

SCO INTERNATIONAL OLYMPIAD

GRADE 3 QUESTION PAPER

SCO International Mental Ability Olympiad - Official Paper 2025-26

Grade 3 mental ability pathways and aligned with SCO practice, reporting, and future-ready reasoning growth.

- age-fit reasoning guidance for Grade 3 / primary-level learners globally
- question pathways across patterns, figures, alphabet, ranking, coding, direction sense, and visual logic
- official paper structure with answer key, explanations

Maths	English	Science	Mental Ability	Finance Knowledge
AI	Entrepreneurship	GK	Coding	Life Skills

SCO International Mental Ability Olympiad - Class 3

Exam Information

Field	Details
Exam Name	SCO International Mental Ability Olympiad
Class / Grade	Class 3
Academic Year	2025-26
Total Questions	35
Time	60 minutes
Maximum Marks	40

Guidelines for Candidates

- Read each question carefully before choosing the answer.
- There is only ONE correct answer for each question.
- Use reasoning, observation, pattern recognition, and direction logic to solve the questions.
- Calculator is not required for this paper.
- All questions are compulsory. There is no negative marking.
- The Achievers Section carries 2 marks per question; all other questions carry 1 mark each.
- Total Questions: 35 | Maximum Marks: 40 | Time: 60 minutes.

Section Pattern

Section	Question Range	Marks	Skill Focus
General Reasoning	1-10	1 mark each	Patterns, alphabet, ranking, coding, shapes, direction sense
Reason and Assertion	11-20	1 mark each	Conceptual reasoning and statement validation
Case Study	21-30	1 mark each	Story-based reasoning and applied problem solving
Achievers Section	31-35	2 marks each	Higher-order logic and multi-step reasoning

Q1. What is the next number in the series:

2, 5, 9, 14, ?

Options:

- A) 18
- B) 19
- C) 20
- D) 21

Answer:

C) 20

Explanation:

The differences between terms are 3 (5-2), 4 (9-5), and 5 (14-9). The next difference increases by 1 (i.e. 6). Thus, the next term = $14 + 6 = 20$.

Q2. Consider a 2×2 matrix of shapes where each row follows the pattern: the first and third figures in each row are identical. In Row 1, you see a Circle and a Square; in Row 2, you see a Triangle and a missing shape.

Question:

Which shape should replace the missing figure if the pattern is to be maintained?

Options:

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

Answer:

B) Triangle

Explanation:

Each row's pattern is that the first shape is repeated as the third shape. In Row 2, the first shape is a Triangle; therefore, the missing figure should be a Triangle.

Q3. A box contains blocks in three colors: red, blue, and green. There are 12 blocks in total. There are equal numbers of red and blue blocks, and there are 4 more green blocks than red blocks.

Question:

How many complete groups can you form if each group must contain one block of each color?

Options:

- A) 2
- B) 3
- C) 4
- D) 6

Answer:

B) 3

Explanation:

With 3 red, 3 blue, and 6 green blocks, you can form exactly 3 groups.

Q4. Which letter comes next in the sequence:

A, D, H, M, ?

Options:

- A) S
- B) T
- C) U
- D) V

Answer:

A) S

Explanation:

The positions are A=1, D=4, H=8, and M=13. The jumps are +3, +4, and +5. The next jump should be +6, so $13 + 6 = 19$, which is S.

Q5. Cat is to kitten as dog is to ?

Options:

- A) Calf
- B) Puppy
- C) Foal
- D) Cub

Answer:

B) Puppy

Explanation:

A young cat is called a kitten, and a young dog is called a puppy. The analogy classifies animals by their offspring.

Q6. In a race with 30 children, if a child finishes 8th from the top, what is his rank from the bottom?

Options:

- A) 22nd
- B) 23rd
- C) 24th
- D) 25th

Answer:

B) 23rd

Explanation:

Rank from bottom = Total - Rank from top + 1 = $30 - 8 + 1 = 23$.

Q7. In a secret code, every letter of a word is replaced by the letter that comes one place later in the alphabet (with Z replaced by A). What is the coded form of "FISH"?

Options:

- A) GJTI
- B) GJSH
- C) EIRG
- D) HJTI

Answer:

- A) GJTI

Explanation:

Shift each letter: F→G, I→J, S→T, H→I; hence, "FISH" becomes "GJTI".

Q8. Which of the following shapes has 4 equal sides and 4 equal angles?

Options:

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

Answer:

- C) Square

Explanation:

A square has 4 equal sides and 4 equal (right) angles.

Q9. Which word looks the same when seen in a mirror?

Options:

- A) DAD
- B) TOP
- C) MOM
- D) NUN

Answer:

- C) MOM

Explanation:

In simple block lettering, M and O are vertically symmetrical, so MOM appears the same in a mirror. The other options contain letters that do not remain the same in a vertical mirror.

Q10. Alex is facing North. He turns 90° to his right, then 90° to his left, and finally 180° around. Which direction is he facing now?

Options:

- A) North
- B) East
- C) South
- D) West

Answer:

- C) South

Explanation:

Starting from North:

90° right \rightarrow East

90° left from East \rightarrow back to North

180° turn from North \rightarrow South

Reason and Assertion - Questions 11

Q11. Assertion: In a series where each number is formed by adding 2 to the previous odd number (starting with 3), every term is odd.

Reason: Adding 2 to an odd number always results in an odd number.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: Starting with 3 (odd), $3+2=5$ (odd), $5+2=7$ (odd), etc. The Reason correctly explains the Assertion.

Q12. Assertion: When each vowel (A, E, I, O, U) is replaced by its mirror letter ($A \leftrightarrow Z$, $E \leftrightarrow V$, $I \leftrightarrow R$, $O \leftrightarrow L$, $U \leftrightarrow F$), none of the vowels remain vowels.

Reason: The mirror letters for A, E, I, O, U are Z, V, R, L, and F respectively, and all of these are consonants.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: Since the mirror of each vowel results in a consonant, the Reason correctly explains the Assertion.

Q13. Assertion: In a code language where every letter is replaced by the letter that comes one position later (with Z replaced by A), the word "CAT" becomes "DBU."

Reason: Shifting each letter one position forward in the alphabet transforms $C \rightarrow D$, $A \rightarrow B$, and $T \rightarrow U$.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: The procedure gives "DBU," and the Reason correctly explains how the code is obtained.

Q14. Assertion: In a line of 20 students, if a child is 4th from the top, his rank from the bottom is 17th.

Reason: The rank from the bottom is calculated by subtracting the top rank from the total number of students and then adding 1, i.e., $20 - 4 + 1 = 17$.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: The calculation confirms the Assertion, and the Reason is correct.

Q15. Assertion: The letter "M" looks the same in a mirror image.

Reason: "M" is vertically symmetrical.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: When written in block style, "M" is vertically symmetrical; its mirror image is identical to itself. The Reason correctly explains the Assertion.

Q16. Assertion: A square has four equal sides and four right angles.

Reason: A shape with four equal sides and four right angles is defined as a square.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: The definition of a square exactly matches the Assertion, so both are true and the Reason is correct.

Q17. Assertion: If a box contains an equal number of red, blue, and green blocks, then the number of complete groups (each group containing one block of each color) equals one-third of the total number of blocks.

Reason: With equal numbers of three colors, dividing the total by 3 gives the number of groups.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: The Reason correctly explains the process of grouping when the colors are equally represented.

Q18. Assertion: If a child is facing East and turns 90° to the left, he will face North.

Reason: Turning left from East means moving counter-clockwise, which leads to North.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: The Reason correctly explains that a 90° left turn from East results in facing North.

Q19. Assertion: In the sequence "apple, banana, cherry, date," the words are arranged in alphabetical order.

Reason: The sequence is arranged based on the first letter of each word: A, B, C,

- D) A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: The words are correctly ordered alphabetically by their first letters. The Reason correctly explains the arrangement.

Q20. Assertion: A robin is a bird.

Reason: A robin is a small animal that can fly and has feathers, which are characteristics of birds.

- A) Both Assertion and Reason are correct, and Reason is the correct explanation of Assertion.
- B) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- C) Assertion is correct, but Reason is incorrect.
- D) Assertion is incorrect, but Reason is correct.

Answer: A

Explanation: Since robins have the features that define birds, both the Assertion and Reason are true and the Reason correctly explains the Assertion.

Case Study - Questions 21

Q21. At Sunshine School, every student's registration code for the annual fair is generated by taking the first two letters of their name, converting each letter to its mirror ($A \leftrightarrow Z$, $B \leftrightarrow Y$, etc.), and then shifting each resulting letter one position backward (with A going to Z).

If a student's name is "EMMA", what is her registration code (using only the first two letters)?

Options:

- A) UM
- B) VN
- C) MU
- D) NV

Answer:

- A) UM

Explanation:

"EM" becomes "V N" via mirror conversion and then shifting each letter one position backward gives "U M".

Solution:

First two letters: "EM".

Mirror of E: $27 - 5 = 22 \rightarrow V$; mirror of M: $27 - 13 = 14 \rightarrow N$.

Shift each letter one position backward: $V \rightarrow U$; $N \rightarrow M$.

Final code: UM.

Q22. On a rainy day, a school bus departs 10 minutes later than usual, and its travel time increases by 20%. Normally, the bus departs at 7:00 AM and takes 40 minutes to reach school. Meanwhile, seat numbers on the bus follow this pattern: The first seat is numbered 4, and each subsequent seat number increases by the next odd number (i.e., differences: 3, then 5, then 7, ...).

If a student gets seat number 12, what is his seat position, and what is the bus's new arrival time?

Options:

- A) 3rd seat; 8:00 AM
- B) 3rd seat; 8:05 AM
- C) 4th seat; 8:00 AM
- D) 4th seat; 8:05 AM

Solution:

Seat Series:

Seat 1 = 4

Seat 2 = $4 + 3 = 7$

Seat 3 = $7 + 5 = 12 \rightarrow$ student is in the 3rd seat.

Bus Timing:

Normal departure: 7:00 AM, travel time = 40 minutes \rightarrow arrival at 7:40 AM.

On rainy day: Departs at 7:10 AM; new travel time = $40 \times 1.20 = 48$ minutes.

New arrival time = $7:10 + 48$ minutes = 7:58 AM (approximately 8:00 AM).

Answer:

- A) 3rd seat; 8:00 AM

Explanation:

The seat series shows that 12 is the 3rd seat, and the delayed departure plus increased travel time results in an arrival around 8:00 AM.

Q23. At a school fair, a basket contains fruits: apples, oranges, and bananas. The number of apples is equal to the number of oranges, and there are 4 more bananas than apples. If there are 28 fruits in total, how many oranges are there?

Options:

- A) 6
- B) 7
- C) 8
- D) 9

Solution:

Let apples = oranges = x ; bananas = $x + 4$.

Total fruits: $x + x + (x + 4) = 3x + 4 = 28$

Solve: $3x = 24$, so $x = 8$.

Answer:

- C) 8

Explanation:

There are 8 oranges (and 8 apples), with 12 bananas, making 28 fruits total.

Q24. Scenario:

A school library receives 5 new books with page counts: 100, 150, 120, 130, 110. They are arranged in increasing order of pages.

Question: Which book (by page count) is third in order?

Options:

- A) 110 pages
- B) 120 pages
- C) 130 pages
- D) 150 pages

Solution:

Sorted order: 100, 110, 120, 130, 150.

The third book is the one with 120 pages.

Answer:

- B) 120 pages

Explanation:

Arranging the page counts in increasing order gives 120 as the third book.

Q25. A child has three different shapes: a circle, a triangle, and a square. The teacher asks them to arrange the shapes by the number of sides (consider a circle as having 0 sides).

Question: Which shape is in the middle when arranged in ascending order?

Options:

- A) Circle
- B) Triangle
- C) Square
- D) They are all equal

Solution:

Circle = 0 sides, triangle = 3 sides, square = 4 sides.

Order: circle, triangle, square.

The middle shape is the triangle.

Answer:

- B) Triangle

Explanation:

Arranged by increasing number of sides, the triangle comes between the circle and the square.

Q26. In art class, a student draws the letter "A" on a transparent sheet. When held in front of a mirror, the image is reversed.

Question: Which letter will appear the same when seen in a mirror?

Options:

- A) A
- B) H
- C) E
- D) F

Solution:

The letter H is vertically symmetrical and remains unchanged in a mirror.

Answer:

- B) H

Explanation:

H looks the same in a mirror, while A, E, and F do not appear exactly the same.

Q27. Sita stands facing North. She then walks 5 steps, turns right and walks 3 steps, and finally turns left and walks 4 steps.

Question: In which direction is she primarily from her starting point?

Options:

- A) North-East
- B) North-West
- C) South-East
- D) South-West

Solution:

Starting at North.

Turn right: facing East → 3 steps East.

Then turn left: now facing North → 4 steps North.

Total displacement: 5 steps North (initial) + 4 steps North = 9 steps North, 3 steps East.

This is primarily North-East.

Answer: North-East

Explanation:

Her net movement is 9 steps North and 3 steps East, which is in the North-East direction.

Q28. A teacher gives a sequence of words: "apple, banana, cherry, ?" where the words are arranged in alphabetical order.

Question: Which word logically comes next from the given options?

Options:

- A) date
- B) apricot
- C) grape
- D) kiwi

Solution:

Alphabetical order: apple (A), banana (B), cherry (C). The next word should start with

D) Answer:

A) date

Explanation:

"Date" starts with D, following the alphabetical sequence A, B, C, D.

Q29. A secret code for a treasure map is created by shifting each letter of the word "GOLD" by one position forward in the alphabet (with Z going to A).

Question: What is the coded form of "GOLD"?

Options:

- A) HPME
- B) HNME
- C) HPMF
- D) HNMF

Solution:

Shift each letter one position forward:

G → H, O → P, L → M, D →

E) Thus, "GOLD" becomes "HPME".

Answer:

- A) HPME

Explanation:

Each letter is shifted one position forward, so GOLD → HPME.

Q30. In a drawing contest with 20 participants, if a child's drawing is the 4th best from the top, what is his rank from the bottom?

Options:

- A) 17th
- B) 16th
- C) 15th
- D) 14th

Solution:

Rank from the bottom = Total - Rank from Top + 1 = $20 - 4 + 1 = 17$.

Answer:

- A) 17th

Explanation:

Using the formula, the child's rank from the bottom is 17.

Q31. A treasure map uses a unique code. The code is generated as follows:

Take the first letter of the word "TREASURE."

Replace it with its mirror letter ($A \leftrightarrow Z$, $B \leftrightarrow Y$, ...).

Shift the resulting letter forward by the number equal to the month number in which the map was found (e.g. May = 5).

Finally, multiply the alphabetical position of that letter by 2.

If the map is found in May, what is the final number?

Options:

- A) 20
- B) 22
- C) 24
- D) 26

Answer:

- C) 24

Explanation:

Following the steps yields "L" whose position (12) doubled equals 24.

Solution:

First letter of "TREASURE" is T (20).

Mirror of T: $27 - 20 = 7 \rightarrow G$.

Shift G (position 7) forward by 5: $7 + 5 = 12 \rightarrow L$.

Multiply position of L (12) by 2 = 24.

Q32. A puzzle states: "Start with 3. For each next term, multiply the previous term by 2. If the result is even, add 1; if it is odd, subtract 1."

What is the 4th term?

Solution:

Term 1: 3 (odd).

Term 2: $3 \times 2 = 6$ (even) $\rightarrow 6 + 1 = 7$.

Term 3: $7 \times 2 = 14$ (even) $\rightarrow 14 + 1 = 15$.

Term 4: $15 \times 2 = 30$ (even) $\rightarrow 30 + 1 = 31$.

Options:

- A) 29
- B) 30
- C) 31
- D) 32

Answer:

- C) 31

Explanation:

The rule gives the sequence 3, 7, 15, and 31.

Q33. A school clock chimes every 15 minutes starting at 11:30 PM on Saturday. If a student hears exactly 10 chimes (including the one at 11:30 PM), what is the time and day when the 10th chime occurs?

Solution:

Chime times (starting at 11:30 PM Saturday):

11:30 PM (Saturday)

11:45 PM (Saturday)

12:00 AM (Sunday)

12:15 AM (Sunday)

12:30 AM (Sunday)

12:45 AM (Sunday)

1:00 AM (Sunday)

1:15 AM (Sunday)

1:30 AM (Sunday)

1:45 AM (Sunday)

Options:

A) 1:45 AM Sunday

B) 1:30 AM Sunday

C) 2:00 AM Sunday

D) 2:15 AM Sunday

Answer:

A) 1:45 AM Sunday

Explanation:

Counting each chime gives the 10th chime at 1:45 AM on Sunday.

Q34. At a fruit market, the number of apples sold follows a pattern. In the 1st hour, 10 apples are sold; in the 2nd hour, $10 + 5 = 15$ apples; in the 3rd hour, $15 + 6 = 21$ apples; in the 4th hour, $21 + 7 = 28$ apples; and in the 5th hour, $28 + 8 = 36$ apples.

What is the total number of apples sold in 5 hours?

Options:

A) 110

B) 115

C) 120

D) 125

Answer:

A) 110

Explanation:

Total = $10 + 15 + 21 + 28 + 36 = 110$ apples.

Q35. On a rainy day, a school bus departs 7 minutes late and its travel time increases by 20%. Normally, it departs at 7:00 AM and takes 40 minutes. Meanwhile, seat numbers on the bus follow this pattern: the first seat is numbered 4; each subsequent seat's number increases by the next odd number (first difference = 3, then 5, etc.).

If a student gets seat number 12, what is his seat position, and what is the bus's new arrival time?

Solution:

Seat series:

Seat 1: 4

Seat 2: $4 + 3 = 7$

Seat 3: $7 + 5 = 12 \rightarrow$ seat 12 is 3rd in order.

Bus timing:

Normal: $7:00 \text{ AM} + 40 = 7:40 \text{ AM}$.

Rainy day: Depart at 7:07 AM; new travel time = $40 \times 1.20 = 48$ minutes.

New arrival time: $7:07 + 48 = 7:55 \text{ AM}$ (approximately 7:55-8:00 AM).

Options:

A) 3rd seat; 7:55 AM

B) 3rd seat; 8:05 AM

C) 4th seat; 7:55 AM

D) 4th seat; 8:05 AM

Answer:

A) 3rd seat; 7:55 AM

Explanation:

Seat 12 is the 3rd seat; the new arrival time is about 7:55 AM.

Answer Key

Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer
1	C) 20	8	C) Square	15	A	22	A) 3rd seat; 8:00 AM	29	A) HPME
2	B) Triangle	9	C) MOM	16	A	23	C) 8	30	A) 17th
3	B) 3	10	C) South	17	A	24	B) 120 pages	31	C) 24
4	A) S	11	A	18	A	25	B) Triangle	32	C) 31
5	B) Puppy	12	A	19	A	26	B) H	33	A) 1:45 AM Sunday
6	B) 23rd	13	A	20	A	27	North-East	34	A) 110
7	A) GJT	14	A	21	A) UM	28	A) date	35	A) 3rd seat; 7:55 AM