NMAT Logical Reasoning

Sample Paper – 3

Duration: 40 Minutes **Maximum Marks: 108**

Instructions

- This paper contains **36** Multiple Choice Questions (Single Correct Answer), modelled on the Logical Reasoning section of **NMAT** by GMAC.
- Each correct answer carries **+3 marks**. There is **no negative marking** for incorrect or unattempted answers, so attempt every question.
- Only **one** option is correct. Choose the most appropriate answer.
- NMAT is a computer-based test with sectional time limits; attempt this practice paper in one timed sitting of about **40 minutes**.
- Use of mobile phones, calculators or electronic gadgets is strictly prohibited.

Part A: Coding-Decoding and Series

Q1. Find the next term in the number series: **5, 11, 23, 47, 95, ____**

(A) 189

(B) 191

(C) 190

(D) 192

Q2. In a certain code language, **RAIN** is written as **SBJO**. How will **CLAY** be written in the same code?

(A) DMBZ

(B) DMBY

(C) DNBZ

(D) EMBZ

Q3. Find the next term in the letter series: **C, F, I, L, ____**

(A) O

(B) N

(C) P

(D) M

Q4. Find the next term in the number series: **3, 4, 7, 11, 18, 29, ____**

(A) 45

(B) 46

(C) 47

(D) 48

Q5. Which letter lies exactly midway between the 6th letter from the left and the 20th letter from the left of the English alphabet?

(A) N

(B) L

(C) M

(D) K

Q6. In a certain code, the digits are represented by letters as follows: 1 =K, 2 =L, 3 =M, 4 =N, 5 =O. What is the code for the number **4 1 5 3**?

(A) N K M O

(B) K N O M

(C) N O K M

(D) N K O M

Part B: Arrangements and Puzzles

Directions (Q7–Q9): Seven students A, B, C, D, E, F and G are sitting in a straight row, all facing North.

- B sits exactly in the middle of the row.
- D sits at the extreme left end and E sits at the extreme right end.
- A sits second from the left end.
- Exactly two students sit between A and G.
- C sits immediately to the right of G.
- F sits between A and B.

(For a person facing North, the left hand points West and the right hand points East.)

Q7. Who sits exactly in the middle of the row?

(A) F

(B) G

(C) A

(D) B

Q8. How many students sit between F and C?

(A) Two

(B) Three

(C) One

(D) Four

Q9. Who sits immediately to the right of G?

(A) B

(B) E

(C) A

(D) C

Directions (Q10–Q12): Seven boxes of different colours — Red, Blue, Green, White, Black, Pink and Grey — are placed one above another in a single stack.

- The Green box is at the top of the stack and the Black box is at the bottom.
- The Red box is placed exactly in the middle of the stack.
- Exactly two boxes lie between the Red box and the Green box.
- The White box is placed immediately above the Black box.
- The Pink box is placed immediately below the Red box.
- The Blue box is placed immediately below the Green box.

Q10. Which box is placed exactly in the middle of the stack?

(A) Red

(B) Grey

(C) Pink

(D) Blue

Q11. How many boxes are placed between the White box and the Blue box?

(A) Two

(B) Three

(C) Four

(D) One

Q12. Which box is placed immediately above the Red box?

(A) Blue

(B) Pink

(C) Grey

(D) Green

Part C: Blood Relations and Direction Sense

Q13. Pointing to a man, Sara said, "His mother is the only daughter of my mother." If Sara is the only daughter of her mother, how is Sara related to the man?

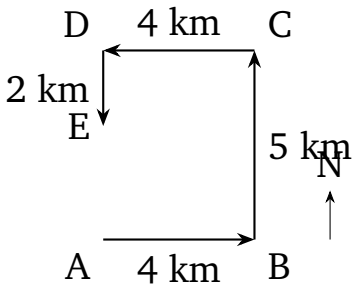
(A) Sister

(B) Mother

(C) Aunt

(D) Grandmother

Q14. A person starts from point A and walks 4 km towards the East to reach B. He then turns left and walks 5 km to C, turns left and walks 4 km to D, and finally turns left and walks 2 km to reach E. How far, and in which direction, is E from A?



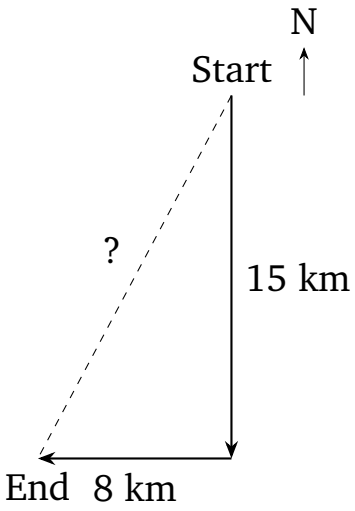
(A) 5 km, North

(B) 3 km, South

(C) 4 km, North

(D) 3 km, North

Q15. A cyclist rides 15 km towards the South, then turns right and rides 8 km. How far is he now from his starting point?



(A) 23 km

(B) 17 km

(C) 15 km

(D) 8 km

Q16. P is the father of Q. Q is the son of R. S is the son of Q, and T is the daughter of S. How is T related to P?

(A) Granddaughter

(B) Daughter

(C) Great-granddaughter

(D) Niece

Q17. A man is facing West. He turns 90° in the clockwise direction and then turns 45° in the anticlockwise direction. Which direction is he facing now?

(A) North

(B) South-West

(C) North-East

(D) North-West

Part D: Syllogisms

Q18. **Statements:** All keys are locks. Some locks are doors.
Conclusions:
I. Some keys are doors.
II. Some doors are locks.
Which of the conclusions follow(s)?

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

Q19. **Statements:** All roses are red. No red is blue.
Conclusions:
I. No rose is blue.
II. Some red things are roses.
Which of the conclusions follow(s)?

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

Q20. **Statements:** Some pens are markers. All markers are inks.
Conclusions:
I. Some pens are inks.
II. Some inks are markers.
Which of the conclusions follow(s)?

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

Q21. **Statements:** All fruits are sweet. Some sweet things are sour.
Conclusions:

I. Some fruits are sour.
II. All sour things are fruits.
Which of the conclusions follow(s)?

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

Q22. **Statements:** No cat is a dog. All dogs are pets.
Conclusions:
I. Some pets are not cats.
II. All pets are dogs.
Which of the conclusions follow(s)?

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

Part E: Critical Reasoning and Verbal Logic

Q23. **Statement:** "Buy our new smartphone — it has the longest battery life in its class." — an advertisement.
Which of the following is an assumption **implicit** in the statement?

(A) No other smartphone has any battery at all.
(B) The smartphone is the cheapest one available.
(C) Battery life cannot be improved by charging.
(D) Buyers are likely to be influenced by the promise of a long battery life.

Q24. **Argument:** The town should install street lights along the highway, because this will reduce night-time accidents.
Which of the following, if true, most **strengthens** the argument?

(A) Street lights consume a large amount of electricity.

(B) Most accidents on the highway happen during the day.

(C) Street lights make the highway look more attractive.

(D) In similar towns, adding highway street lights sharply reduced night-time accidents.

Q25. **Argument:** Our company should switch to software Y, because it processes data faster.
Which of the following, if true, most **weakens** the argument?

(A) Software Y has a modern, attractive interface.

(B) Software Y is cheaper to license than the current software.

(C) Software Y crashes so often that its average daily output is lower than that of the current software.

(D) The employees have already been trained to use software Y.

Q26. **Statement:** A large number of road accidents occur at a busy junction because many drivers ignore the traffic signal.
Which of the following is the most appropriate **course of action**?

(A) The junction should be closed to all traffic permanently.

(B) Signal cameras should be installed and drivers who jump the signal should be penalised.

(C) The traffic signal at the junction should be removed.

(D) The accidents at the junction should be ignored.

Q27. **Statement I:** Heavy rainfall lashed the region continuously for three days.
Statement II: Several low-lying areas of the region were flooded.
Which of the following best describes the relationship between the two statements?

(A) Statement I is the cause and Statement II is its effect.

(B) Statement II is the cause and Statement I is its effect.

(C) Both statements are independent effects of a common cause.

(D) The two statements are unrelated.

Q28. **Statement:** "Students who revise their lessons regularly generally score higher in examinations than those who never revise."
Which of the following inferences follows most logically?

(A) Students who revise regularly never fail an examination.

(B) Examinations are unimportant for every student.

(C) Regular revision can improve a student's performance in examinations.

(D) Only revision decides the result of an examination.

Q29. **Statement:** "All flights from the airport were grounded today because of the dense fog."
Which of the following conclusions follows?

(A) Fog never affects flight services.

(B) The airport has no flights at all.

(C) The dense fog disrupted flight operations at the airport today.

(D) Flights travel faster in dense fog.

Q30. **Statement:** "To cut down paperwork, the bank has launched a mobile app for its account services."
Which of the following is an assumption **implicit** in the statement?

(A) All the branches of the bank will be closed down.

(B) The bank has unlimited funds to spend on technology.

(C) No customer of the bank ever visits a branch.

(D) Customers are able and willing to use a mobile app for banking.

Part F: Analytical and Miscellaneous

Q31. Choose the option that best completes the analogy: **BIRD : NEST :: BEE : ?**

(A) Flower

(B) Honey

(C) Hive

(D) Sky

Q32. Find the odd one out.

(A) Copper

(B) Diamond

(C) Iron

(D) Silver

Q33. In a certain code, **TIGER** is written as **UJHFS**. How is **LION** written in the same code?

(A) MJPO

(B) MJPN

(C) NJPO

(D) MKPO

Q34. In a row of children all facing North, Meera is 9th from the left end and 8th from the right end. How many children are there in the row?

(A) 18

(B) 17

(C) 15

(D) 16

Q35. If "+" means "×", "−" means "+", "×" means "÷" and "÷" means "−", then find the value of:

$$16 \div 4 + 5 \times 2 - 3$$

(A) 10

(B) 9

(C) 11

(D) 8

Q36. In each row the third number is obtained from the first two by the same rule. Find the missing number.

2	3	13
3	4	25
4	5	?

(A) 41

(B) 45

(C) 40

(D) 39

Detailed Solutions

Q1.

Solution

Concept — Number series (multiply and add): Test whether each term comes from the previous one by the same multiply-then-add rule.

Step 1: The terms are $5, 11, 23, 47, 95$.

Step 2: Check $5 \times 2 + 1 = 11$; this matches the second term.

Step 3: Check $11 \times 2 + 1 = 23$ and $23 \times 2 + 1 = 47$ and $47 \times 2 + 1 = 95$. The rule "double and add 1" holds throughout.

Step 4: Apply the rule to the last term: $95 \times 2 + 1 = 190 + 1 = 191$.

Why other options are wrong:

- Option A: 189 uses $95 \times 2 - 1$, the wrong sign.
- Option C: 190 forgets to add 1.
- Option D: 192 adds 2 instead of 1.

Final Answer: The next term is 191 $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q1

Q2.

Solution

Concept — Letter coding by shift: Compare each letter of the code word with the original to find a fixed shift.

Step 1: In RAIN $\rightarrow$ SBJO, compare letter by letter.

Step 2: R $\rightarrow$ S is $+1$; A $\rightarrow$ B is $+1$; I $\rightarrow$ J is $+1$; N $\rightarrow$ O is $+1$.

Step 3: The rule is: replace every letter by the next letter of the alphabet.

Step 4: Apply to CLAY: C $\rightarrow$ D, L $\rightarrow$ M, A $\rightarrow$ B, Y $\rightarrow$ Z, giving **DMBZ**.

Why other options are wrong:

- Option B: DMBY leaves Y unshifted.
- Option C: DNBZ shifts L by two places.
- Option D: EMBZ shifts C by two places.

Final Answer: CLAY is coded as DMBZ $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q2

Q3.

Solution

Concept — Letter series: Convert letters to positions and look for a constant difference.

Step 1: Positions: C $= 3$, F $= 6$, I $= 9$, L $= 12$.

Step 2: The differences are $6 - 3 = 3$, $9 - 6 = 3$, $12 - 9 = 3$. The series increases by 3 each time.

Step 3: The next position is $12 + 3 = 15$.

Step 4: The 15th letter of the alphabet is **O**.

Why other options are wrong:

- Option B: N is position 14, a step of only $+2$.
- Option C: P is position 16, a step of $+4$.
- Option D: M is position 13, a step of $+1$.

Final Answer: The next term is O $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q3

Q4.

Solution

Concept — Sum-of-previous-terms series: Check whether each term is the sum of the two terms before it.

Step 1: The terms are $3, 4, 7, 11, 18, 29$.

Step 2: Check $3 + 4 = 7$; this matches the third term.

Step 3: Check $4 + 7 = 11$, $7 + 11 = 18$, $11 + 18 = 29$. Each term is the sum of the previous two.

Step 4: The next term is $18 + 29 = 47$.

Why other options are wrong:

- Option A: 45 is $16 + 29$, using the wrong earlier term.

- Option B: 46 does not equal $18 + 29$.
- Option D: 48 overshoots the correct sum by 1.

Final Answer: The next term is 47 $\Rightarrow$ C

Answer: (C) Go Back to Q4

Q5.

Solution

Concept — Midway position: The letter midway between two positions is found by averaging the two position numbers.

Step 1: The 6th letter from the left is F (position 6).

Step 2: The 20th letter from the left is T (position 20).

Step 3: The midway position is $\frac{6+20}{2} = \frac{26}{2} = 13$.

Step 4: The 13th letter of the alphabet is **M**.

Why other options are wrong:

- Option A: N is position 14, one past the middle.
- Option B: L is position 12, one short of the middle.
- Option D: K is position 11, two short of the middle.

Final Answer: The middle letter is M $\Rightarrow$ C

Answer: (C) Go Back to Q5

Q6.

Solution

Concept — Symbol substitution: Replace each digit by the letter assigned to it, one by one.

Step 1: The key is 1 =K, 2 =L, 3 =M, 4 =N, 5 =O.

Step 2: The number is 4 1 5 3. Replace the first digit: $4 \rightarrow$ N.

Step 3: Replace the second digit: $1 \rightarrow$ K.

Step 4: Replace the third digit: $5 \rightarrow$ O; and the fourth: $3 \rightarrow$ M.

Step 5: Reading in order gives **N K O M**.

Why other options are wrong:

- Option A: N K M O swaps the codes for 5 and 3.
- Option B: K N O M swaps the first two letters.
- Option C: N O K M swaps the codes for 1 and 5.

Final Answer: The code is N K O M $\Rightarrow$ D

Answer: (D) Go Back to Q6

Q7.

Solution

Concept — Linear arrangement: Fix the end and middle seats first, then place the rest using the "between" and "immediately" clues. For students facing North, the right side is the East (our right) end.

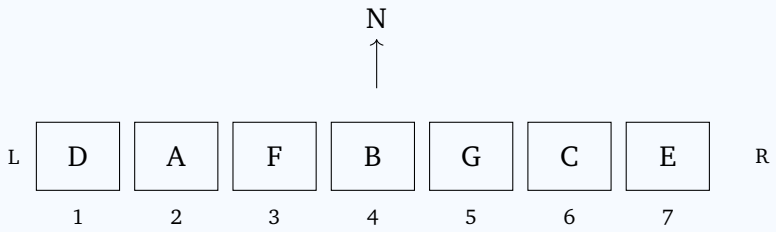
Step 1: D is at the extreme left and E is at the extreme right, so positions 1 and 7 are fixed. B sits exactly in the middle, so B is at position 4.

Step 2: A sits second from the left, so A is at position 2.

Step 3: "Two students sit between A and G" with A at 2 places G at position 5.

Step 4: "C sits immediately to the right of G" places C at position 6. "F sits between A and B" leaves only position 3 for F.

Step 5: The final order from left to right is **D, A, F, B, G, C, E**.



Step 6: The middle seat, position 4, is occupied by **B**.

Why other options are wrong:

- Option A: F is at position 3, not the middle.
- Option B: G is at position 5.
- Option C: A is at position 2.

Final Answer: B sits exactly in the middle $\Rightarrow$ D

Answer: (D) Go Back to Q7

Q8.

Solution

Concept — Counting between two seats: Use the order found above and count the seats strictly between the two named students.

Step 1: The order is D, A, F, B, G, C, E, so F is at position 3 and C is at position 6.

Step 2: The positions strictly between 3 and 6 are positions 4 and 5.

Step 3: Position 4 is B and position 5 is G, which is **two** students.

Why other options are wrong:

- Option B: Three would include C itself, an end point.
- Option C: One misses either B or G.
- Option D: Four counts students outside the range.

Final Answer: Two students sit between F and C $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q8

Q9.

Solution

Concept — Immediate right: For a student facing North, the immediate right is the seat one place towards the East (our right) end.

Step 1: The order is D, A, F, B, G, C, E.

Step 2: G is at position 5; the seat immediately to its right is position 6.

Step 3: Position 6 is occupied by **C**.

Why other options are wrong:

- Option A: B is to the left of G, at position 4.
- Option B: E is at the far right end, position 7.
- Option C: A is at position 2, far to the left.

Final Answer: C sits immediately to the right of G $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q9

Q10.

Solution

Concept — Stack puzzle: Number the positions from bottom (1) to top (7), fix the top, bottom and middle, then use the "immediately" clues.

Step 1: Green is at the top (7) and Black is at the bottom (1). The Red box is exactly in the middle, so Red is at position 4.

Step 2: "Two boxes lie between Red and Green" agrees with Red at 4 and Green at 7 (positions 5 and 6 lie between them).

Step 3: White is immediately above Black, so White is at position 2. Pink is immediately below Red, so Pink is at position 3.

Step 4: Blue is immediately below Green, so Blue is at position 6. The only place left, position 5, is Grey.

Step 5: From bottom to top the stack is **Black, White, Pink, Red, Grey, Blue, Green**.

7	Green
6	Blue
5	Grey
4	Red
3	Pink
2	White
1	Black

Step 6: The middle box, position 4, is **Red**.

Why other options are wrong:

- Option B: Grey is at position 5.
- Option C: Pink is at position 3.
- Option D: Blue is at position 6.

Final Answer: The Red box is in the middle $\Rightarrow$ A

Answer: (A) Go Back to Q10

Q11.

Solution

Concept — Counting between two boxes: Use the stack found above and count the boxes strictly between the two named ones.

Step 1: White is at position 2 and Blue is at position 6.

Step 2: The positions strictly between them are 3, 4 and 5.

Step 3: These hold Pink, Red and Grey, which is **three** boxes.

Why other options are wrong:

- Option A: Two misses one of the three boxes.
- Option C: Four would include an end box.
- Option D: One is far too few.

Final Answer: Three boxes lie between White and Blue $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q11

Q12.

Solution

Concept — Immediately above: Read off the box one position higher than Red.

Step 1: Red is at position 4.

Step 2: The box immediately above is at position 5.

Step 3: Position 5 is occupied by the **Grey** box.

Why other options are wrong:

- Option A: Blue is at position 6, one higher than Grey.
- Option B: Pink is below Red, at position 3.
- Option D: Green is at the very top, position 7.

Final Answer: The Grey box is immediately above Red $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q12

Q13.

Solution

Concept — Blood relations: Work outward from the innermost phrase in the statement.

Step 1: "The only daughter of my mother" is spoken by Sara, who is stated to be the only daughter of her mother. So this phrase refers to Sara herself.

Step 2: The man's mother is therefore Sara.

Step 3: If Sara is the man's mother, then Sara is related to the man as his **mother**.

Why other options are wrong:

- Option A: A sister would be at the same generation, not his parent.
- Option C: An aunt would be the sister of his mother, not his mother.
- Option D: A grandmother is one generation further up.

Final Answer: Sara is the man's mother $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q13

Q14.

Solution

Concept — Direction sense with turns: Track each leg using coordinates, remembering that a left turn rotates the facing direction 90° anticlockwise.

Step 1: Start at A $= (0, 0)$ and walk 4 km East to B $= (4, 0)$.

Step 2: Facing East, a left turn makes him face North; walk 5 km to C $= (4, 5)$.

Step 3: Facing North, a left turn makes him face West; walk 4 km to D $= (0, 5)$.

Step 4: Facing West, a left turn makes him face South; walk 2 km to E $= (0, 3)$.

Step 5: E is at $(0, 3)$ and A is at $(0, 0)$, so E is 3 km directly North of A.

Why other options are wrong:

- Option A: 5 km North uses the wrong leg length.
- Option B: 3 km South has the wrong direction; E is above A.
- Option C: 4 km North misreads the final vertical gap.

Final Answer: E is 3 km North of A $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q14

Q15.

Solution

Concept — Shortest distance: The straight-line distance is the hypotenuse of the right triangle formed by the two perpendicular legs.

Step 1: The cyclist rides 15 km South.

Step 2: Facing South, a right turn makes him face West; he rides 8 km West.

Step 3: The two legs (15 km and 8 km) are at right angles, so the distance is $\sqrt{15^2 + 8^2}$.

Step 4: $15^2 + 8^2 = 225 + 64 = 289$.

Step 5: $\sqrt{289} = 17$, so he is 17 km from the start.

Why other options are wrong:

- Option A: 23 km adds the two legs directly.
- Option C: 15 km uses only the southward leg.
- Option D: 8 km uses only the westward leg.

Final Answer: The distance is 17 km $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q15

Q16.

Solution

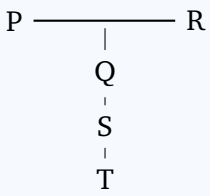
Concept — Three-generation family tree: Draw the generations one below another and count the steps from P down to T.

Step 1: P is the father of Q, so Q is one generation below P.

Step 2: Q is the son of R, so R is Q's other parent; Q remains one generation below P.

Step 3: S is the son of Q, so S is two generations below P (P's grandson).

Step 4: T is the daughter of S, so T is three generations below P, i.e. the **great-granddaughter** of P.



Why other options are wrong:

- Option A: A granddaughter is only two generations below, but T is three.
- Option B: A daughter is one generation below.
- Option D: A niece is not a direct descendant of P.

Final Answer: T is the great-granddaughter of P $\Rightarrow$ C

Answer: (C) Go Back to Q16

Q17.

Solution

Concept — Turning directions: Measure the facing as a bearing from North, adding for clockwise turns and subtracting for anticlockwise turns.

Step 1: The man starts facing West, which is a bearing of $270°$.

Step 2: Turning $90°$ clockwise gives $270° + 90° = 360°$, which is North ($0°$).

Step 3: Turning $45°$ anticlockwise subtracts $45°$: $360° - 45° = 315°$.

Step 4: A bearing of $315°$ is **North-West**.

Why other options are wrong:

- Option A: North is only the position after the first turn.
- Option B: South-West would need a bearing of $225°$.
- Option C: North-East would need a bearing of $45°$.

Final Answer: He now faces North-West $\Rightarrow$ D

Answer: (D) Go Back to Q17

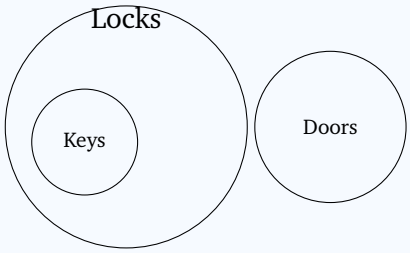
Q18.

Solution

Concept — Syllogism (all + some): An "all" statement joined to a "some" statement need not carry across to the far term; a Venn diagram shows the possibilities.

Step 1: "All keys are locks" places the key circle inside the lock circle.

Step 2: "Some locks are doors" overlaps the lock circle with the door circle.



Step 3: The door-overlap can lie in the part of the lock circle that does not touch the keys, so no key need be a door. Conclusion I (Some keys are doors) does not follow.

Step 4: "Some locks are doors" immediately gives its converse: some doors are locks. Conclusion II follows.

Step 5: Only Conclusion II follows.

Why other options are wrong:

- Option B: I is not guaranteed, as shown by the diagram.
- Option C: Since I fails, "both" is wrong.
- Option D: II clearly follows, so "neither" is wrong.

Final Answer: Only Conclusion II follows $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q18

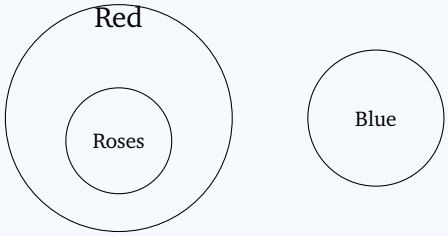
Q19.

Solution

Concept — Syllogism (all + no): Combine an inclusion with an exclusion using a Venn diagram.

Step 1: "All roses are red" places the rose circle inside the red circle.

Step 2: "No red is blue" keeps the red circle fully separate from the blue circle.



Step 3: Since roses lie inside red and red is entirely separate from blue, no rose can be blue. Conclusion I follows.

Step 4: "All roses are red" means those roses are red things, so some red things are roses. Conclusion II follows.

Step 5: Both conclusions follow.

Why other options are wrong:

- Option A: II also follows, so "only I" is incomplete.
- Option C: I also follows, so "only II" is incomplete.
- Option D: Both are valid, so "neither" is wrong.

Final Answer: Both I and II follow $\Rightarrow$ B

Answer: (B) Go Back to Q19

Q20.

Solution

Concept — Syllogism (some + all): A "some" statement joined to an "all" statement carries the "some" across to the wider term.

Step 1: "Some pens are markers" overlaps the pen and marker circles.

Step 2: "All markers are inks" places the marker circle inside the ink circle.

Step 3: The pens that are markers are therefore also inks, so some pens are inks. Conclusion I follows.

Step 4: Since all markers are inks, those markers are inks, so some inks are markers. Conclusion II follows.

Step 5: Both conclusions follow.

Why other options are wrong:

- Option A: II also follows, so "only I" is incomplete.

- Option C: I also follows, so "only II" is incomplete.
- Option D: Both are valid, so "neither" is wrong.

Final Answer: Both I and II follow $\Rightarrow$ B

Answer: (B) Go Back to Q20

Q21.

Solution

Concept — Syllogism (all + some): A "some" statement about the middle term need not attach to the term inside it.

Step 1: "All fruits are sweet" places the fruit circle inside the sweet circle.

Step 2: "Some sweet things are sour" overlaps the sweet circle with the sour circle.

Step 3: The sour overlap can lie in the part of the sweet circle outside the fruits, so no fruit need be sour. Conclusion I (Some fruits are sour) does not follow.

Step 4: Nothing says every sour thing is a fruit; sour things may lie outside the fruit circle. Conclusion II (All sour things are fruits) does not follow.

Step 5: Neither conclusion follows.

Why other options are wrong:

- Option A: I is only a possibility, not a certainty.
- Option B: II is far too strong.
- Option D: Since neither is forced, "both" is wrong.

Final Answer: Neither conclusion follows $\Rightarrow$ C

Answer: (C) Go Back to Q21

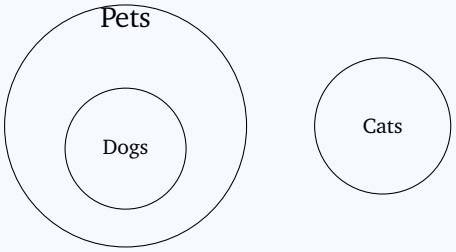
Q22.

Solution

Concept — Syllogism (no + all): Combine an exclusion with an inclusion using a Venn diagram.

Step 1: "No cat is a dog" keeps the cat and dog circles fully separate.

Step 2: "All dogs are pets" places the dog circle inside the pet circle.



Step 3: Dogs are pets, and no dog is a cat, so those dog-pets are pets that are not cats. Conclusion I (Some pets are not cats) follows.

Step 4: Nothing forces every pet to be a dog; the pet circle can hold non-dogs. Conclusion II (All pets are dogs) does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option B: II is unsupported, as pets may include non-dogs.
- Option C: II fails, so "both" is wrong.
- Option D: I clearly follows, so "neither" is wrong.

Final Answer: Only Conclusion I follows $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q22

Q23.

Solution

Concept — Implicit assumption: An assumption is something taken for granted that must be true for the statement to make sense.

Step 1: The advertisement tries to attract buyers by promising "the longest battery life in its class".

Step 2: Such an appeal works only if the seller assumes that buyers care about, and are drawn by, a long battery life.

Step 3: So the implicit assumption is that buyers are likely to be influenced by the promise of a long battery life (Option D).

Why other options are wrong:

- Option A: The extreme claim that no other phone has any battery is never assumed.
- Option B: Price is not mentioned in the advertisement.

- Option C: Whether the battery can be improved by charging is irrelevant to the appeal.

Final Answer: The implicit assumption is Option D $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q23

Q24.

Solution

Concept — Strengthening an argument: The best strengthener adds direct evidence that the proposed action produces the claimed result.

Step 1: The argument claims that installing highway street lights will reduce night-time accidents.

Step 2: The claim is supported if the same measure has actually reduced night-time accidents elsewhere.

Step 3: Option D shows that in similar towns, adding highway street lights sharply reduced night-time accidents, directly backing the claim.

Why other options are wrong:

- Option A: Electricity use is a cost, not support for the claim.
- Option B: If most accidents happen by day, lights would help less, which weakens rather than strengthens.
- Option C: An attractive highway does not address accidents.

Final Answer: Option D most strengthens the argument $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q24

Q25.

Solution

Concept — Weakening an argument: The best weakener attacks the reason given for the action.

Step 1: The argument recommends software Y only because it processes data faster.

Step 2: If frequent crashes make software Y's average daily output lower than the current software, then "faster" does not mean more work done.

Step 3: Option C directly undermines the single reason offered, so it weakens the argument most.

Why other options are wrong:

- Option A: A modern interface does not affect throughput.
- Option B: A lower price would support, not weaken, the switch.
- Option D: Existing training also supports the switch.

Final Answer: Option C most weakens the argument $\Rightarrow$ $\boxed{C}$

Answer: (C) Go Back to Q25

Q26.

Solution

Concept — Course of action: A good course of action should directly address the problem in a reasonable, practical way.

Step 1: The problem is that accidents occur because drivers jump the traffic signal.

Step 2: A sensible response is to deter signal jumping by detecting and penalising it.

Step 3: Option B installs signal cameras and penalises violators, addressing the cause directly.

Why other options are wrong:

- Option A: Closing the junction permanently is extreme and disrupts all traffic.
- Option C: Removing the signal would make matters worse.
- Option D: Ignoring the accidents does nothing to help.

Final Answer: Option B is the appropriate course of action $\Rightarrow$ $\boxed{B}$

Answer: (B) Go Back to Q26

Q27.

Solution

Concept — Cause and effect: Identify which event naturally brings about the other.

Step 1: Statement I: heavy rainfall lashed the region for three days.

Step 2: Prolonged heavy rain naturally raises water levels and overwhelms drainage.

Step 3: Statement II: low-lying areas were flooded. This is the expected result of the heavy rain.

Step 4: So Statement I is the cause and Statement II is its effect (Option A).

Why other options are wrong:

- Option B: Flooding did not cause the rainfall.
- Option C: The two are directly linked, not independent effects.
- Option D: They are clearly related, not unrelated.

Final Answer: Statement I is the cause of Statement II $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q27

Q28.

Solution

Concept — Inference: A valid inference is a moderate conclusion that the statement reasonably supports.

Step 1: The statement links regular revision to higher examination scores.

Step 2: From this it is reasonable to infer that regular revision can improve exam performance.

Step 3: Option C states exactly this measured inference.

Why other options are wrong:

- Option A: "Never fail" is far too strong.
- Option B: The statement does not call examinations unimportant.
- Option D: It never claims revision is the only factor.

Final Answer: Option C is the logical inference $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q28

Q29.

Solution

Concept — Statement and conclusion: A conclusion must follow directly from the wording of the statement.

Step 1: The statement says all flights were grounded today because of the dense fog.

Step 2: This tells us the fog disrupted the airport's flight operations today.

Step 3: Option C restates this directly, so it follows.

Why other options are wrong:

- Option A: The statement shows fog does affect flights.
- Option B: Grounded flights still exist; the airport clearly has flights.
- Option D: Nothing suggests flights are faster in fog.

Final Answer: Option C follows from the statement $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q29

Q30.

Solution

Concept — Implicit assumption: The plan makes sense only if a certain belief is taken for granted.

Step 1: The bank launches a mobile app in order to cut down paperwork.

Step 2: This decision only makes sense if the bank believes its customers are able and willing to use such an app.

Step 3: Option D captures this assumption.

Why other options are wrong:

- Option A: Closing all branches is not assumed and would be an extreme step.
- Option B: Unlimited funds are not needed for the decision.
- Option C: The plan does not assume that no customer ever visits a branch.

Final Answer: Option D is the implicit assumption $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q30

Q31.

Solution

Concept — Analogy: Name the relationship in the first pair, then find the option that repeats it.

Step 1: A nest is the home in which a bird lives.

Step 2: The relationship is "creature : the home it lives in".

Step 3: The home in which a bee lives is a **hive**, so Option C completes the analogy.

Why other options are wrong:

- Option A: A flower is where a bee gathers nectar, not its home.
- Option B: Honey is what a bee makes, not where it lives.
- Option D: The sky is where a bird flies, not a home.

Final Answer: Bee : Hive completes the analogy $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q31

Q32.

Solution

Concept — Odd one out: Find the common category shared by all but one item.

Step 1: Copper, Iron and Silver are all metals.

Step 2: Diamond is a form of carbon, a non-metal, not a metal.

Step 3: So the odd one out is **Diamond** (Option B).

Why other options are wrong:

- Option A: Copper is a metal, like two of the others.
- Option C: Iron is a metal.
- Option D: Silver is a metal.

Final Answer: Diamond is the odd one out $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q32

Q33.

Solution

Concept — Coding by shift: Find the shift from the sample word, then apply it letter by letter.

Step 1: In TIGER → UJHFS, each letter moves forward by one: T→U, I→J, G→H, E→F, R→S.

Step 2: The rule is $+1$ for every letter.

Step 3: Apply to LION: L→M, I→J, O→P, N→O.

Step 4: The code is **MJPO**.

Why other options are wrong:

- Option B: MJPN shifts N backwards instead of forwards.
- Option C: NJPO shifts L by two places.
- Option D: MKPO shifts I by two places.

Final Answer: LION is coded as MJPO $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q33

Q34.

Solution

Concept — Position in a row: If a person is mth from one end and nth from the other, the total count is $m + n - 1$ (the person is counted once from each side).

Step 1: Meera is 9th from the left, so there are 8 children to her left.

Step 2: Meera is 8th from the right, so there are 7 children to her right.

Step 3: Total $= 8 + 1 + 7 = 16$, which equals $9 + 8 - 1$.

Step 4: So there are 16 children in the row.

Why other options are wrong:

- Option A: 18 removes nothing for the double count.
- Option B: 17 adds the two ranks without removing the overlap.
- Option C: 15 subtracts one too many.

Final Answer: There are 16 children $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q34

Q35.

Solution

Concept — Operator substitution: Replace each symbol by the operation it stands for, then evaluate using the normal order of operations.

Step 1: The substitutions are $+ \to \times$, $- \to +$, $\times \to \div$, $\div \to -$.

Step 2: Rewrite $16 \div 4 + 5 \times 2 - 3$ as $16 - 4 \times 5 \div 2 + 3$.

Step 3: Do multiplication and division from left to right: $4 \times 5 = 20$.

Step 4: Then $20 \div 2 = 10$.

Step 5: Now add and subtract from left to right: $16 - 10 = 6$, and $6 + 3 = 9$.

Why other options are wrong:

- Option A: 10 stops before adding the final 3.
- Option C: 11 adds instead of subtracting somewhere.
- Option D: 8 comes from mishandling the order of operations.

Final Answer: The value is 9 $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q35

Q36.

Solution

Concept — Number matrix: Find one rule that turns the first two numbers of a row into the third, then test it on every row.

Step 1: Row 1: $2^2 + 3^2 = 4 + 9 = 13$, which matches the third number.

Step 2: Row 2: $3^2 + 4^2 = 9 + 16 = 25$, which also matches.

Step 3: The rule is: third number $=$ (first)^2+(second)^2.

Step 4: Row 3: $4^2 + 5^2 = 16 + 25 = 41$.

Why other options are wrong:

- Option B: 45 overshoots the correct total.
- Option C: 40 falls one short of the sum of squares.
- Option D: 39 comes from an incorrect rule.

Final Answer: The missing number is 41 $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q36

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	A	3	A	4	C	5	C
6	D	7	D	8	A	9	D	10	A
11	B	12	C	13	B	14	D	15	B
16	C	17	D	18	A	19	B	20	B
21	C	22	A	23	D	24	D	25	C
26	B	27	A	28	C	29	C	30	D
31	C	32	B	33	A	34	D	35	B
36	A								