

ATMA Analytical Reasoning Skills

Sample Paper – 3

Duration: 60 Minutes

Maximum Marks: 60

Instructions

- This paper contains **60** Multiple Choice Questions (Single Correct Answer) in two parts (Part I and Part II), modelled on the Analytical Reasoning Skills portion of **ATMA** entrance.
- Each correct answer carries **+1 mark**. There is a **penalty of 0.25 mark** for every incorrect answer; unattempted questions carry **0** mark.
- Only **one** option is correct. Choose carefully.
- Syllabus level: **Logical reasoning & data interpretation (ATMA Analytical Reasoning Skills)**
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

Part I: Analytical Reasoning Skills

Q1. Find the next term in the series: 3, 7, 16, 32, 57, ?

- (A) 83
- (B) 88
- (C) 93
- (D) 98

Q2. Find the next term in the letter series: *C, F, K, R, ?*

- (A) *X*
- (B) *A*
- (C) *B*
- (D) *Z*



Q3. $7 : 56 :: 11 : ?$

- (A) 132
- (B) 121
- (C) 110
- (D) 143

Q4. **Glove : Hand :: Sock : ?**

- (A) Shoe
- (B) Wool
- (C) Knee
- (D) Foot

Q5. Choose the odd one out.

- (A) 144
- (B) 196
- (C) 150
- (D) 225

Q6. In a certain code, each letter is replaced by its position number in the English alphabet ($A = 1, B = 2, \dots, Z = 26$). Using this scheme, the word **FACE** is coded as:

- (A) 6-1-5-3
- (B) 6-1-3-5
- (C) 5-1-3-6
- (D) 6-3-1-5

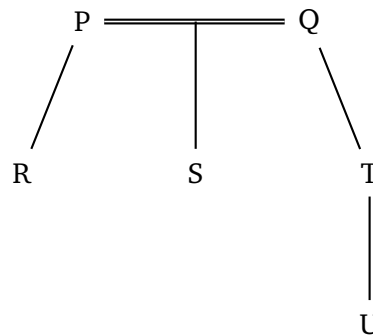
Q7. In the same alphabet-position code ($A = 1, \dots, Z = 26$), the number string 4-1-20-1 stands for the word:

- (A) DUST



- (B) DATE
- (C) DARK
- (D) DATA

Q8. Study the family tree, where a double line denotes a married couple and a downward branch denotes a parent-to-child link.

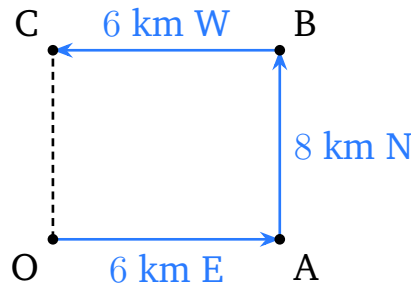


P is the father and Q is the mother. R, S and T are their children, and U is T's son. How is P related to U?

- (A) Grandfather
 - (B) Father
 - (C) Uncle
 - (D) Brother
- Q9.** Pointing to a photograph, a woman said, “She is the daughter of the only sister of my father.” How is the woman related to the girl in the photograph?
- (A) Aunt
 - (B) Niece
 - (C) Cousin
 - (D) Sister
- Q10.** A delivery rider starts at point O and rides 6 km East to reach A, then turns left and rides 8 km North to reach B, then turns left again and rides



6 km West to reach C. The route is shown below.

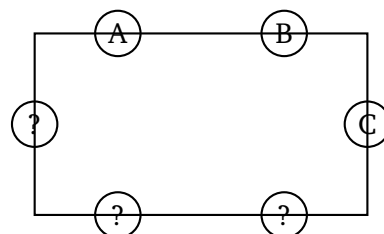


How far and in which direction is the rider’s final point C from the starting point O?

- (A) 6 km North
- (B) 8 km North
- (C) 10 km North-East
- (D) 14 km North

Q11. Directions (Q11–Q13): Eight friends — A, B, C, D, E, F, G and H — sit around a rectangular table. Four sit on the longer sides (two per side) and the two corners are not occupied; in fact four sit at the four mid-side positions and four at the table ends, one per short side, but for this puzzle treat it simply as eight seats, one per person, evenly spaced around the table. Some face the centre of the table and some face outward.

A faces the centre. B sits second to the right of A. C is an immediate neighbour of A and faces outward. D sits exactly opposite A and faces the centre. E sits to the immediate left of D. F and G are immediate neighbours, and H sits between B and F.



(The figure shows representative seats around the table; positions of D, E, F, G, H follow from the clues.)

Who sits exactly opposite A?

- (A) B
- (B) C
- (C) E
- (D) D

Q12. Refer to the seating arrangement in Q11. Which of the following statements about C is true?

- (A) C is an immediate neighbour of A and faces outward.
- (B) C sits opposite A.
- (C) C sits between D and E.
- (D) C faces the centre.

Q13. Refer to the seating arrangement in Q11. H sits between which two friends?

- (A) A and C
- (B) B and F
- (C) D and E
- (D) F and G

Q14. Five training sessions — Marketing, Finance, HR, Sales and IT — are scheduled on five consecutive working days from Monday to Friday, one per day. Finance is on Wednesday. Marketing is held the day immediately before Finance. HR is held on Friday. Sales is held immediately after Finance. On which day is IT scheduled?

- (A) Tuesday
- (B) Wednesday

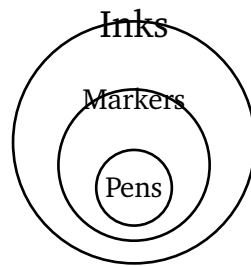


- (C) Monday
- (D) Friday

Q15. Among five students P, Q, R, S and T, Q scored more than P but less than R. T scored more than R, and S scored the highest of all. Who scored the second highest?

- (A) Q
- (B) R
- (C) S
- (D) T

Q16. Statements: All pens are markers. All markers are inks.

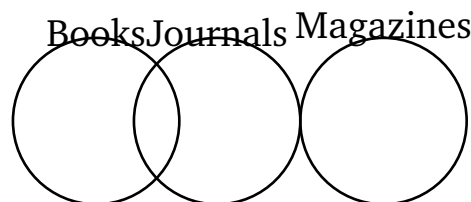


Conclusions: (I) All pens are inks. (II) All inks are pens.

Which conclusion(s) follow?

- (A) Only II follows
- (B) Both I and II follow
- (C) Only I follows
- (D) Neither I nor II follows

Q17. Statements: Some books are journals. No journal is a magazine.



Conclusions: (I) Some books are not magazines. (II) All magazines are books.

Which conclusion(s) follow?

- (A) Only I follows
- (B) Only II follows
- (C) Both follow
- (D) Neither follows

Q18. Statement: A city bus service announces, “All passengers must keep their travel cards ready before boarding to avoid delays at the entry gate.”

Conclusions: (I) Keeping cards ready can reduce boarding delays. (II) No passenger ever keeps the card ready.

Which conclusion(s) logically follow from the statement?

- (A) Only II follows
- (B) Only I follows
- (C) Both follow
- (D) Neither follows

Q19. Statement: Several students of a coaching centre failed the mock test because they had not practised enough mock papers.

Courses of Action: (I) The centre should schedule regular timed mock papers. (II) The centre should permanently expel all students who failed.

Which course of action should be followed?

- (A) Only II follows
- (B) Both follow
- (C) Neither follows
- (D) Only I follows



- Q20.** In a certain code: $P \star Q$ means $P > Q$; $P \bullet Q$ means $P < Q$; $P \circ Q$ means $P = Q$. Given that $A \star B$, $B \circ C$ and $C \star D$, which of the following is definitely true?
- (A) $A > D$
(B) $A < D$
(C) $A = D$
(D) $B < D$
- Q21.** In a row of 40 students facing North, Rohan is 15th from the left end. What is his position from the right end?
- (A) 25th
(B) 26th
(C) 24th
(D) 27th
- Q22.** If 1 January 2024 was a Monday, what day of the week was 1 March 2024? (Note: 2024 is a leap year.)
- (A) Wednesday
(B) Thursday
(C) Friday
(D) Saturday
- Q23.** Find the missing number that replaces “?” in the grid below, where each row follows the same rule (third column = first column \times second column – first column).

| | | |
|---|---|----|
| 4 | 3 | 8 |
| 5 | 4 | 15 |
| 6 | 5 | ? |



- (A) 20
- (B) 30
- (C) 36
- (D) 24

Q24. Question: What is the two-digit number?

Statement I: The sum of its two digits is 9. **Statement II:** The number is exactly 4 times the sum of its digits.

Which statement(s) is/are sufficient to answer the question?

- (A) Both I and II together are sufficient, but neither alone is sufficient
- (B) Statement I alone is sufficient
- (C) Statement II alone is sufficient
- (D) Even both together are not sufficient

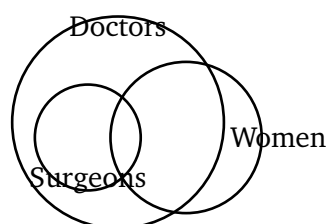
Q25. Question: Is the integer N even?

Statement I: N is a multiple of 3. **Statement II:** N is a multiple of 4.

Which statement(s) is/are sufficient to answer the question?

- (A) Statement I alone is sufficient
- (B) Both together are needed
- (C) Statement II alone is sufficient
- (D) Neither is sufficient

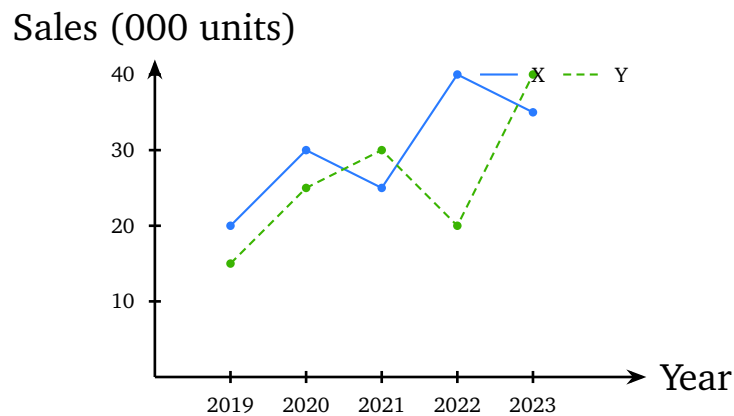
Q26. Which of the following diagrams best represents the relationship among **Doctors**, **Surgeons** and **Women**? (Some doctors are women; all surgeons are doctors; some surgeons are women.)



Identify the correct description of this diagram.

- (A) Surgeons lie entirely outside Doctors
- (B) Surgeons lie wholly inside Doctors, and Women overlaps both Doctors and Surgeons
- (C) Women is wholly inside Surgeons
- (D) All three circles are completely separate

Q27. Directions (Q27–Q30): The line graph shows the annual sales (in thousand units) of two products, X and Y, of a company over five years.



In the year 2021, by how many thousand units did the sales of product Y exceed the sales of product X?

- (A) 10
- (B) 2.5
- (C) 7.5
- (D) 5

Q28. Refer to the line graph in Q27. What is the percentage growth in the sales of product X from 2019 to 2022?

- (A) 100%
- (B) 50%
- (C) 80%



(D) 25%

Q29. Refer to the line graph in Q27. In which year was the combined sales of products X and Y the highest?

(A) 2020

(B) 2022

(C) 2023

(D) 2021

Q30. Refer to the line graph in Q27. What is the average annual sales of product Y (in thousand units) over the five years?

(A) 30

(B) 26

(C) 28

(D) 24

Part II: Analytical Reasoning Skills

Q31. Find the next term in the series: 5, 11, 23, 47, 95, ?

(A) 185

(B) 187

(C) 190

(D) 191

Q32. Find the next term in the series: 2, 6, 12, 20, 30, ?

(A) 40

(B) 36

(C) 42

(D) 44



Q33. $6 : 42 :: 9 : ?$

- (A) 81
- (B) 90
- (C) 72
- (D) 99

Q34. **Author : Book :: Composer : ?**

- (A) Music
- (B) Piano
- (C) Stage
- (D) Singer

Q35. Choose the odd one out.

- (A) 8
- (B) 27
- (C) 64
- (D) 100

Q36. In a certain code, each letter of a word is replaced by the letter two places later in the English alphabet (so $A \rightarrow C$, $B \rightarrow D$, and so on). Using this scheme, the word **MANGO** is coded as:

- (A) OCPIQ
- (B) OCPHQ
- (C) NCPIQ
- (D) OBPIQ

Q37. In a code, each letter of a word is shifted three places forward in the alphabet (so $A \rightarrow D$, $B \rightarrow E$, and so on; thus **DOG** becomes **GRJ**). Using the same rule, the code **FDW** stands for the word:



- (A) COT
- (B) CAR
- (C) CAT
- (D) BAT

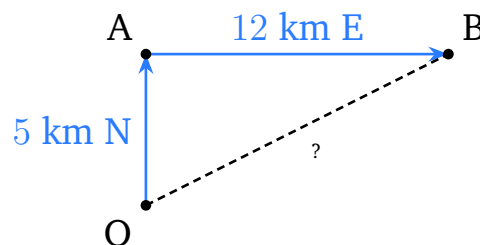
Q38. Read the statements: “A is the father of B. B is the sister of C. C is the mother of D.” How is A related to D?

- (A) Father
- (B) Grandfather
- (C) Uncle
- (D) Brother

Q39. Pointing to a man, a boy said, “He is the son of my grandfather’s only son.” How is the man related to the boy?

- (A) Father
- (B) Uncle
- (C) Cousin
- (D) Brother

Q40. A surveyor starts at point O, walks 5 km North to reach A, then turns right and walks 12 km East to reach B, as shown.



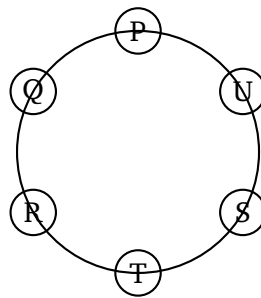
What is the straight-line distance between the starting point O and the final point B?

- (A) 17 km



- (B) 15 km
- (C) 13 km
- (D) 11 km

Q41. Directions (Q41–Q43): Six friends — P, Q, R, S, T and U — sit around a circular table facing the centre. The seats are evenly spaced. For this puzzle, “to the right” of a person means the seat immediately clockwise from them, and “to the left” means the seat immediately anticlockwise. U sits immediately to the right of P. S sits immediately to the right of U. T sits immediately to the right of S. R sits immediately to the right of T. Q sits immediately to the right of R (and Q is therefore immediately to the left of P).

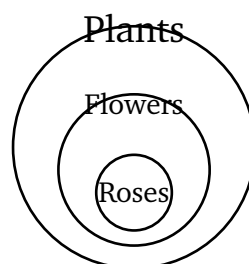


Who sits exactly opposite P?

- (A) S
 - (B) T
 - (C) R
 - (D) U
- Q42.** Refer to the seating arrangement in Q41. Which two friends are the immediate neighbours of T?
- (A) S and R
 - (B) U and S
 - (C) R and Q
 - (D) P and U



- Q43.** Refer to the seating arrangement in Q41. Who sits exactly opposite U?
- (A) Q
 - (B) T
 - (C) R
 - (D) S
- Q44.** Five people — J, K, L, M and N — live on five different floors of a building (floor 1 at the bottom to floor 5 at the top). N lives on the topmost floor. J lives immediately above K. L lives on floor 2. M lives on floor 1. On which floor does K live?
- (A) Floor 4
 - (B) Floor 3
 - (C) Floor 1
 - (D) Floor 2
- Q45.** Five boxes V, W, X, Y and Z have different weights. W is heavier than X but lighter than Y. Z is heavier than Y. V is the lightest of all. Which box is the heaviest?
- (A) Y
 - (B) W
 - (C) V
 - (D) Z
- Q46. Statements:** All roses are flowers. All flowers are plants.

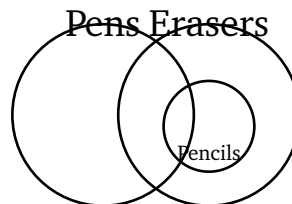


Conclusions: (I) All roses are plants. (II) Some plants are roses.

Which conclusion(s) follow?

- (A) Both I and II follow
- (B) Only I follows
- (C) Only II follows
- (D) Neither follows

Q47. Statements: Some pens are pencils. All pencils are erasers.



Conclusions: (I) All pens are erasers. (II) Some pens are erasers.

Which conclusion(s) follow?

- (A) Only I follows
- (B) Both follow
- (C) Only II follows
- (D) Neither follows

Q48. Statement: A library notice reads, “Members who return books after the due date will be charged a late fee.”

Conclusions: (I) Returning books late can lead to a charge. (II) Every member always returns books on time.

Which conclusion(s) logically follow from the statement?

- (A) Only II follows
- (B) Only I follows
- (C) Both follow
- (D) Neither follows



Q49. Statement: Many residents of a colony fell ill after drinking water from a common tank that was found to be contaminated.

Courses of Action: (I) The tank should be cleaned and the water tested before it is used again. (II) The colony should permanently stop supplying water to all residents.

Which course of action should be followed?

- (A) Only II follows
- (B) Both follow
- (C) Neither follows
- (D) Only I follows

Q50. In a certain code: $P \# Q$ means $P \geq Q$; $P @ Q$ means $P \leq Q$; $P \& Q$ means $P = Q$. Given that $A \# B$, $B \& C$ and $C \# D$, which of the following is definitely true?

- (A) $A \geq D$
- (B) $A < D$
- (C) $A = D$
- (D) $B < D$

Q51. In a class of 35 students arranged by rank, Meera is 12th from the top. What is her rank from the bottom?

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

Q52. What is the angle between the hour hand and the minute hand of a clock at exactly 3:00?

- (A) 45°



- (B) 90°
- (C) 120°
- (D) 180°

Q53. Find the missing number that replaces “?” in the grid, where each row follows the same rule (third column = (first column + second column) \times 2).

| | | |
|---|---|----|
| 3 | 2 | 10 |
| 5 | 4 | 18 |
| 7 | 6 | ? |

- (A) 26
- (B) 24
- (C) 28
- (D) 20

Q54. Question: What is the value of the positive integer x ?

Statement I: x is a prime number less than 10. **Statement II:** x is an even number.

Which statement(s) is/are sufficient to answer the question?

- (A) Statement I alone is sufficient
- (B) Statement II alone is sufficient
- (C) Both I and II together are sufficient, but neither alone is sufficient
- (D) Even both together are not sufficient

Q55. Question: Is the integer K divisible by 6?

Statement I: K is divisible by 2. **Statement II:** K is divisible by 3.

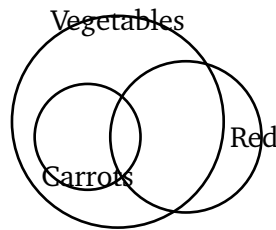
Which statement(s) is/are sufficient to answer the question?

- (A) Statement I alone is sufficient



- (B) Both I and II together are sufficient, but neither alone is sufficient
- (C) Statement II alone is sufficient
- (D) Neither is sufficient

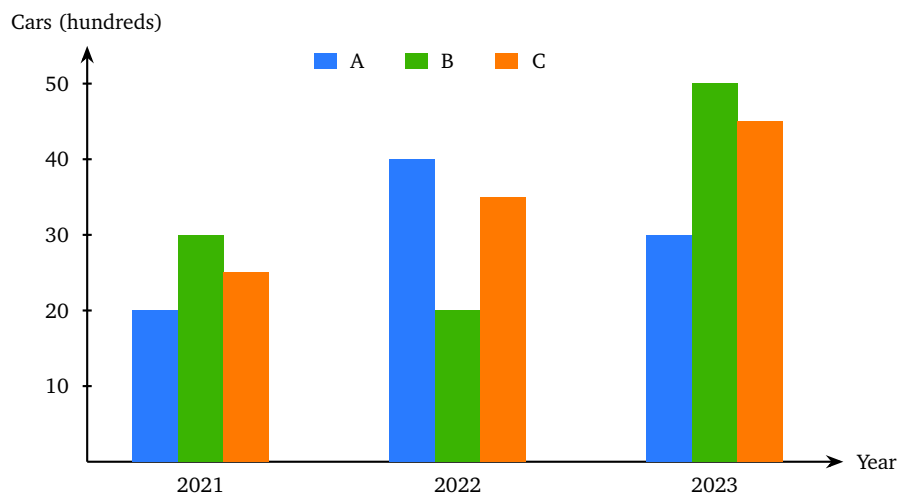
Q56. Which of the following best represents the relationship among **Vegetables**, **Carrots** and **Red things**? (All carrots are vegetables; some vegetables are red; some carrots are red.)



Identify the correct description of this diagram.

- (A) Carrots lie entirely outside Vegetables
- (B) Red things lie wholly inside Carrots
- (C) The three circles are completely separate
- (D) Carrots lie wholly inside Vegetables, and Red overlaps both Vegetables and Carrots

Q57. Directions (Q57–Q60): The bar chart shows the number of cars (in hundreds) sold by three dealers A, B and C over three years.



What was the combined number of cars (in hundreds) sold by all three dealers in 2022?

- (A) 95
- (B) 90
- (C) 100
- (D) 85

Q58. Refer to the bar chart in Q57. What is the percentage growth in the number of cars sold by dealer A from 2021 to 2022?

- (A) 50%
- (B) 100%
- (C) 75%
- (D) 25%

Q59. Refer to the bar chart in Q57. Which dealer sold the highest total number of cars over the three years?

- (A) Dealer A
- (B) All equal
- (C) Dealer B
- (D) Dealer C

Q60. Refer to the bar chart in Q57. What is the average number of cars (in hundreds) sold by dealer C over the three years?

- (A) 30
- (B) 40
- (C) 35
- (D) 45



Detailed Solutions

Q1.

Solution

Concept — Number series with growing differences: Examine the gaps between consecutive terms to spot the rule.

Step 1 — Find the differences: $7 - 3 = 4$, $16 - 7 = 9$, $32 - 16 = 16$, $57 - 32 = 25$.

Step 2 — Identify the pattern: The differences are 4, 9, 16, 25, i.e. $2^2, 3^2, 4^2, 5^2$. The next difference is $6^2 = 36$.

Step 3 — Next term: $57 + 36 = 93$.

Why other options are wrong:

- 83 and 88: use too small a difference.
- 98: overshoots; would need a difference of 41.

Final Answer: $93 \Rightarrow$

Answer: (C) [Go Back to Q1](#)

Q2.

Solution

Concept — Letter series via position numbers: Convert letters to alphabet positions and study the jumps.

Step 1 — Positions: $C = 3$, $F = 6$, $K = 11$, $R = 18$.

Step 2 — Differences: $6 - 3 = 3$, $11 - 6 = 5$, $18 - 11 = 7$. The gaps are 3, 5, 7 (odd numbers), so the next gap is 9.

Step 3 — Next position: $18 + 9 = 27$. Since the alphabet has 26 letters, position 27 wraps to $27 - 26 = 1 = A$.

Why other options are wrong:

- X (24), Z (26): do not match the +9 jump.
- B (2): would need a jump of 10.

Final Answer: $A \Rightarrow$

Answer: (B) [Go Back to Q2](#)



Q3.

Solution

Concept — Number analogy: Find the operation linking the first pair, then apply it to the second.

Step 1 — Link the first pair: 7 and 56. Note $56 = 7 \times 8 = 7 \times (7 + 1)$. So the rule is $n \rightarrow n(n + 1)$.

Step 2 — Apply to 11: $11 \times (11 + 1) = 11 \times 12 = 132$.

Why other options are wrong:

- $121 = 11^2$: wrong rule.
- $110 = 11 \times 10$: uses $(n - 1)$, not $(n + 1)$.
- $143 = 11 \times 13$: uses $(n + 2)$.

Final Answer: $132 \Rightarrow$

Answer: (A) [Go Back to Q3](#)

Q4.

Solution

Concept — Word analogy (function relationship): A glove is worn on the hand; identify what a sock is worn on.

Step 1 — First pair: A glove covers the *hand*.

Step 2 — Second pair: A sock is worn on the *foot*, mirroring the relationship exactly.

Why other options are wrong:

- Shoe: a shoe is also worn on the foot, but it is another garment, not the body part.
- Wool: that is a material, not the body part covered.
- Knee: not the part a sock is primarily worn on.

Final Answer: Foot \Rightarrow

Answer: (D) [Go Back to Q4](#)



Q5.

Solution

Concept — Classification by perfect squares: Check which numbers are perfect squares.

Step 1 — Test each: $144 = 12^2$, $196 = 14^2$, $225 = 15^2$ are perfect squares.

Step 2 — The odd one: 150 is not a perfect square ($12^2 = 144$, $13^2 = 169$), so it does not belong.

Why other options are wrong: 144, 196 and 225 all share the “perfect square” property and so cannot be the odd one.

Final Answer: $150 \Rightarrow$

Answer: (C) [Go Back to Q5](#)

Q6.

Solution

Concept — Number coding by alphabet position: Replace each letter with its serial position ($A = 1, \dots, Z = 26$).

Step 1 — Positions of FACE: $F = 6$, $A = 1$, $C = 3$, $E = 5$.

Step 2 — Form the code: Reading in order gives 6-1-3-5.

Why other options are wrong:

- 6-1-5-3: swaps C and E.
- 5-1-3-6: reverses the order.
- 6-3-1-5: swaps A and C.

Final Answer: 6-1-3-5 \Rightarrow

Answer: (B) [Go Back to Q6](#)



Q7.

Solution

Concept — Decoding number-to-letter: Convert each number back to the letter at that position.

Step 1 — Translate: $4 = D$, $1 = A$, $20 = T$, $1 = A$.

Step 2 — Read the word: $D-A-T-A = DATA$.

Why other options are wrong:

- DUST: needs 4-21-19-20.
- DATE: needs 4-1-20-5.
- DARK: needs 4-1-18-11.

Final Answer: DATA \Rightarrow D

Answer: (D) [Go Back to Q7](#)

Q8.

Solution

Concept — Reading a family tree: Follow the branches: P-Q are a couple; R, S, T are their children; U is a child of T.

Step 1 — Locate U: U is the son of T, and T is a child of P.

Step 2 — Relate P to U: P is the parent of T, and T is the parent of U. Hence P is U's grandparent. As P is male (the father), P is U's *grandfather*.

Why other options are wrong:

- Father: P is T's father, not U's.
- Uncle / Brother: these describe same-generation or sibling links, not a two-level descent.

Final Answer: Grandfather \Rightarrow A

Answer: (A) [Go Back to Q8](#)



Q9.

Solution

Concept — Decoding a relation statement: Work outward from “my father”.

Step 1 — The father’s only sister: is the woman’s aunt (paternal aunt).

Step 2 — That aunt’s daughter: is the woman’s cousin (the girl in the photo).

Step 3 — Relation of woman to girl: They are children of two siblings, so the woman is the girl’s *cousin*.

Why other options are wrong:

- Aunt / Niece: would need a one-generation gap; here both are in the same generation.
- Sister: they do not share parents.

Final Answer: Cousin \Rightarrow

Answer: (C) [Go Back to Q9](#)

Q10.

Solution

Concept — Net displacement from a route: Track horizontal (E–W) and vertical (N–S) movements separately.

Step 1 — Horizontal: 6 km East then 6 km West cancel out, giving net 0 horizontal displacement.

Step 2 — Vertical: Only the 8 km North leg remains. So C lies 8 km directly North of O.

Step 3 — Confirm with the figure: C is directly above O (dashed line), 8 km away, due North.

Why other options are wrong:

- 6 km or 14 km North: wrong net vertical distance.
- 10 km North-East: would require unequal E/W legs.

Final Answer: 8 km North \Rightarrow

Answer: (B) [Go Back to Q10](#)



Q11.

Solution

Concept — Opposite seats: The clue “D sits exactly opposite A” answers this directly.

Step 1 — Read the clue: “D sits exactly opposite A and faces the centre.”

Step 2 — Conclusion: The person opposite A is D.

Why other options are wrong:

- B: sits second to A's right, not opposite.
- C: is an immediate neighbour of A.
- E: sits to the immediate left of D, so not opposite A.

Final Answer: D \Rightarrow

[Go Back to Q11](#)

Q12.

Solution

Concept — Matching a given clue: Test each statement against the conditions.

Step 1 — Direct clue: “C is an immediate neighbour of A and faces outward” is stated verbatim in the puzzle.

Step 2 — Verify the others fail: C is not opposite A (that is D), C is not stated to sit between D and E, and C faces outward (not the centre).

Why other options are wrong: Each contradicts the established facts about C's position and facing direction.

Final Answer: C is an immediate neighbour of A and faces outward \Rightarrow

[Go Back to Q12](#)



Q13.

Solution

Concept — Locating H: Use the clue that fixes H between two named friends.

Step 1 — Read the clue: “H sits between B and F.”

Step 2 — Conclusion: H is flanked by B and F.

Why other options are wrong: A and C are A's side; D and E are on the far side; F and G are a neighbouring pair but H is specifically between B and F.

Final Answer: B and F \Rightarrow

Answer: (B) [Go Back to Q13](#)

Q14.

Solution

Concept — Day scheduling: Place each session using the fixed anchors.

Step 1 — Anchor Finance: Finance is on Wednesday.

Step 2 — Around Finance: Marketing is immediately before Finance \Rightarrow Tuesday. Sales is immediately after Finance \Rightarrow Thursday.

Step 3 — HR and IT: HR is on Friday. The only day left, Monday, is for IT.

Final schedule: Mon = IT, Tue = Marketing, Wed = Finance, Thu = Sales, Fri = HR.

Why other options are wrong: Tuesday is Marketing, Wednesday is Finance, Friday is HR — none of these can be IT.

Final Answer: Monday \Rightarrow

Answer: (C) [Go Back to Q14](#)

Q15.

Solution

Concept — Ordering by comparison: Translate each clue into inequalities and chain them.

Step 1 — From the clues: $P < Q$, $Q < R$, $R < T$, and S is highest.

Step 2 — Build the order: $P < Q < R < T < S$ (with S on top).



Step 3 — Second highest: The one just below S is T .

Why other options are wrong: S is highest (not second); R and Q rank below T .

Final Answer: $T \Rightarrow$ D

Answer: (D) [Go Back to Q15](#)

Q16.

Solution

Concept — Chained universal statements: “All pens are markers” and “all markers are inks” nest the sets.

Step 1 — Nesting: Pens \subseteq Markers \subseteq Inks, exactly as the Venn diagram shows (innermost to outermost).

Step 2 — Test conclusions: (I) All pens are inks — true, since pens lie inside inks. (II) All inks are pens — false; the outer ink region need not be pens.

Why other options are wrong: II reverses the inclusion; only I is valid, so “both” and “only II” fail, and “neither” is wrong because I does follow.

Final Answer: Only I follows \Rightarrow C

Answer: (C) [Go Back to Q16](#)

Q17.

Solution

Concept — “Some” with a negative premise: Combine “some books are journals” with “no journal is a magazine”.

Step 1 — Trace the books that are journals: Those books are journals, and no journal is a magazine, so those particular books are not magazines.

Step 2 — Conclusion I: “Some books are not magazines” — true.

Step 3 — Conclusion II: “All magazines are books” — not supported; the diagram keeps magazines separate from journals with no forced link to books.

Why other options are wrong: II is an unwarranted universal; hence “both”, “only II” and “neither” are all incorrect.

Final Answer: Only I follows \Rightarrow A

Answer: (A) [Go Back to Q17](#)



Q18.

Solution

Concept — Statement and conclusion: A valid conclusion must be directly supported by the statement.

Step 1 — Conclusion I: The notice links keeping cards ready with avoiding delays, so “keeping cards ready can reduce boarding delays” follows.

Step 2 — Conclusion II: “No passenger ever keeps the card ready” is an extreme claim the statement never makes.

Why other options are wrong: II is unsupported, so “only II”, “both” and “neither” fail.

Final Answer: Only I follows ⇒

Answer: (B) [Go Back to Q18](#)

Q19.

Solution

Concept — Course of action: A good action is constructive and proportionate to the problem.

Step 1 — The problem: Students failed due to insufficient mock practice.

Step 2 — Evaluate actions: (I) Scheduling regular timed mock papers directly addresses the cause — valid. (II) Permanently expelling all who failed is harsh and does not solve the practice gap — not valid.

Why other options are wrong: II is disproportionate, so “only II”, “both” and “neither” are wrong.

Final Answer: Only I follows ⇒

Answer: (D) [Go Back to Q19](#)



Q20.

Solution

Concept — Coded inequalities: Replace symbols with $>$, $<$, $=$ and chain.

Step 1 — Decode: $A \star B \Rightarrow A > B$; $B \circ C \Rightarrow B = C$; $C \star D \Rightarrow C > D$.

Step 2 — Chain: $A > B$ and $B = C$ give $A > C$. With $C > D$, we get $A > C > D$, so $A > D$.

Why other options are wrong: $A < D$ and $A = D$ contradict $A > D$; $B < D$ is false since $B = C > D$ means $B > D$.

Final Answer: $A > D \Rightarrow \boxed{A}$

Answer: (A) [Go Back to Q20](#)

Q21.

Solution

Concept — Position from the other end: For a row of n , position from right = $n - (\text{position from left}) + 1$.

Step 1 — Substitute: $n = 40$, position from left = 15.

Step 2 — Compute: $40 - 15 + 1 = 26$. Rohan is 26th from the right.

Why other options are wrong: 25th forgets the +1; 24th and 27th miscount.

Final Answer: 26th $\Rightarrow \boxed{B}$

Answer: (B) [Go Back to Q21](#)

Q22.

Solution

Concept — Day counting: Count the total days from 1 Jan to 1 Mar, then take the remainder on division by 7.

Step 1 — Days elapsed: From 1 Jan to 1 Feb is 31 days; from 1 Feb to 1 Mar is 29 days (2024 is a leap year). Total = $31 + 29 = 60$ days after 1 Jan.

Step 2 — Odd days: $60 \div 7 = 8$ remainder 4. So 1 Mar is 4 weekdays after Monday.

Step 3 — Add: Monday +4 = Tuesday \rightarrow Wednesday \rightarrow Thursday \rightarrow Friday. So 1 Mar 2024 is a Friday.

Why other options are wrong: Wednesday/Thursday/Saturday correspond to



remainders 2, 3, 5, not 4.

Final Answer: Friday \Rightarrow

Answer: (C) [Go Back to Q22](#)

Q23.

Solution

Concept — Row rule in a grid: The third column equals (first \times second) – first.

Step 1 — Verify with given rows: Row 1: $4 \times 3 - 4 = 12 - 4 = 8$. \checkmark Row 2: $5 \times 4 - 5 = 20 - 5 = 15$. \checkmark

Step 2 — Apply to row 3: $6 \times 5 - 6 = 30 - 6 = 24$.

Why other options are wrong: 20, 30 and 36 come from misapplying the rule (e.g. forgetting to subtract the first number).

Final Answer: 24 \Rightarrow

Answer: (D) [Go Back to Q23](#)

Q24.

Solution

Concept — Data sufficiency: Test each statement alone, then together.

Step 1 — Statement I alone: Digit sum = 9 allows 18, 27, 36, 45, 54, 63, 72, 81, 90 — many numbers. Not sufficient.

Step 2 — Statement II alone: Number = $4 \times$ (digit sum). Testing candidates, $12 = 4 \times 3$ (digit sum 3) works, and $24 = 4 \times 6$ (digit sum 6) works too — more than one. Not sufficient.

Step 3 — Both together: Digit sum = 9 and number = $4 \times 9 = 36$. Check: digits of 36 sum to 9. \checkmark Unique answer 36. Both together are sufficient.

Why other options are wrong: Neither statement alone pins down a single number; together they do, so “both together” is correct.

Final Answer: Both I and II together are sufficient \Rightarrow

Answer: (A) [Go Back to Q24](#)



Q25.

Solution

Concept — Even/odd sufficiency: A multiple of 4 is always even; a multiple of 3 may be either.

Step 1 — Statement I alone: N is a multiple of 3 — e.g. 6 (even) or 9 (odd). Cannot decide. Not sufficient.

Step 2 — Statement II alone: N is a multiple of 4 $\Rightarrow N = 4k$, which is always even. Sufficient.

Why other options are wrong: I alone fails; we do not need both; and II clearly settles the question, so “neither” is wrong.

Final Answer: Statement II alone is sufficient \Rightarrow

[Go Back to Q25](#)

Q26.

Solution

Concept — Logical Venn relationships: Translate each given fact into circle positions.

Step 1 — All surgeons are doctors: the Surgeons circle lies wholly inside the Doctors circle.

Step 2 — Some doctors are women and some surgeons are women: the Women circle overlaps both Doctors and Surgeons.

Step 3 — Match the description: Surgeons inside Doctors, with Women overlapping both — exactly option (B).

Why other options are wrong: Surgeons are not outside Doctors; Women is not inside Surgeons; the circles are not all separate.

Final Answer: Surgeons inside Doctors, Women overlaps both \Rightarrow

[Go Back to Q26](#)



Q27.

Solution

Concept — Reading the line graph: Read the 2021 values of X and Y, then subtract.

Step 1 — Values in 2021: Product X = 25 thousand; Product Y = 30 thousand.

Step 2 — Difference: $30 - 25 = 5$ thousand units. Y exceeds X by 5.

Why other options are wrong: 10, 2.5 and 7.5 misread one of the two data points.

Final Answer: $5 \Rightarrow$ D

Answer: (D) [Go Back to Q27](#)

Q28.

Solution

Concept — Percentage growth: $\text{Growth \%} = \frac{\text{final} - \text{initial}}{\text{initial}} \times 100.$

Step 1 — Values for X: 2019 = 20 thousand; 2022 = 40 thousand.

Step 2 — Apply: $\frac{40 - 20}{20} \times 100 = \frac{20}{20} \times 100 = 100\%.$

Why other options are wrong: 50% would double-count the base; 80% and 25% use wrong endpoints.

Final Answer: $100\% \Rightarrow$ A

Answer: (A) [Go Back to Q28](#)

Q29.

Solution

Concept — Combined totals: Add X and Y for each year and compare.

Step 1 — Yearly totals (thousand units): 2019 : $20 + 15 = 35$; 2020 : $30 + 25 = 55$;
2021 : $25 + 30 = 55$; 2022 : $40 + 20 = 60$; 2023 : $35 + 40 = 75$.

Step 2 — Highest: 75 in 2023 is the largest combined total.

Why other options are wrong: 2020 (55), 2022 (60) and 2021 (55) all fall below 2023.

Final Answer: 2023 \Rightarrow C

Answer: (C) [Go Back to Q29](#)



Q30.

Solution

Concept — Average: $\text{Average} = \frac{\text{sum of values}}{\text{number of years}}$.

Step 1 — Y values: 15, 25, 30, 20, 40 (thousand units).

Step 2 — Sum: $15 + 25 + 30 + 20 + 40 = 130$.

Step 3 — Divide: $130 \div 5 = 26$ thousand units.

Why other options are wrong: 30, 28 and 24 result from arithmetic slips in the sum.

Final Answer: $26 \Rightarrow$

Answer: (B) [Go Back to Q30](#)

Q31.

Solution

Concept — Multiplicative series: Check whether each term is built from the previous one by a fixed operation.

Step 1 — Test the rule: $5 \times 2 + 1 = 11$; $11 \times 2 + 1 = 23$; $23 \times 2 + 1 = 47$; $47 \times 2 + 1 = 95$. The rule is “double and add 1”.

Step 2 — Next term: $95 \times 2 + 1 = 190 + 1 = 191$.

Why other options are wrong:

- 185, 187, 190: do not satisfy “double and add 1”.

Final Answer: $191 \Rightarrow$

Answer: (D) [Go Back to Q31](#)



Q32.

Solution

Concept — Series via products / growing differences: Inspect both the gaps and a product form.

Step 1 — Differences: $6 - 2 = 4$, $12 - 6 = 6$, $20 - 12 = 8$, $30 - 20 = 10$. The gaps are 4, 6, 8, 10, so the next gap is 12.

Step 2 — Next term: $30 + 12 = 42$. (Equivalently each term is $n(n + 1)$: $1 \cdot 2, 2 \cdot 3, 3 \cdot 4, 4 \cdot 5, 5 \cdot 6$, then $6 \cdot 7 = 42$.)

Why other options are wrong:

- 40: uses a gap of 10 again.
- 36, 44: do not match the +12 step.

Final Answer: $42 \Rightarrow$ C

Answer: (C) [Go Back to Q32](#)

Q33.

Solution

Concept — Number analogy: Identify the operation in the first pair and apply it.

Step 1 — First pair: 6 and 42. Note $42 = 6 \times 7 = 6 \times (6 + 1)$, so the rule is $n \rightarrow n(n + 1)$.

Step 2 — Apply to 9: $9 \times (9 + 1) = 9 \times 10 = 90$.

Why other options are wrong:

- $81 = 9^2$: wrong rule.
- $72 = 9 \times 8$: uses $(n - 1)$.
- $99 = 9 \times 11$: uses $(n + 2)$.

Final Answer: $90 \Rightarrow$ B

Answer: (B) [Go Back to Q33](#)



Q34.

Solution

Concept — Word analogy (creator and creation): An author creates a book; find what a composer creates.

Step 1 — First pair: An author produces a *book*.

Step 2 — Second pair: A composer produces *music*, mirroring the creator-to-creation link.

Why other options are wrong:

- Piano: an instrument used, not the creation.
- Stage: a place of performance, not what is created.
- Singer: a person, not the product of composing.

Final Answer: Music \Rightarrow

Answer: (A) [Go Back to Q34](#)

Q35.

Solution

Concept — Classification by perfect cubes: Check which numbers are perfect cubes.

Step 1 — Test each: $8 = 2^3$, $27 = 3^3$, $64 = 4^3$ are perfect cubes.

Step 2 — The odd one: 100 is not a perfect cube ($4^3 = 64$, $5^3 = 125$), so it does not belong.

Why other options are wrong: 8, 27 and 64 all share the “perfect cube” property and so cannot be the odd one.

Final Answer: 100 \Rightarrow

Answer: (D) [Go Back to Q35](#)



Q36.

Solution

Concept — Letter shift coding: Move each letter two places forward in the alphabet.

Step 1 — Shift each letter of MANGO: $M \rightarrow O, A \rightarrow C, N \rightarrow P, G \rightarrow I, O \rightarrow Q$.

Step 2 — Form the code: Reading in order gives OCPIQ.

Why other options are wrong:

- OCPHQ: G wrongly shifted to H instead of I .
- NCPIQ: M wrongly shifted to N (only +1).
- OBPIQ: A wrongly shifted to B (only +1).

Final Answer: OCPIQ \Rightarrow

Answer: (A) [Go Back to Q36](#)

Q37.

Solution

Concept — Decoding a forward shift: The code was made by +3; reverse it by shifting each code letter 3 places back.

Step 1 — Shift FDW back by 3: $F \rightarrow C, D \rightarrow A, W \rightarrow T$.

Step 2 — Read the word: $C-A-T = CAT$.

Why other options are wrong:

- COT: would need code FRW.
- CAR: would need code FDU.
- BAT: would need code EDW.

Final Answer: CAT \Rightarrow

Answer: (C) [Go Back to Q37](#)



Q38.

Solution

Concept — Chaining a relation statement: Link each clue step by step.

Step 1 — A and B: A is the father of B.

Step 2 — B and C: B is the sister of C, so A is also the father of C (B and C are siblings).

Step 3 — C and D: C is the mother of D. Since A is C's father, A is the parent of D's parent, i.e. A is D's grandfather (A is male, being a father).

Why other options are wrong:

- Father: A is C's father, not D's.
- Uncle / Brother: these are same-generation links, not a two-level descent.

Final Answer: Grandfather ⇒

Answer: (B) [Go Back to Q38](#)

Q39.

Solution

Concept — Decoding “grandfather's only son”: Work outward from the boy.

Step 1 — The grandfather's only son: The only son of the boy's grandfather is the boy's own father.

Step 2 — Son of that man: The man is the son of the boy's father. A son of the boy's father (other than the boy himself) is the boy's brother.

Step 3 — Relation: The man is the boy's *brother*.

Why other options are wrong:

- Father / Uncle: would need a one-generation gap; here both are children of the same father.
- Cousin: would require different fathers.

Final Answer: Brother ⇒

Answer: (D) [Go Back to Q39](#)



Q40.

Solution

Concept — Straight-line distance via Pythagoras: The two perpendicular legs form a right triangle whose hypotenuse is OB.

Step 1 — Legs: North leg = 5 km (O to A), East leg = 12 km (A to B), meeting at a right angle at A.

Step 2 — Apply Pythagoras: $OB = \sqrt{5^2 + 12^2} = \sqrt{25 + 144} = \sqrt{169} = 13$ km.

Why other options are wrong:

- 17 km: that is $5 + 12$, the path length, not the straight-line distance.
- 15 km, 11 km: do not satisfy $\sqrt{25 + 144}$.

Final Answer: 13 km \Rightarrow C

Answer: (C) [Go Back to Q40](#)

Q41.

Solution

Concept — Circular seating: Place people one by one going clockwise, then read off opposite pairs.

Step 1 — Build the clockwise order: Starting from P and applying “immediately to the right (clockwise)” repeatedly: P, U, S, T, R, Q, and back to P.

Step 2 — Opposite seats: With six evenly spaced seats, each person’s opposite is three seats away. Counting three clockwise from P (P \rightarrow U \rightarrow S \rightarrow T) gives T.

Why other options are wrong:

- S: two seats from P.
- R: four seats clockwise from P (opposite U, not P).
- U: immediate neighbour of P.

Final Answer: T \Rightarrow B

Answer: (B) [Go Back to Q41](#)



Q42.

Solution

Concept — Neighbours in the circle: Use the clockwise order P, U, S, T, R, Q.

Step 1 — Locate T: In the order P, U, S, T, R, Q, the person just before T is S and the person just after T is R.

Step 2 — Neighbours: So T is flanked by S and R.

Why other options are wrong: U and S are neighbours of each other; R and Q are a different adjacent pair; P and U sit on the far side from T.

Final Answer: S and R \Rightarrow

Answer: (A) [Go Back to Q42](#)

Q43.

Solution

Concept — Opposite seat of U: Count three seats from U in the clockwise order P, U, S, T, R, Q.

Step 1 — Three seats from U: $U \rightarrow S \rightarrow T \rightarrow R$. The person opposite U is R.

Step 2 — Confirm: R is three places away from U, which is directly across a six-seat circle.

Why other options are wrong: Q and S are adjacent to U or two seats away; T is opposite P, not U.

Final Answer: R \Rightarrow

Answer: (C) [Go Back to Q43](#)

Q44.

Solution

Concept — Floor arrangement: Place each person using the fixed clues.

Step 1 — Fixed floors: N is on floor 5 (top), L on floor 2, M on floor 1.

Step 2 — Remaining floors: Floors 3 and 4 are left for J and K. Since J is immediately above K, $K = 3$ and $J = 4$.

Final placement: Floor 5 = N, 4 = J, 3 = K, 2 = L, 1 = M.

Why other options are wrong: Floor 4 is J; floors 1 and 2 are taken by M and L,



so K can only be floor 3.

Final Answer: Floor 3 \Rightarrow

Answer: (B) [Go Back to Q44](#)

Q45.

Solution

Concept — Ordering by weight: Translate each clue into inequalities and chain them.

Step 1 — From the clues: $X < W$, $W < Y$, $Y < Z$, and V is the lightest.

Step 2 — Build the order: $V < X < W < Y < Z$.

Step 3 — Heaviest: The top of the chain is Z.

Why other options are wrong: Y is below Z; W is in the middle; V is the lightest.

Final Answer: Z \Rightarrow

Answer: (D) [Go Back to Q45](#)

Q46.

Solution

Concept — Chained universal statements: “All roses are flowers” and “all flowers are plants” nest the sets.

Step 1 — Nesting: $Roses \subseteq Flowers \subseteq Plants$, as the Venn diagram shows.

Step 2 — Test conclusions: (I) All roses are plants — true, since roses lie inside plants. (II) Some plants are roses — true, because the rose region is a non-empty part of the plant region.

Why other options are wrong: Both conclusions are valid, so “only I”, “only II” and “neither” all fail.

Final Answer: Both I and II follow \Rightarrow

Answer: (A) [Go Back to Q46](#)



Q47.

Solution

Concept — “Some” combined with “all”: Combine “some pens are pencils” with “all pencils are erasers”.

Step 1 — Trace the pens that are pencils: Those pens are pencils, and all pencils are erasers, so those particular pens are erasers.

Step 2 — Conclusion II: “Some pens are erasers” — true.

Step 3 — Conclusion I: “All pens are erasers” — not supported; only the pens that overlap pencils are guaranteed to be erasers.

Why other options are wrong: I is too strong, so “only I”, “both” and “neither” are incorrect.

Final Answer: Only II follows ⇒ C

Answer: (C) [Go Back to Q47](#)

Q48.

Solution

Concept — Statement and conclusion: A valid conclusion must be directly supported by the statement.

Step 1 — Conclusion I: The notice links late return with a late fee, so “returning books late can lead to a charge” follows.

Step 2 — Conclusion II: “Every member always returns books on time” is an extreme claim the statement never makes.

Why other options are wrong: II is unsupported, so “only II”, “both” and “neither” fail.

Final Answer: Only I follows ⇒ B

Answer: (B) [Go Back to Q48](#)



Q49.

Solution

Concept — Course of action: A good action is constructive and proportionate to the problem.

Step 1 — The problem: Residents fell ill from a contaminated common water tank.

Step 2 — Evaluate actions: (I) Cleaning and testing the tank before reuse directly removes the cause — valid. (II) Permanently stopping all water supply is disproportionate and harmful — not valid.

Why other options are wrong: II is an over-reaction, so “only II”, “both” and “neither” are wrong.

Final Answer: Only I follows \Rightarrow

Answer: (D) [Go Back to Q49](#)

Q50.

Solution

Concept — Coded inequalities: Replace symbols with $\geq, \leq, =$ and chain.

Step 1 — Decode: $A \# B \Rightarrow A \geq B$; $B \& C \Rightarrow B = C$; $C \# D \Rightarrow C \geq D$.

Step 2 — Chain: $A \geq B$ and $B = C$ give $A \geq C$. With $C \geq D$, we get $A \geq C \geq D$, so $A \geq D$.

Why other options are wrong: $A < D$ contradicts $A \geq D$; $A = D$ is only one possibility, not guaranteed; $B < D$ is false since $B = C \geq D$.

Final Answer: $A \geq D \Rightarrow$

Answer: (A) [Go Back to Q50](#)

Q51.

Solution

Concept — Rank from the other end: For n items, rank from bottom = $n -$ (rank from top) + 1.

Step 1 — Substitute: $n = 35$, rank from top = 12.

Step 2 — Compute: $35 - 12 + 1 = 24$. Meera is 24th from the bottom.

Why other options are wrong: 23rd forgets the +1; 22nd and 25th miscount.



Final Answer: 24th \Rightarrow

Answer: (C) [Go Back to Q51](#)

Q52.

Solution

Concept — Clock angle: Each hour mark is 30° apart, since $360^\circ \div 12 = 30^\circ$.

Step 1 — Hand positions at 3:00: The minute hand points at 12; the hour hand points at 3.

Step 2 — Count the gap: From 12 to 3 is 3 hour marks, i.e. $3 \times 30^\circ = 90^\circ$.

Why other options are wrong: 45° , 120° and 180° correspond to 1.5, 4 and 6 hour gaps, not 3.

Final Answer: $90^\circ \Rightarrow$

Answer: (B) [Go Back to Q52](#)

Q53.

Solution

Concept — Row rule in a grid: The third column equals $(\text{first} + \text{second}) \times 2$.

Step 1 — Verify with given rows: Row 1: $(3 + 2) \times 2 = 5 \times 2 = 10$. ✓ Row 2: $(5 + 4) \times 2 = 9 \times 2 = 18$. ✓

Step 2 — Apply to row 3: $(7 + 6) \times 2 = 13 \times 2 = 26$.

Why other options are wrong: 24, 28 and 20 come from misadding or mismultiplying.

Final Answer: 26 \Rightarrow

Answer: (A) [Go Back to Q53](#)



Q54.

Solution

Concept — Data sufficiency: Test each statement alone, then together.

Step 1 — Statement I alone: Primes less than 10 are 2, 3, 5, 7 — four possibilities. Not sufficient.

Step 2 — Statement II alone: x even allows 2, 4, 6, ... — infinitely many. Not sufficient.

Step 3 — Both together: An even prime less than 10 is only 2 (the unique even prime). Unique answer $x = 2$. Both together are sufficient.

Why other options are wrong: Neither statement alone pins down x ; together they give exactly one value, so “both together” is correct.

Final Answer: Both together are sufficient \Rightarrow

[Go Back to Q54](#)

Q55.

Solution

Concept — Divisibility sufficiency: A number is divisible by 6 exactly when it is divisible by both 2 and 3.

Step 1 — Statement I alone: Divisible by 2 only — e.g. 4 (not by 6) or 12 (by 6). Cannot decide. Not sufficient.

Step 2 — Statement II alone: Divisible by 3 only — e.g. 9 (not by 6) or 12 (by 6). Cannot decide. Not sufficient.

Step 3 — Both together: Divisible by 2 and by 3 \Rightarrow divisible by 6 (since 2 and 3 are coprime). Sufficient.

Why other options are wrong: Neither alone settles it; “neither is sufficient” is wrong because together they do.

Final Answer: Both together are sufficient \Rightarrow

[Go Back to Q55](#)



Q56.

Solution

Concept — Logical Venn relationships: Translate each fact into circle positions.

Step 1 — All carrots are vegetables: the Carrots circle lies wholly inside the Vegetables circle.

Step 2 — Some vegetables are red and some carrots are red: the Red circle overlaps both Vegetables and Carrots.

Step 3 — Match the description: Carrots inside Vegetables, with Red overlapping both — exactly option (D).

Why other options are wrong: Carrots are not outside Vegetables; Red is not inside Carrots; the circles are not all separate.

Final Answer: Carrots inside Vegetables, Red overlaps both \Rightarrow

[Go Back to Q56](#)

Q57.

Solution

Concept — Reading the bar chart: Read the three 2022 bars and add them.

Step 1 — Values in 2022 (hundreds): Dealer A = 40, Dealer B = 20, Dealer C = 35.

Step 2 — Combined total: $40 + 20 + 35 = 95$ hundred cars.

Why other options are wrong: 90, 100 and 85 result from misreading one of the three bars.

Final Answer: $95 \Rightarrow$

[Go Back to Q57](#)



Q58.

Solution

Concept — Percentage growth: $\text{Growth \%} = \frac{\text{final} - \text{initial}}{\text{initial}} \times 100.$

Step 1 — Values for A: 2021 = 20, 2022 = 40 (hundreds).

Step 2 — Apply: $\frac{40 - 20}{20} \times 100 = \frac{20}{20} \times 100 = 100\%.$

Why other options are wrong: 50% halves the base; 75% and 25% use wrong values.

Final Answer: 100% \Rightarrow B

Answer: (B) [Go Back to Q58](#)

Q59.

Solution

Concept — Three-year totals: Add each dealer's three bars and compare.

Step 1 — Totals (hundreds): Dealer A : $20 + 40 + 30 = 90$; Dealer B : $30 + 20 + 50 = 100$; Dealer C : $25 + 35 + 45 = 105$.

Step 2 — Highest: 105 for Dealer C is the largest total.

Why other options are wrong: A (90) and B (100) fall below C; the totals are not equal.

Final Answer: Dealer C \Rightarrow D

Answer: (D) [Go Back to Q59](#)

Q60.

Solution

Concept — Average: $\text{Average} = \frac{\text{sum of values}}{\text{number of years}}.$

Step 1 — Dealer C values (hundreds): 25, 35, 45.

Step 2 — Sum: $25 + 35 + 45 = 105.$

Step 3 — Divide: $105 \div 3 = 35$ hundred cars.

Why other options are wrong: 30, 40 and 45 result from arithmetic slips in the sum or count.



Final Answer: 35 \Rightarrow

Answer: (C) [Go Back to Q60](#)



Answer Key

| Q | Ans | Q | Ans | Q | Ans | Q | Ans | Q | Ans |
|----|-----|----|-----|----|-----|----|-----|----|-----|
| 1 | C | 2 | B | 3 | A | 4 | D | 5 | C |
| 6 | B | 7 | D | 8 | A | 9 | C | 10 | B |
| 11 | D | 12 | A | 13 | B | 14 | C | 15 | D |
| 16 | C | 17 | A | 18 | B | 19 | D | 20 | A |
| 21 | B | 22 | C | 23 | D | 24 | A | 25 | C |
| 26 | B | 27 | D | 28 | A | 29 | C | 30 | B |
| 31 | D | 32 | C | 33 | B | 34 | A | 35 | D |
| 36 | A | 37 | C | 38 | B | 39 | D | 40 | C |
| 41 | B | 42 | A | 43 | C | 44 | B | 45 | D |
| 46 | A | 47 | C | 48 | B | 49 | D | 50 | A |
| 51 | C | 52 | B | 53 | A | 54 | C | 55 | B |
| 56 | D | 57 | A | 58 | B | 59 | D | 60 | C |

