NMAT Logical Reasoning

Sample Paper – 10

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, **BIRD** is written as **CKUH**. Using the same rule, how is **LAMP** written?

(A) NCPT

(B) MCQT

(C) MCPT

(D) MDPT

Q2. In a certain code, **MOUSE** is written as **13-15-21-19-5**, where each letter is replaced by its position in the English alphabet. How is **HORSE** written in the same code?

(A) 8-15-18-19-5

(B) 8-15-19-18-5

(C) 8-18-15-19-5

(D) 8-15-18-19-6

Q3. Find the next term in the letter series: **C, F, J, O, ____**

(A) T

(B) V

(C) U

(D) W

Q4. Find the next term in the number series: **5, 11, 23, 47, 95, ____**

(A) 190

(B) 189

(C) 191

(D) 192

Q5. Which letter lies exactly midway between the 5th letter from the left and the 21st letter from the left of the English alphabet?

(A) L

(B) M

(C) N

(D) K

Q6. In a certain code, the digits are represented by letters as follows: 1 =D, 2 =E, 3 =F, 4 =G, 5 =H. What is the code for the number **3 5 1 4**?

(A) F H G D

(B) F H D G

(C) H F D G

(D) F D H G

Part B: Arrangements and Puzzles

Directions (Q7–Q9): Eight students — P, Q, R, S, T, U, V and W — sit in two parallel rows of four, so that each student in one row faces exactly one student in the other row.

- P, Q, R and S sit in Row 1 and all face South; T, U, V and W sit in Row 2 and all face North.
- R sits at the left end of Row 1, and Q sits at the right end of Row 1.
- P sits immediately to the right of R.
- W sits at the left end of Row 2, and T sits at the right end of Row 2.
- U sits immediately to the left of V in Row 2.

(All references to *left* and *right* are from the reader's point of view, with each row numbered 1 to 4 from left to right.)

Q7. Which student faces R?

(A) T

(B) U

(C) V

(D) W

Q8. Who sits immediately to the right of the student who faces S?

(A) U

(B) T

(C) W

(D) V

Q9. Which of the following pairs of students face each other?

(A) P and V

(B) R and U

(C) S and T

(D) Q and T

Directions (Q10–Q12): Seven boxes — A, B, C, D, E, F and G — are stacked one above another. The lowest position is numbered 1 and the topmost is numbered 7.

- Box C is kept at the topmost position.
- Box A is kept at the lowest position.
- Box F is placed immediately above box A.
- Exactly two boxes lie between box F and box D, with D higher than F.
- Box B is placed immediately below box D.
- Box G is placed immediately above box D.

Q10. Which box is at the fourth position from the bottom?

(A) E

(B) B

(C) D

(D) G

Q11. How many boxes lie between box F and box G?

(A) One

(B) Two

(C) Four

(D) Three

Q12. Which box is placed immediately above box E?

(A) A

(B) F

(C) D

(D) B

Part C: Blood Relations and Direction Sense

Q13. Pointing to a boy, Meena said, "He is the son of the only daughter of my mother." How is the boy related to Meena?

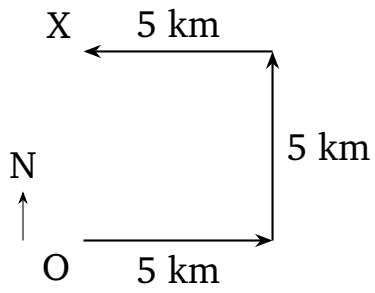
(A) Brother

(B) Son

(C) Nephew

(D) Cousin

Q14. A boy starts from point O and walks 5 km towards the East. He then turns left and walks 5 km, and again turns left and walks 5 km to reach point X. How far, and in which direction, is X from O?



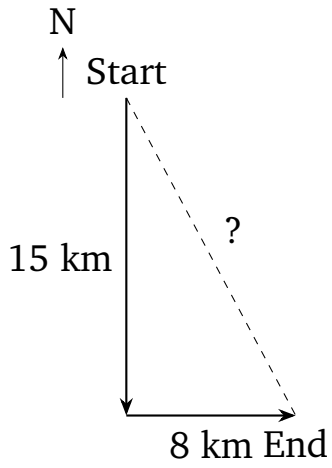
(A) 5 km, East

(B) 10 km, North

(C) 15 km, West

(D) 5 km, North

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



(A) 23 km

(B) 15 km

(C) 17 km

(D) 8 km

Q16. P is the father of Q. Q is the sister of R. S is the mother of R. How is P related to S?

(A) Brother

(B) Father

(C) Son

(D) Husband

Q17. A person is facing East. He turns 90° in the clockwise direction, then turns 45° in the anticlockwise direction, and finally turns 180° in the clockwise direction. Which direction is he facing now?

(A) South-East

(B) North-East

(C) North-West

(D) South-West

Part D: Syllogisms

Q18. **Statements:** All books are pens. All pens are inks.
Conclusions:
I. All books are inks.
II. All inks are books.
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:** Some pens are pencils. Some pencils are erasers.
Conclusions:
I. Some pens are erasers.
II. All erasers are pens.
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:** No cat is a dog. All dogs are pets.
Conclusions:
I. Some pets are not cats.
II. All pets are cats.
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:** All apples are fruits. Some fruits are sweet.
Conclusions:

I. All fruits are apples.
II. Some fruits are apples.
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

Q22. **Statements:** All roses are red. All red things are bright.
Conclusions:
I. All roses are bright.
II. Some bright 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

Part E: Critical Reasoning and Verbal Logic

Q23. **Statement:** "Enrol in our online course and master coding in just 30 days." — an advertisement.
Which of the following is an assumption **implicit** in the statement?

(A) People are likely to be attracted by the promise of learning coding quickly.
(B) Nobody can learn coding without this particular course.
(C) Coding can never be learned in a classroom.
(D) Every person in the world wants to learn coding.

Q24. **Argument:** The company should switch to remote work, because this will increase employee productivity.
Which of the following, if true, most **strengthens** the argument?

(A) Remote work saves the company money on office rent.

(B) In comparable firms, moving to remote work raised the measured output per employee.

(C) Many employees say they prefer working from home.

(D) Remote work requires every employee to have a reliable internet connection.

Q25. **Argument:** The restaurant should add many more spicy dishes to its menu, because spicy food is popular.
Which of the following, if true, most **weakens** the argument?

(A) Spicy dishes are cheaper to prepare than mild ones.

(B) The head chef is very skilled at cooking spicy food.

(C) A rival restaurant nearby also serves spicy food.

(D) A survey shows that most of this restaurant's regular customers dislike spicy food.

Q26. **Statement:** A large number of commuters complain of very long waiting times at a busy bus stop.
Which of the following is the most appropriate **course of action**?

(A) The transport authority should increase the frequency of buses on that route.

(B) The bus stop should be closed down permanently.

(C) Commuters should simply be told to stop complaining.

(D) The entire route should be cancelled.

Q27. **Statement I:** A severe drought struck the region this summer.
Statement II: Crop yields in the region fell sharply this year.
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 unrelated.

(D) Both statements are effects of some other, unrelated cause.

Q28. **Statement:** "Students who sleep at least seven hours a night tend to score higher in examinations than those who sleep less."
Which of the following inferences follows most logically?

(A) Sleeping less than seven hours guarantees that a student will fail.

(B) Getting adequate sleep may help students perform better in examinations.

(C) Sleep is the only factor that affects examination scores.

(D) Students should never study at night.

Q29. **Statement:** "The airline cancelled all of its flights today because of a nationwide pilots' strike."
Which of the following conclusions follows?

(A) Strikes never affect airline operations.

(B) The airline owns no aircraft of its own.

(C) Flights become cheaper during a strike.

(D) The pilots' strike disrupted the airline's flight operations today.

Q30. **Statement:** "To reduce paper waste, the college has decided to move all its notices to a mobile app."
Which of the following is an assumption **implicit** in the statement?

(A) Students and staff have access to mobile phones that can run the app.

(B) Paper will disappear from the world entirely.

(C) Nobody ever reads notices printed on paper.

(D) The app will remain free of any cost forever.

Part F: Analytical and Miscellaneous

Q31. Choose the option that best completes the analogy: **PEN : WRITE :: KNIFE : ?**

(A) Sharp

(B) Kitchen

(C) Cut

(D) Metal

Q32. Find the odd one out.

(A) Copper

(B) Iron

(C) Granite

(D) Aluminium

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

(A) MJPOT

(B) MJPOS

(C) MKPOT

(D) NJPOT

Q34. Among five friends, A is taller than B but shorter than C. D is taller than C, and E is the tallest of all. Who is the third tallest among them?

(A) C

(B) D

(C) A

(D) B

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

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

(A) 5

(B) 6

(C) 7

(D) 8

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

7	3	20
9	5	28
6	4	?

(A) 18

(B) 24

(C) 20

(D) 22

Detailed Solutions

Q1.

Solution

Concept — Coding by a growing shift: Compare each letter of the code word with the original; the shift may change from one position to the next.

Step 1: In BIRD $\rightarrow$ CKUH, compare letter by letter.

Step 2: B $\rightarrow$ C is a shift of $+1$; I $\rightarrow$ K is $+2$; R $\rightarrow$ U is $+3$; D $\rightarrow$ H is $+4$.

Step 3: The rule is: shift the 1st letter by $+1$, the 2nd by $+2$, the 3rd by $+3$ and the 4th by $+4$.

Step 4: Apply to LAMP: L$+1$ =M, A$+2$ =C, M$+3$ =P, P$+4$ =T, giving **MCPT**.

Why other options are wrong:

- Option A: NCPT shifts L by $+2$ instead of $+1$.
- Option B: MCQT shifts M by $+4$ instead of $+3$.
- Option D: MDPT shifts A by $+3$ instead of $+2$.

Final Answer: LAMP is coded as MCPT $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q1

Q2.

Solution

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

Step 1: Check the key: M$=13$, O$=15$, U$=21$, S$=19$, E$=5$, so MOUSE $=$ 13-15-21-19-5. The rule is confirmed.

Step 2: Find the positions of the letters of HORSE.

Step 3: H is the 8th letter $\rightarrow 8$; O is the 15th $\rightarrow 15$.

Step 4: R is the 18th $\rightarrow 18$; S is the 19th $\rightarrow 19$; E is the 5th $\rightarrow 5$.

Step 5: Writing them in order gives **8-15-18-19-5**.

Why other options are wrong:

- Option B: 8-15-19-18-5 swaps the codes for R and S.

- Option C: 8-18-15-19-5 swaps the codes for O and R.
- Option D: 8-15-18-19-6 uses 6 for E instead of 5.

Final Answer: HORSE is coded as 8-15-18-19-5 $\Rightarrow$ A

Answer: (A) Go Back to Q2

Q3.

Solution

Concept — Letter series: Convert letters to positions and study how the gap changes.

Step 1: Positions: C= 3, F= 6, J= 10, O= 15.

Step 2: The gaps are $6-3=3$, $10-6=4$, $15-10=5$. Each gap grows by 1.

Step 3: The next gap is 6, so the next position is $15+6=21$.

Step 4: The 21st letter of the alphabet is **U**.

Why other options are wrong:

- Option A: T is position 20, a gap of only 5.
- Option B: V is position 22, a gap of 7.
- Option D: W is position 23, a gap of 8.

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

Answer: (C) Go Back to Q3

Q4.

Solution

Concept — Number series by a fixed operation: Test whether each term comes from the previous one by the same rule.

Step 1: Terms: $5, 11, 23, 47, 95$.

Step 2: Check "double and add one": $5\times2+1=11$; $11\times2+1=23$; $23\times2+1=47$; $47\times2+1=95$. The rule holds.

Step 3: Apply once more: $95\times2+1=190+1=191$.

Step 4: So the next term is 191.

Why other options are wrong:

- Option A: 190 forgets to add the $+1$.
- Option B: 189 subtracts instead of adding one.
- Option D: 192 adds one too many.

Final Answer: The next term is 191 $\Rightarrow$ 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 5th letter from the left is E (position 5).

Step 2: The 21st letter from the left is U (position 21).

Step 3: The midway position is $\frac{5+21}{2} = \frac{26}{2} = 13$.

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 C: 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 $\Rightarrow$ B

Answer: (B) 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 =D, 2 =E, 3 =F, 4 =G, 5 =H.

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

Step 3: Replace the second digit: $5 \rightarrow$ H.

Step 4: Replace the third digit: $1 \rightarrow$ D; and the fourth: $4 \rightarrow$ G.

Step 5: Reading in order gives **F H D G**.

Why other options are wrong:

- Option A: F H G D swaps the codes for 1 and 4.
- Option C: H F D G swaps the first two letters.
- Option D: F D H G swaps the codes for 5 and 1.

Final Answer: The code is F H D G $\Rightarrow$ B

Answer: (B) Go Back to Q6

Q7.

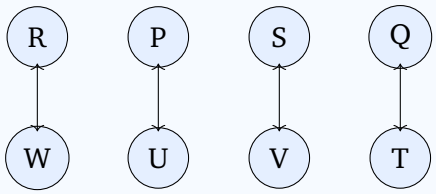
Solution

Concept — Double-row seating: Fix each row from left to right (reader's view), then match the facing columns.

Step 1: Row 1 has R at the left end and Q at the right end, with P immediately to the right of R. So R, P occupy positions 1 and 2; Q is at position 4; the only seat left, position 3, is S. Row 1 (left to right): **R, P, S, Q**.

Step 2: Row 2 has W at the left end (position 1) and T at the right end (position 4). U is immediately to the left of V, so they fill positions 2 and 3 as U, V. Row 2 (left to right): **W, U, V, T**.

Step 3: Since the rows face each other, students in the same column face one another.



(Row 1 on top faces South; Row 2 below faces North.)

Step 4: R is at column 1, so R faces the column-1 student of Row 2, which is **W**.

Why other options are wrong:

- Option A: T faces Q (column 4), not R.
- Option B: U faces P (column 2).
- Option C: V faces S (column 3).

Final Answer: W faces R $\Rightarrow$ D

Answer: (D) Go Back to Q7

Q8.

Solution

Concept — Reading the fixed rows: Use the arrangement found above and read positions from the reader's view.

Step 1: Row 1 (left to right) is R, P, S, Q; Row 2 (left to right) is W, U, V, T.

Step 2: S sits at column 3, so the student who faces S is the column-3 student of Row 2, which is V.

Step 3: V is at position 3 of Row 2. The student immediately to the right of V is at position 4, which is T.

Step 4: So the required student is **T**.

Why other options are wrong:

- Option A: U is to the left of V, not the right.
- Option C: W is at the far left end of Row 2.
- Option D: V is the student who faces S, not the one to his right.

Final Answer: T sits immediately to the right of the student facing S $\Rightarrow$ B

Answer: (B) Go Back to Q8

Q9.

Solution

Concept — Facing pairs: Two students face each other only if they share the same column.

Step 1: The facing columns are: R–W, P–U, S–V and Q–T.

Step 2: Compare each option with this list.

Step 3: Only **Q and T** appear together as a genuine facing pair.

Why other options are wrong:

- Option A: P faces U, not V.
- Option B: R faces W, not U.

- Option C: S faces V, not T.

Final Answer: Q and T face each other $\Rightarrow$ D

Answer: (D) Go Back to Q9

Q10.

Solution

Concept — Stacking puzzle: Fix the known ends first, then use the "immediately above/below" and "gap" clues.

Step 1: C is at position 7 (top) and A is at position 1 (bottom). F is immediately above A, so F $= 2$.

Step 2: "Exactly two boxes lie between F and D" with D higher than F means positions 3 and 4 lie between them, so D $= 5$.

Step 3: B is immediately below D, so B $= 4$; G is immediately above D, so G $= 6$.

Step 4: The only position left, 3, is E. The full stack (bottom to top) is:

7	C
6	G
5	D
4	B
3	E
2	F
1	A

Step 5: The fourth position from the bottom is occupied by **B**.

Why other options are wrong:

- Option A: E is at position 3.
- Option C: D is at position 5.
- Option D: G is at position 6.

Final Answer: B is at the fourth position from the bottom $\Rightarrow$ B

Answer: (B) Go Back to Q10

Q11.

Solution

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

Step 1: F is at position 2 and G is at position 6.

Step 2: The positions strictly between them are 3, 4 and 5, holding E, B and D.

Step 3: That is **three** boxes.

Why other options are wrong:

- Option A: One would require them to be two apart.
- Option B: Two undercounts by one.
- Option C: Four overcounts, including an end box.

Final Answer: Three boxes lie between F and G $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q11

Q12.

Solution

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

Step 1: E is at position 3.

Step 2: The position immediately above is 4.

Step 3: Position 4 is occupied by **B**.

Why other options are wrong:

- Option A: A is at the bottom, position 1.
- Option B: F is at position 2, below E.
- Option C: D is at position 5, one above B.

Final Answer: B is immediately above E $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q12

Q13.

Solution

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

Step 1: "My mother" refers to Meena's mother.

Step 2: "The only daughter of my mother" must be Meena herself, since she is the single daughter.

Step 3: "The son of" that daughter is therefore the son of Meena.

Step 4: So the boy is Meena's **son**.

Why other options are wrong:

- Option A: A brother would be Meena's mother's son, not her daughter's son.
- Option C: A nephew would be the son of Meena's brother or sister.
- Option D: A cousin would be the child of an uncle or aunt.

Final Answer: The boy is Meena's son $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q13

Q14.

Solution

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

Step 1: Facing East, the boy walks 5 km East, reaching $(5, 0)$.

Step 2: A left turn makes him face North; he walks 5 km North, reaching $(5, 5)$.

Step 3: A second left turn makes him face West; he walks 5 km West, reaching $(0, 5)$.

Step 4: The net movement is 0 km East–West (the 5 km East and 5 km West cancel) and 5 km North.

Step 5: So X is 5 km due **North** of O.

Why other options are wrong:

- Option A: 5 km East ignores the northward leg.
- Option B: 10 km North adds a leg that does not exist.

- Option C: 15 km West adds all three legs in one direction.

Final Answer: X is 5 km North of O $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q14

Q15.

Solution

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

Step 1: The cyclist rides 15 km South.

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

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 B: 15 km uses only the southward leg.
- Option D: 8 km uses only the eastward leg.

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

Answer: (C) Go Back to Q15

Q16.

Solution

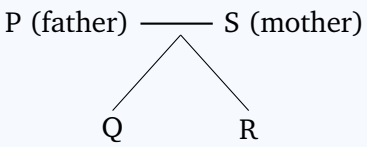
Concept — Family tree: Draw the relationships and read off the link between P and S.

Step 1: P is the father of Q, so P is a parent of Q.

Step 2: Q is the sister of R, so Q and R are siblings and share the same parents. Hence P is also the father of R.

Step 3: S is the mother of R, so S is the female parent of Q and R.

Step 4: P and S are the father and mother of the same children, so P is the **husband** of S.



Why other options are wrong:

- Option A: P is a parent, not a brother, in this tree.
- Option B: "Father" describes P's link to Q and R, not to S.
- Option C: A son cannot be the father of the children shown.

Final Answer: P is the husband of S $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q16

Q17.

Solution

Concept — Turning directions: Measure the facing as a bearing (North $= 0°$), adding for clockwise turns and subtracting for anticlockwise turns.

Step 1: Facing East means a bearing of $90°$.

Step 2: Turning $90°$ clockwise: $90° + 90° = 180°$, which is South.

Step 3: Turning $45°$ anticlockwise: $180° - 45° = 135°$, which is South-East.

Step 4: Turning $180°$ clockwise: $135° + 180° = 315°$, 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 net bearing of $45°$.
- Option D: South-West would need a net bearing of $225°$.

Final Answer: He now faces North-West $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q17

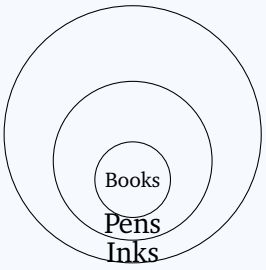
Q18.

Solution

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

Step 1: "All books are pens" places the book circle inside the pen circle.

Step 2: "All pens are inks" places the pen circle inside the ink circle.



Step 3: Books lie inside pens, which lie inside inks, so every book is an ink. Conclusion I (All books are inks) follows.

Step 4: Conclusion II (All inks are books) reverses the chain; the ink circle is much larger, so it does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option B: II is the invalid reverse statement.
- Option C: Both cannot follow when II fails.
- Option D: I clearly follows, so "neither" is wrong.

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

Answer: (A) Go Back to Q18

Q19.

Solution

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

Step 1: "Some pens are pencils" overlaps pens with pencils.

Step 2: "Some pencils are erasers" overlaps pencils with erasers.

Step 3: The pens that are pencils and the erasers that are pencils may be entirely different pencils, so no pen need be an eraser. Conclusion I (Some pens are erasers) does not follow.

Step 4: Conclusion II (All erasers are pens) is even stronger and also fails.

Step 5: Neither conclusion follows.

Why other options are wrong:

- Options A and B: Neither single conclusion is guaranteed by "some + some".
- Option C: Both cannot follow when neither is forced.

Final Answer: Neither conclusion follows $\Rightarrow$ D

Answer: (D) Go Back to Q19

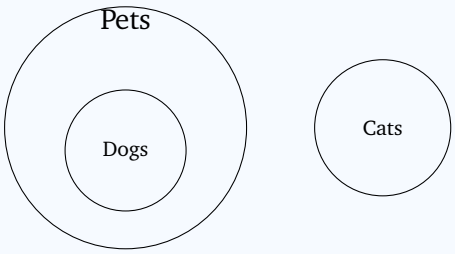
Q20.

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 dogs are pets that are not cats. Conclusion I (Some pets are not cats) follows.

Step 4: Nothing forces every pet to be a cat, so Conclusion II (All pets are cats) does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option B: II is unsupported, as the pet circle is wider than the cat circle.

- 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 Q20

Q21.

Solution

Concept — Syllogism (immediate inference): From "All X are Y" we may say "Some Y are X", but not "All Y are X".

Step 1: "All apples are fruits" places apples inside fruits. The second statement about sweet fruits does not touch apples directly.

Step 2: Conclusion I (All fruits are apples) reverses the first statement; the fruit circle is larger, so it does not follow.

Step 3: Conclusion II (Some fruits are apples) is the valid converse of "All apples are fruits", because apples do exist and each is a fruit. It follows.

Step 4: So only Conclusion II follows.

Why other options are wrong:

- Option A: I is the invalid reverse of an "all" statement.
- Option C: Since I fails, "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 Q21

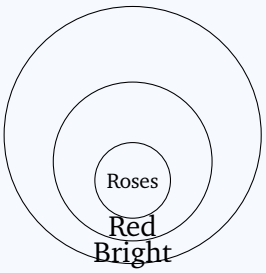
Q22.

Solution

Concept — Syllogism (all + all with converse): Follow the chain of inclusion, and use the valid "some" converse.

Step 1: "All roses are red" places roses inside red things.

Step 2: "All red things are bright" places red things inside bright things.



Step 3: Roses lie inside red things, which lie inside bright things, so all roses are bright. Conclusion I follows.

Step 4: Since all roses are bright and roses exist, "Some bright things are roses" is a valid converse. Conclusion II follows.

Step 5: Both conclusions follow.

Why other options are wrong:

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

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

Answer: (B) 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 that they will master coding quickly, in just 30 days.

Step 2: Such an appeal only works if the advertiser assumes that a fast-result promise will actually attract learners.

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

Why other options are wrong:

- Option B: The ad never claims theirs is the only way to learn.
- Option C: Whether coding can be learned in a classroom is not implied.

- Option D: The ad does not assume that everyone in the world wants to code.

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 increase productivity.

Step 2: This is supported best by real evidence that remote work actually raised output elsewhere.

Step 3: Option B shows that in comparable firms, remote work raised measured output per employee, directly backing the claim.

Why other options are wrong:

- Option A: Saving rent is a cost benefit, not a productivity gain.
- Option C: A preference for home working does not prove higher output.
- Option D: Needing reliable internet is a requirement, not support.

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

Answer: (B) Go Back to Q24

Q25.

Solution

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

Step 1: The argument says the restaurant should add spicy dishes because spicy food is popular.

Step 2: If the restaurant's own regular customers dislike spicy food, then "popular in general" does not apply to the people who actually eat there.

Step 3: Option D directly undermines the reason, so it weakens the argument most.

Why other options are wrong:

- Option A: A low cost would support, not weaken, adding the dishes.
- Option B: A skilled chef also supports the plan.
- Option C: A rival serving spicy food does not show this restaurant's customers dislike it.

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

Answer: (D) Go Back to Q25

Q26.

Solution

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

Step 1: The problem is long waiting times for commuters at a busy bus stop.

Step 2: A sensible response is to run buses more often so that people wait less.

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

Why other options are wrong:

- Option B: Closing the stop removes the service instead of improving it.
- Option C: Telling commuters to stop complaining ignores the real issue.
- Option D: Cancelling the route punishes the very people who need it.

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

Answer: (A) Go Back to Q26

Q27.

Solution

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

Step 1: Statement I: a severe drought struck the region this summer.

Step 2: A drought means far less water for crops, which usually lowers the harvest.

Step 3: Statement II: crop yields fell sharply. This is the expected result of the drought.

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

Why other options are wrong:

- Option B: A poor harvest does not cause a drought.
- Option C: The two are clearly linked, not unrelated.
- Option D: No third common cause is suggested here.

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 at least seven hours of sleep with higher examination scores.

Step 2: From this it is reasonable to infer that getting adequate sleep may help students perform better.

Step 3: Option B states exactly this measured inference.

Why other options are wrong:

- Option A: "Guarantees failure" is far too strong.
- Option C: The statement does not say sleep is the only factor.
- Option D: It never advises against studying at night.

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

Answer: (B) 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 cancelled today because of a nationwide pilots' strike.

Step 2: This tells us the strike disrupted the airline's flight operations today.

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

Why other options are wrong:

- Option A: The statement shows strikes clearly do affect flights.
- Option B: Cancelled flights still need aircraft; the airline owns some.
- Option C: Nothing suggests flights become cheaper during a strike.

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 condition is taken for granted.

Step 1: The college moves all its notices to a mobile app to cut paper waste.

Step 2: This only works if students and staff can actually see the notices, which needs phones able to run the app.

Step 3: Option A captures this assumption.

Why other options are wrong:

- Option B: The plan does not assume paper vanishes worldwide.
- Option C: It is not assumed that nobody reads paper notices.
- Option D: The decision does not depend on the app being free forever.

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

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 pen is a tool used to write.

Step 2: The relationship is "tool : the action it is used for".

Step 3: A knife is a tool used to **cut**, so Option C completes the analogy.

Why other options are wrong:

- Option A: "Sharp" describes a knife, it is not an action.
- Option B: "Kitchen" is a place, not the action of a knife.
- Option D: "Metal" is the material of a knife, not its use.

Final Answer: Knife : Cut completes the analogy $\Rightarrow$ $\boxed{C}$

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 Aluminium are all metals.

Step 2: Granite is a rock, not a metal.

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

Why other options are wrong:

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

Final Answer: Granite is the odd one out $\Rightarrow$ $\boxed{C}$

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 LIONS: L→M, I→J, O→P, N→O, S→T.

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

Why other options are wrong:

- Option B: MJPOS leaves S unshifted.
- Option C: MKPOT shifts I by $+2$ instead of $+1$.
- Option D: NJPOT shifts L by $+2$ instead of $+1$.

Final Answer: LIONS is coded as MJPOT $\Rightarrow$ A

Answer: (A) Go Back to Q33

Q34.

Solution

Concept — Ranking by height: Convert each clue into a $>$ relation, then line everyone up from tallest to shortest.

Step 1: "A is taller than B" gives $A > B$.

Step 2: "A is shorter than C" gives $C > A$.

Step 3: "D is taller than C" gives $D > C$, and "E is the tallest" gives $E > D$.

Step 4: Combining: $E > D > C > A > B$.

Step 5: Counting from the tallest, the order is E (1st), D (2nd), C (3rd). So the third tallest is **C**.

Why other options are wrong:

- Option B: D is the second tallest.
- Option C: A is the fourth tallest.
- Option D: B is the shortest.

Final Answer: C is the third tallest $\Rightarrow$ A

Answer: (A) Go Back to Q34

Q35.

Solution

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

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

Step 2: Rewrite $8 - 4 + 2 \times 6 \div 3$ as $8 \div 4 \times 2 + 6 - 3$.

Step 3: Do division and multiplication from left to right: $8 \div 4 = 2$.

Step 4: Then $2 \times 2 = 4$.

Step 5: Now add and subtract: $4 + 6 = 10$, and $10 - 3 = 7$.

Why other options are wrong:

- Option A: 5 comes from mishandling the order of operations.
- Option B: 6 stops before subtracting 3 correctly.
- Option D: 8 comes from an arithmetic slip in the final step.

Final Answer: The value is 7 $\Rightarrow$ C

Answer: (C) 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: $(7 + 3) \times 2 = 10 \times 2 = 20$, which matches the third number.

Step 2: Row 2: $(9 + 5) \times 2 = 14 \times 2 = 28$, which also matches.

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

Step 4: Row 3: $(6 + 4) \times 2 = 10 \times 2 = 20$.

Why other options are wrong:

- Option A: 18 does not fit the (sum)$\times 2$ rule.
- Option B: 24 overshoots the correct total.
- Option D: 22 comes from adding 2 instead of doubling.

Final Answer: The missing number is 20 $\Rightarrow$ C

Answer: (C) Go Back to Q36

Answer Key

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