by 7.
- In Achievers questions, underline the rule, solve step by step, and verify the option before marking.

## Skills Developed

Pattern recognition, visual-spatial reasoning, observation, classification, systematic counting, basic deductive logic, mathematical reasoning, and confidence in solving multi-step reasoning problems.