NMAT Logical Reasoning

Sample Paper – 6

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. In a certain code language, **DELHI** is written as **4-5-12-8-9**, where each letter is replaced by its position in the English alphabet. How will **INDIA** be written in the same code?

(A) 9-14-4-1-9

(B) 9-14-4-9-1

(C) 9-4-14-9-1

(D) 9-14-9-4-1

Q2. Find the next term in the number series: **3, 8, 15, 24, 35, ____**

(A) 46

(B) 48

(C) 50

(D) 45

Q3. Find the next term in the letter series: **B, D, G, K, ____**

(A) P

(B) O

(C) Q

(D) N

Q4. Find the next term in the number series: **5, 11, 23, 47, ____**

(A) 95

(B) 94

(C) 96

(D) 93

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) L

(B) N

(C) M

(D) K

Q6. In a certain code, **CODE** is written as **3-15-4-5**, where each letter is replaced by its position in the English alphabet. How is **BOND** written in the same code?

(A) 2-15-4-14

(B) 2-14-15-4

(C) 2-15-14-14

(D) 2-15-14-4

Part B: Arrangements and Puzzles

Directions (Q7–Q9): Six people M, N, O, P, Q and R are seated around a circular table. **Some of them face the centre and some face outside.**

- M, N, P and R face the centre; O and Q face outside.
- N sits to the immediate left of M.
- O sits to the immediate left of N.
- P sits to the immediate right of O.
- Q sits to the immediate left of P.
- R sits to the immediate right of Q.

(For a person facing the centre, their left is the clockwise-adjacent seat; for a person facing outside, their left is the anticlockwise-adjacent seat.)

Q7. Who sits to the immediate right of P?

(A) Q

(B) R

(C) N

(D) O

Q8. How many persons sit between N and Q when counted clockwise starting from N?

(A) Two

(B) Three

(C) One

(D) Four

Q9. Which of the following pairs of persons are immediate neighbours?

(A) M and P

(B) N and Q

(C) Q and R

(D) O and M

Directions (Q10–Q12): Seven boxes T, U, V, W, X, Y and Z are placed one above another in a single stack. The lowest position is numbered 1 and the topmost is numbered 7.

- W is placed at the topmost position.
- V is placed at the lowest position.
- Z is placed immediately above V.
- X is placed immediately below U.
- T is placed immediately below X.
- Y is placed immediately above U.

Q10. Which box is placed at position four (the fourth from the bottom)?

(A) T

(B) U

(C) Y

(D) X

Q11. How many boxes are placed between T and Y?

(A) Four

(B) Three

(C) Two

(D) One

Q12. Which box is placed immediately above X?

(A) U

(B) X

(C) Y

(D) T

Part C: Blood Relations and Direction Sense

Q13. A is the father of B. B is the sister of C. C is the mother of D. How is A related to D?

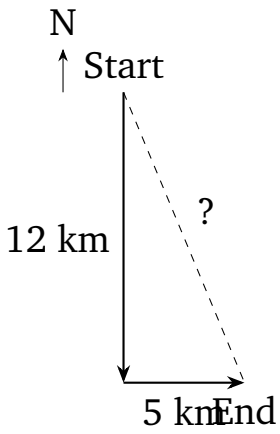
(A) Father

(B) Uncle

(C) Grandfather

(D) Brother

Q14. A boy cycles 12 km towards the South, then turns left and cycles 5 km. How far is he now from his starting point?



(A) 17 km

(B) 13 km

(C) 7 km

(D) 11 km

Q15. A person is facing East. He turns 90° in the clockwise direction, then turns 45° in the anticlockwise direction, and finally turns 180°. Which direction is he facing now?

(A) South-East

(B) North-East

(C) South-West

(D) North-West

Q16. P is the brother of Q. Q is the daughter of R. S is the father of P. How is R related to S?

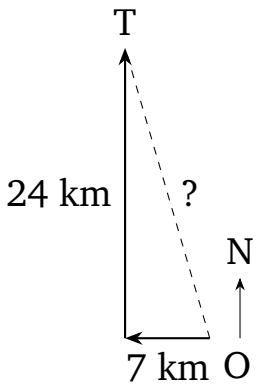
(A) Sister

(B) Daughter

(C) Wife

(D) Mother

Q17. A man starts from point O and walks 7 km towards the West. He then turns right and walks 24 km towards the North to reach point T. What is the shortest distance between O and T?



(A) 31 km

(B) 25 km

(C) 17 km

(D) 23 km

Part D: Syllogisms

Q18. **Statements:** Some notebooks are pens. All pens are red things.

Conclusions:

I. All notebooks are red things.

II. Some notebooks are red things.

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

Q19. **Statements:** All cups are jugs. All jugs are bottles.
Conclusions:
I. All cups are bottles.
II. All bottles are cups.
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

Q20. **Statements:** All tigers are cats. All cats are mammals.
Conclusions:
I. All tigers are mammals.
II. Some mammals are tigers.
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

Q21. **Statements:** Some keys are locks. Some locks are chains.
Conclusions:
I. Some keys are chains.
II. Some chains are keys.
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 apple is a mango. Some mangoes are sweet.
Conclusions:
I. Some sweet things are not apples.
II. All sweet things are mangoes.
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:** "Enrol in our online course and land a job within six months." — an advertisement.
Which of the following is an assumption **implicit** in the statement?

(A) People are likely to be drawn by the promise of quick employment.

(B) No other institute offers online courses.

(C) Every person who takes the course is currently unemployed.

(D) A job can never be found without an online course.

Q24. **Argument:** Our company should switch most employees to remote work, because this will cut the company's costs.
Which of the following, if true, most **strengthens** the argument?

(A) Some employees prefer working from an office.

(B) Remote work requires each employee to have a laptop.

(C) Remote work can make team meetings harder to schedule.

(D) In comparable firms, moving to remote work sharply reduced spending on office rent and utilities.

Q25. **Argument:** Our school should replace printed textbooks with tablets, because tablets are much lighter to carry.
Which of the following, if true, most **weakens** the argument?

(A) Tablets can store many books in one device.

(B) Reading on tablet screens tires students' eyes so quickly that they end up studying far less than with printed books.

(C) Tablets are produced by several well-known companies.

(D) Some teachers already use tablets at home.

Q26. **Statement:** The number of road accidents at a particular junction has risen sharply this year.
Which of the following is the most appropriate **course of action**?

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

(B) Traffic signals and speed breakers should be installed at the junction to control the flow of vehicles.

(C) The accident figures should not be published.

(D) Drivers who use the junction should be fined regardless of fault.

Q27. **Statement I:** The sale of ice cream in the city rose sharply this week.
Statement II: The number of sunstroke cases in the city rose sharply this week.
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) The two statements are completely unrelated.

(D) Both statements are effects of an independent common cause.

Q28. **Statement:** "A survey found that students who sleep at least seven hours a night score, on average, higher marks in examinations than students who sleep less."
Which of the following inferences follows most logically?

(A) Sleeping less than seven hours always causes a student to fail.

(B) Marks depend only on the number of hours a student sleeps.

(C) Adequate sleep may contribute to better examination performance.

(D) Students who sleep more never need to study.

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

(A) Fog never affects air travel.

(B) The airport has no flights on any day.

(C) Flights become faster during fog.

(D) The dense fog disrupted air travel at the airport today.

Q30. **Statement:** "To reduce paper waste, the college has decided to send all notices to students by email."
Which of the following is an assumption **implicit** in the statement?

(A) Students have access to email and will check it for notices.

(B) No student ever reads a printed notice.

(C) Email is completely free of any cost.

(D) Paper will soon disappear from the college entirely.

Part F: Analytical and Miscellaneous

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

(A) Honey

(B) Hive

(C) Flower

(D) Sting

Q32. Find the odd one out.

(A) Copper

(B) Iron

(C) Oxygen

(D) Gold

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

(A) MJPO

(B) MJPN

(C) MJOO

(D) NJPO

Q34. In a row of 25 children all facing North, Amit is 9th from the left end. What is his position from the right end?

(A) 16th

(B) 15th

(C) 18th

(D) 17th

Q35. If "$+$" means "$\times$", "$-$" means "$+$", "$\times$" means "$\div$" and "$\div$" means "$-$", then find the value of:

$$8 \div 2 + 3 \times 6 - 4$$

(A) 9

(B) 11

(C) 13

(D) 10

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

2	3	7
4	5	21
6	7	?

(A) 40

(B) 42

(C) 41

(D) 43

Detailed Solutions

Q1.

Solution

Concept — Position coding (letter to number): Each letter is replaced by its serial position in the English alphabet.

Step 1: Check the given code: D $= 4$, E $= 5$, L $= 12$, H $= 8$, I $= 9$, so DELHI $=$ 4-5-12-8-9. The rule is confirmed.

Step 2: Now take the letters of INDIA one by one.

Step 3: I is the 9th letter $\rightarrow 9$; N is the 14th letter $\rightarrow 14$.

Step 4: D is the 4th letter $\rightarrow 4$; I is the 9th letter $\rightarrow 9$; A is the 1st letter $\rightarrow 1$.

Step 5: Writing the numbers in order gives **9-14-4-9-1**.

Why other options are wrong:

- Option A: 9-14-4-1-9 swaps the last two numbers (A and I).
- Option C: 9-4-14-9-1 swaps the codes for N and D.
- Option D: 9-14-9-4-1 swaps the codes for the third and fourth letters.

Final Answer: INDIA is coded as 9-14-4-9-1 $\Rightarrow$ B

Answer: (B) Go Back to Q1

Q2.

Solution

Concept — Number series with growing differences: Study the gaps between consecutive terms.

Step 1: Terms: $3, 8, 15, 24, 35$.

Step 2: Differences: $8 - 3 = 5$, $15 - 8 = 7$, $24 - 15 = 9$, $35 - 24 = 11$.

Step 3: The differences increase by 2 each time: $5, 7, 9, 11$, so the next difference is 13.

Step 4: The next term is $35 + 13 = 48$.

Why other options are wrong:

- Option A: 46 would need a difference of 11, repeating the previous gap.

- Option C: 50 would need a difference of 15, skipping 13.
- Option D: 45 would need a difference of 10, breaking the pattern.

Final Answer: The next term is 48 $\Rightarrow$ B

Answer: (B) Go Back to Q2

Q3.

Solution

Concept — Letter series: Convert letters to positions and look at the pattern of the differences.

Step 1: Positions: B $= 2$, D $= 4$, G $= 7$, K $= 11$.

Step 2: The differences are $4 - 2 = 2$, $7 - 4 = 3$, $11 - 7 = 4$. The gaps increase by 1 each time.

Step 3: The next gap is 5, so the next position is $11 + 5 = 16$.

Step 4: The 16th letter of the alphabet is **P**.

Why other options are wrong:

- Option B: O is position 15, a gap of only 4.
- Option C: Q is position 17, a gap of 6.
- Option D: N is position 14, a gap of 3.

Final Answer: The next term is P $\Rightarrow$ A

Answer: (A) Go Back to Q3

Q4.

Solution

Concept — Number series (multiply and add): Test whether each term comes from the previous one by a fixed operation.

Step 1: Terms: $5, 11, 23, 47$.

Step 2: Check $5 \times 2 + 1 = 11$. It works.

Step 3: Check $11 \times 2 + 1 = 23$, and $23 \times 2 + 1 = 47$. The rule "multiply by 2, then add 1" holds throughout.

Step 4: The next term is $47 \times 2 + 1 = 94 + 1 = 95$.

Why other options are wrong:

- Option B: 94 forgets to add the $+1$.
- Option C: 96 adds 2 instead of 1.
- Option D: 93 subtracts instead of adding.

Final Answer: The next term is 95 $\Rightarrow$ A

Answer: (A) 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: L is position 12, one short of the middle.
- Option B: N is position 14, one past 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 — Position coding (letter to number): Replace each letter by its serial position in the alphabet.

Step 1: Check the given code: C $= 3$, O $= 15$, D $= 4$, E $= 5$, so CODE $=$ 3-15-4-5. The rule is confirmed.

Step 2: Take the letters of BOND one by one.

Step 3: B is the 2nd letter $\rightarrow 2$; O is the 15th letter $\rightarrow 15$.

Step 4: N is the 14th letter $\rightarrow 14$; D is the 4th letter $\rightarrow 4$.

Step 5: Writing the numbers in order gives **2-15-14-4**.

Why other options are wrong:

- Option A: 2-15-4-14 swaps the codes for N and D.
- Option B: 2-14-15-4 swaps the codes for O and N.
- Option C: 2-15-14-14 uses 14 for D instead of 4.

Final Answer: BOND is coded as 2-15-14-4 $\Rightarrow$ D

Answer: (D) Go Back to Q6

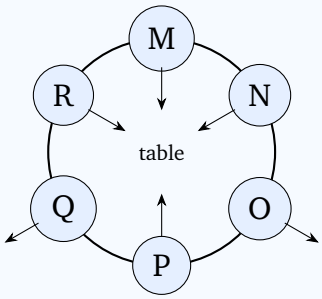
Q7.

Solution

Concept — Circular seating with mixed facing: For a person facing the centre, left is the clockwise seat and right is the anticlockwise seat; for a person facing outside, these are reversed. Build the circle from the clues.

Step 1: Taking the clues together and applying the facing rule to each person, the seats fall into a single clockwise order: **M, N, O, P, Q, R**.

Step 2: The facings are: M, N, P and R face the centre; O and Q face outside.



Step 3: P faces the centre, so P's right is the anticlockwise seat next to P.

Step 4: Moving anticlockwise from P (that is, against the clockwise order M, N, O, P, . . .) the seat next to P is **O**.

Why other options are wrong:

- Option A: Q is P's clockwise neighbour, which is P's left.
- Option B: R is not adjacent to P.

- Option C: N is two seats away from P.

Final Answer: O sits to the immediate right of P $\Rightarrow$ D

Answer: (D) Go Back to Q7

Q8.

Solution

Concept — Counting on a circle: Use the clockwise order found above and count between the two named people.

Step 1: The clockwise order is M, N, O, P, Q, R.

Step 2: Start at N and move clockwise: the next seat is O, then P, then Q.

Step 3: The persons sitting between N and Q (clockwise) are O and P.

Step 4: That is **two** persons.

Why other options are wrong:

- Option B: Three would wrongly include Q, the end point.
- Option C: One misses either O or P.
- Option D: Four counts persons on the far side of the circle.

Final Answer: Two persons sit between N and Q clockwise $\Rightarrow$ A

Answer: (A) Go Back to Q8

Q9.

Solution

Concept — Immediate neighbours: Two persons are immediate neighbours if their seats are next to each other on the circle, whatever way they face.

Step 1: The clockwise order is M, N, O, P, Q, R, with R next to M to close the circle.

Step 2: The adjacent pairs are M–N, N–O, O–P, P–Q, Q–R and R–M.

Step 3: Among the options, only **Q and R** appear as an adjacent pair.

Why other options are wrong:

- Option A: M and P have N and O between them.

- Option B: N and Q are separated by O and P.
- Option D: O and M are separated by N on one side.

Final Answer: Q and R are immediate neighbours $\Rightarrow$ C

Answer: (C) Go Back to Q9

Q10.

Solution

Concept — Stack puzzle: Fix the known positions first, then use the "immediately above/below" clues.

Step 1: W is at position 7 (top) and V is at position 1 (bottom). Z is immediately above V, so Z is at position 2.

Step 2: The clues X immediately below U, T immediately below X, and Y immediately above U give the block T, X, U, Y in consecutive rising order.

Step 3: Positions 3, 4, 5 and 6 remain for this block, so T $= 3$, X $= 4$, U $= 5$, Y $= 6$.

Step 4: The full stack (top to bottom) is:

7	W
6	Y
5	U
4	X
3	T
2	Z
1	V

Step 5: Position 4 is occupied by **X**.

Why other options are wrong:

- Option A: T is at position 3.
- Option B: U is at position 5.
- Option C: Y is at position 6.

Final Answer: X is placed at position four $\Rightarrow$ D

Answer: (D) Go Back to Q10

Q11.

Solution

Concept — Counting between two items: Use the stack found above.

Step 1: T is at position 3 and Y is at position 6.

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

Step 3: Positions 4 and 5 hold the boxes X and U, so **two** boxes lie between T and Y.

Why other options are wrong:

- Option A: Four is more boxes than the gap allows.
- Option B: Three would need them four positions apart.
- Option D: One misses one of the two boxes in between.

Final Answer: Two boxes lie between T and Y $\Rightarrow$ C

Answer: (C) Go Back to Q11

Q12.

Solution

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

Step 1: X is at position 4.

Step 2: The position immediately above is position 5.

Step 3: Position 5 holds **U**.

Why other options are wrong:

- Option B: X cannot be above itself.
- Option C: Y is at position 6, one above U.
- Option D: T is at position 3, below X.

Final Answer: U is placed immediately above X $\Rightarrow$ A

Answer: (A) Go Back to Q12

Q13.

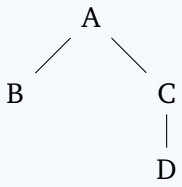
Solution

Concept — Multi-generation blood relation: Build the family across three generations, one link at a time.

Step 1: A is the father of B, so B belongs to the generation below A.

Step 2: B is the sister of C, so B and C are siblings; therefore C is also a child of A.

Step 3: C is the mother of D, so D belongs to the generation below C, that is, two generations below A.



Step 4: A is the parent of C, and C is the parent of D, so A is the father of D's mother, i.e. D's **grandfather**.

Why other options are wrong:

- Option A: A is D's grandfather, not father; D's father is not mentioned.
- Option B: An uncle would be a brother of a parent, not a grandparent.
- Option D: A brother would be in the same generation as D.

Final Answer: A is the grandfather of D $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q13

Q14.

Solution

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

Step 1: The boy cycles 12 km South.

Step 2: Facing South, a left turn makes him face East; he cycles 5 km East.

Step 3: The two legs (12 km and 5 km) are at right angles, so the distance is $\sqrt{12^2 + 5^2}$.

Step 4: $12^2 + 5^2 = 144 + 25 = 169$.

Step 5: $\sqrt{169} = 13$, so he is 13 km from the start.

Why other options are wrong:

- Option A: 17 km adds the two legs directly.
- Option C: 7 km subtracts the legs.
- Option D: 11 km does not match the Pythagoras result.

Final Answer: The distance is 13 km $\Rightarrow$ B

Answer: (B) Go Back to Q14

Q15.

Solution

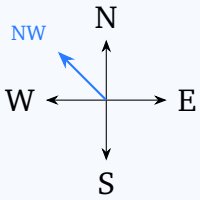
Concept — Turning directions: Track the facing direction after each turn, using $90°$ for a quarter turn and $45°$ for a half of that.

Step 1: The person starts facing East.

Step 2: Turning $90°$ clockwise from East makes him face South.

Step 3: Turning $45°$ anticlockwise from South brings him halfway back towards East, i.e. facing South-East.

Step 4: Turning $180°$ from South-East makes him face the exact opposite, which is **North-West**.



Why other options are wrong:

- Option A: South-East is only the facing after the second turn.
- Option B: North-East would need a different set of turns.
- Option C: South-West is the opposite of North-East, not the answer.

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

Answer: (D) Go Back to Q15

Q16.

Solution

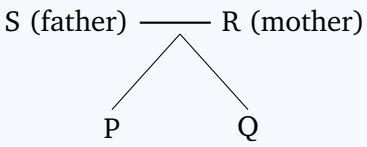
Concept — Family tree: Draw the relationships and read off the link between R and S.

Step 1: P is the brother of Q, so P and Q are siblings.

Step 2: Q is the daughter of R, so R is a parent of Q (and of P).

Step 3: S is the father of P, so S is the male parent of P and Q.

Step 4: R is the other parent of the same children. Since S is the father, R is the mother, i.e. the wife of S.



Why other options are wrong:

- Option A: A sister would be a sibling of S, not a parent of his children.
- Option B: A daughter would be one generation below S.
- Option D: "Mother" describes R's link to P and Q, not to S.

Final Answer: R is the wife of S $\Rightarrow$ C

Answer: (C) Go Back to Q16

Q17.

Solution

Concept — Shortest distance: The direct distance from O to T is the hypotenuse of the right triangle formed by the westward and northward legs.

Step 1: The man walks 7 km West from O.

Step 2: Facing West, a right turn makes him face North; he walks 24 km North to reach T.

Step 3: The two legs (7 km and 24 km) are at right angles, so $OT = \sqrt{7^2 + 24^2}$.

Step 4: $7^2 + 24^2 = 49 + 576 = 625$.

Step 5: $\sqrt{625} = 25$, so O and T are 25 km apart.

Why other options are wrong:

- Option A: 31 km adds the two legs directly.
- Option C: 17 km subtracts the legs.
- Option D: 23 km does not match the Pythagoras result.

Final Answer: The shortest distance is 25 km $\Rightarrow$ B

Answer: (B) Go Back to Q17

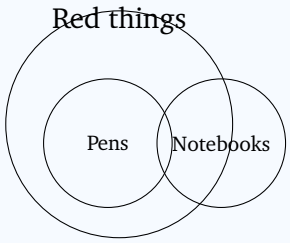
Q18.

Solution

Concept — Syllogism (some + all): A "some" statement joined to an "all" statement carries the "some" across, but not the "all".

Step 1: "Some notebooks are pens" means the notebook and pen circles overlap.

Step 2: "All pens are red things" places the pen circle inside the red-things circle.



Step 3: The notebooks that are pens lie inside the red-things circle, so those notebooks are red things. Conclusion II (Some notebooks are red things) follows.

Step 4: Conclusion I (All notebooks are red things) is too strong, because notebooks outside the pen circle need not be red. It does not follow.

Step 5: Only Conclusion II follows.

Why other options are wrong:

- Option A: I is not guaranteed, as shown above.
- Option C: I fails, so "both" is wrong.
- Option D: II clearly follows, so "neither" is wrong.

Final Answer: Only Conclusion II follows $\Rightarrow$ B

Answer: (B) Go Back to Q18

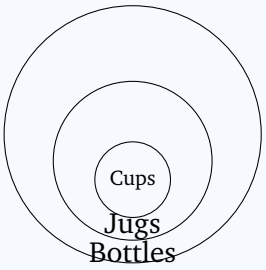
Q19.

Solution

Concept — Syllogism (chain of "all"): Two "all" statements sharing a middle term link the end terms in one direction only.

Step 1: "All cups are jugs" places the cup circle inside the jug circle.

Step 2: "All jugs are bottles" places the jug circle inside the bottle circle.



Step 3: Cups lie inside jugs, and jugs lie inside bottles, so every cup is a bottle. Conclusion I (All cups are bottles) follows.

Step 4: Conclusion II (All bottles are cups) reverses the inclusion; many bottles need not be cups. It does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option B: II reverses the chain and fails.
- Option C: II is invalid, 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 Q19

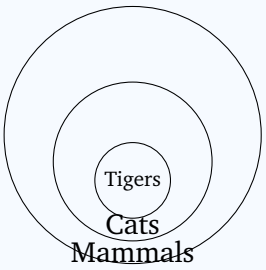
Q20.

Solution

Concept — Syllogism (all + all): A chain of two "all" statements links the smallest set to the largest, and also gives a "some" in the reverse direction.

Step 1: "All tigers are cats" places the tiger circle inside the cat circle.

Step 2: "All cats are mammals" places the cat circle inside the mammal circle.



Step 3: Tigers lie inside cats, which lie inside mammals, so all tigers are mammals. Conclusion I follows.

Step 4: Since all tigers are mammals, at least those mammals are tigers, so "Some mammals are tigers" also follows. Conclusion II follows.

Step 5: Both conclusions follow.

Why other options are wrong:

- Options A and B: Each accepts only one conclusion, but both are valid.
- Option D: "Neither" ignores the clear chain of inclusion.

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

Answer: (C) Go Back to Q20

Q21.

Solution

Concept — Syllogism (some + some): Two "some" statements sharing a middle term give no definite link between the end terms.

Step 1: "Some keys are locks" overlaps keys with locks.

Step 2: "Some locks are chains" overlaps locks with chains.

Step 3: The keys that are locks and the locks that are chains may be entirely different locks, so no key need be a chain.

Step 4: Therefore Conclusion I (Some keys are chains) does not necessarily follow.

Step 5: Its converse, Conclusion II (Some chains are keys), fails for the same reason.

Why other options are wrong:

- Options A and B: Neither single conclusion is guaranteed by "some + some".

- Option D: Both cannot follow when neither is forced.

Final Answer: Neither conclusion follows $\Rightarrow$ C

Answer: (C) Go Back to Q21

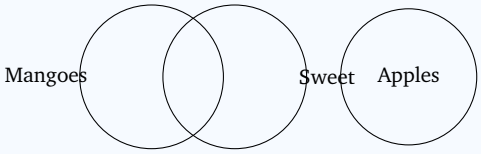
Q22.

Solution

Concept — Syllogism (no + some): Combine an exclusion with a "some" statement using a Venn diagram.

Step 1: "No apple is a mango" keeps the apple and mango circles fully separate.

Step 2: "Some mangoes are sweet" overlaps the mango circle with the sweet circle.



Step 3: The mangoes that are sweet are not apples (no mango is an apple), so those sweet things are not apples. Conclusion I (Some sweet things are not apples) follows.

Step 4: "All sweet things are mangoes" (Conclusion II) is far too strong, since some sweet things could lie outside the mango circle. It does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option B: II is unsupported, as sweet things need not all be mangoes.
- Option C: II fails, so "both" is wrong.
- Option D: I clearly follows, so "neither" is wrong.

Final Answer: Only Conclusion I follows $\Rightarrow$ A

Answer: (A) Go Back to Q22

Q23.

Solution

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

Step 1: The advertisement invites people by promising a job within six months.

Step 2: Such an appeal only works if the institute assumes that the promise of quick employment will actually attract people.

Step 3: So the implicit assumption is that people are likely to be drawn by the promise of quick employment (Option A).

Why other options are wrong:

- Option B: Whether other institutes exist is never suggested.
- Option C: The ad does not assume every taker is unemployed.
- Option D: It never claims a job is impossible without the course.

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

Answer: (A) 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 switching to remote work will cut the company's costs.

Step 2: Costs fall only if real spending, such as rent and utilities, actually goes down.

Step 3: Option D shows that in comparable firms remote work sharply reduced spending on office rent and utilities, directly supporting the claim.

Why other options are wrong:

- Option A: Employee preference does not address cost.
- Option B: Needing laptops is a possible extra cost, not support.
- Option C: Harder meetings is a drawback, not support.

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 single reason given for the action.

Step 1: The argument recommends tablets only because they are lighter to carry.

Step 2: If tablet screens tire students' eyes so much that they study far less, the change harms learning despite the lighter weight.

Step 3: Option B directly undermines the value of the switch, so it weakens the argument most.

Why other options are wrong:

- Option A: Storing many books supports, not weakens, the switch.
- Option C: The maker's reputation does not affect the argument.
- Option D: Teachers using tablets at home is irrelevant to student learning.

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

Answer: (B) 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 a sharp rise in road accidents at one junction.

Step 2: A sensible response is to control the flow of vehicles at that junction with signals and speed breakers.

Step 3: Option B does exactly this, so it is the most appropriate action.

Why other options are wrong:

- Option A: Closing the junction permanently is extreme and impractical.
- Option C: Hiding the figures ignores the problem.
- Option D: Fining all drivers regardless of fault is unjust and does not fix the cause.

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: Check whether one event causes the other, or both spring from a third common cause.

Step 1: Statement I: ice-cream sales rose sharply. Statement II: sunstroke cases rose sharply.

Step 2: Higher ice-cream sales do not cause sunstroke, and sunstroke does not cause ice-cream sales, so neither is the cause of the other.

Step 3: Both rise together during a spell of very hot weather. A heatwave makes people buy more ice cream and also causes more sunstroke.

Step 4: So both statements are effects of an independent common cause (the hot weather), which is Option D.

Why other options are wrong:

- Options A and B: Neither event directly causes the other.
- Option C: They are clearly linked through the weather, not unrelated.

Final Answer: Both statements are effects of a common cause $\Rightarrow$ $\boxed{D}$

Answer: (D) Go Back to Q27

Q28.

Solution

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

Step 1: The survey links sleeping at least seven hours to higher average exam marks.

Step 2: From this it is reasonable to infer that getting enough sleep may help exam performance.

Step 3: Option C states exactly this cautious inference (note the word "may").

Why other options are wrong:

- Option A: "Always causes a student to fail" is far too strong.
- Option B: Marks depend on many factors, not sleep alone.
- Option D: The statement never says more sleep removes the need to study.

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

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 dense fog.

Step 2: This tells us the fog disrupted the airport's air travel today.

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

Why other options are wrong:

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

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

Answer: (D) 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 college decides to send all notices to students by email.

Step 2: This decision only makes sense if the college believes students have email access and will actually check it.

Step 3: Option A captures this assumption.

Why other options are wrong:

- Option B: The plan does not assume no one reads printed notices.

- Option C: The cost of email is not the assumption behind the decision.
- Option D: The plan is about notices, not about removing all paper.

Final Answer: Option A is the implicit assumption $\Rightarrow$ A

Answer: (A) 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 that a bird builds and lives in.

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

Step 3: The home a bee builds and lives in is a **hive**, so Option B completes the analogy.

Why other options are wrong:

- Option A: Honey is what a bee makes, not where it lives.
- Option C: A flower is where a bee feeds, not its home.
- Option D: A sting is a body part of the bee, not its home.

Final Answer: Bee : Hive completes the analogy $\Rightarrow$ B

Answer: (B) 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 Gold are all metals.

Step 2: Oxygen is a gas (a non-metal), not a metal.

Step 3: So the odd one out is **Oxygen** (Option C).

Why other options are wrong:

- Option A: Copper is a metal, like the others.
- Option B: Iron is a metal.
- Option D: Gold is a metal.

Final Answer: Oxygen is the odd one out $\Rightarrow$ C

Answer: (C) 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 $\rightarrow$ UJHFS, each letter moves forward by one: T$\rightarrow$U, I$\rightarrow$J, G$\rightarrow$H, E$\rightarrow$F, R$\rightarrow$S.

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

Step 3: Apply to LION: L$\rightarrow$M, I$\rightarrow$J, O$\rightarrow$P, N$\rightarrow$O.

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

Why other options are wrong:

- Option B: MJPN leaves N unshifted.
- Option C: MJOO leaves O unshifted.
- Option D: NJPO shifts L by two instead of one.

Final Answer: LION is coded as MJPO $\Rightarrow$ A

Answer: (A) Go Back to Q33

Q34.

Solution

Concept — Position in a row: If the total number of people is T and a person is mth from one end, then the position from the other end is $T - m + 1$.

Step 1: The row has $T = 25$ children, and Amit is 9th from the left.

Step 2: Position from the right $= 25 - 9 + 1$.

Step 3: $25 - 9 = 16$, and $16 + 1 = 17$.

Step 4: So Amit is 17th from the right end.

Why other options are wrong:

- Option A: 16th forgets the $+1$ for Amit's own place.

- Option B: 15th subtracts too much.
- Option C: 18th adds one too many.

Final Answer: Amit is 17th from the right $\Rightarrow$ 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 $8 \div 2 + 3 \times 6 - 4$ as $8 - 2 \times 3 \div 6 + 4$.

Step 3: Do multiplication and division from left to right: $2 \times 3 = 6$.

Step 4: Then $6 \div 6 = 1$.

Step 5: Now add and subtract from left to right: $8 - 1 = 7$, and $7 + 4 = 11$.

Why other options are wrong:

- Option A: 9 comes from mishandling the order of operations.
- Option C: 13 adds instead of subtracting the 1.
- Option D: 10 drops one unit somewhere in the working.

Final Answer: The value is 11 $\Rightarrow$ 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: $2 \times 3 = 6$, and $6 + 1 = 7$, which matches the third number.

Step 2: Row 2: $4 \times 5 = 20$, and $20 + 1 = 21$, which also matches.

Step 3: The rule is: third number $=$ (first $\times$ second) $+1$.

Step 4: Row 3: $6 \times 7 = 42$, and $42 + 1 = 43$.

Why other options are wrong:

- Option A: 40 does not fit the rule.
- Option B: 42 forgets to add the $+1$.
- Option C: 41 undershoots the correct total.

Final Answer: The missing number is 43 $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q36

Answer Key

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