SYNERGY MATHS OLYMPIAD (SMO)

GRADE II – MATHS HANDBOOK

Classes 1–3 Framework • 40 Marks • 60 Minutes

SMO GRADE II SYLLABUS

Section	Title / Major Topics	Marks
A	Number World & Mathematical Reasoning Number Sense; Addition; Subtraction; Multiplication; Division; Measurement	10
B	Maths in Action – Day-to-Day Maths Time & Calendar; Money; Measuring Units; Geometrical Shapes; Data Handling; Pictographs	10
C	Problem Solving Word Problems; Operations; Measurement; Time; Money; Data Interpretation; Figure-based Problems	10
D	Brain Teasers & Synergy Challenge Patterns; Analogy; Classification; Ranking; Grouping & Embedded Figures; Coding–Decoding; Higher-order Thinking	10
	TOTAL	**40**

QUESTION PATTERN

Section	Questions	Difficulty	Purpose
A – Number World	10	Easy → Moderate	Mathematical fluency
B – Math in Action	10	Easy → Moderate	Practical mathematics
C – Problem Solving	10	Moderate	Application of concepts
D – Brain Teasers & Synergy Challenge	10	Moderate → Challenging	Logical and higher-order thinking

PAPER SPECIFICATIONS

40 MCQs | 40 Marks | 60 Minutes

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Class 2 — Model Question Paper & Practice Test

Grade:	Class 2	**Time:**	60 Minutes
Total Questions:	6 Questions	**Total Marks:**	40 Marks

SECTION A: NUMBER WORLD & MATHEMATICAL REASONING

Q1. What is the expanded form of the number 407?

(A) 400 + 70 + 0

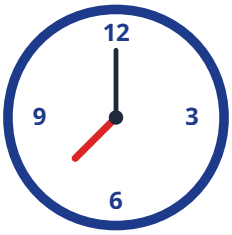
(B) 400 + 0 + 7

(C) 40 + 7

(D) 400 + 70 + 7

SECTION B: MATHS IN ACTION & DAY-TO-DAY MATHS (PICTURE-BASED)

Q2. Look at the clock below. Rohan goes to play 1 hour before the time shown on the clock. At what time does Rohan go to play?



(A) 4:00

(B) 5:00

(C) 6:00

(D) 3:00

Q3. Count the total value of coins shown in the box below:



(A) ₹12

(B) ₹13

(C) ₹15

(D) ₹10

SECTION C: PROBLEM SOLVING

Q4. A fruit vendor had 48 apples. He sold 23 apples in the morning and 12 apples in the afternoon. How many apples are left with him now?

(A) 25 apples
(B) 13 apples
(C) 35 apples
(D) 15 apples

SECTION D: SYNERGY CHALLENGE & BRAIN TEASERS

Q5. [Synergy Challenge] Find the missing number in the balance pattern below:

[24 + 16] = [50 – ?]

(A) 10
(B) 40
(C) 20
(D) 30

Q6. [Brain Teaser] Look at the pattern of shapes:



Which shape comes next in place of the question mark (?)?

(A) Circle
(B) Triangle
(C) Square
(D) Rectangle

Answer Key & Explanations

1. **(B) 400 + 0 + 7** — In 407, 4 is in hundreds place (400), 0 in tens place (0), and 7 in ones place (7).
2. **(A) 4:00** — The clock shows 5:00. 1 hour before 5:00 is 4:00.
3. **(B) ₹13** — Total value = ₹5 + ₹5 + ₹2 + ₹1 = ₹13.
4. **(B) 13 apples** — Total sold = 23 + 12 = 35 apples. Remaining apples = 48 – 35 = 13 apples.
5. **(A) 10** — Left side: 24 + 16 = 40. Right side needs to equal 40, so 50 – 10 = 40.
6. **(B) Triangle** — The repeating visual pattern sequence is [Circle → Square → Triangle].