

NMAT Logical Reasoning

Sample Paper – 7

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, **MOUSE** is written as **OQWUG**. How will **TIGER** be written in the same code?

- (A) VKIGR
- (B) VKHGT
- (C) VKIGT
- (D) UKIGT

Q2. If in a certain code **GO** is written as **7-15** (each letter replaced by its position in the English alphabet), then how is **SUN** written in the same code?

- (A) 19-20-14



- (B) 18-21-14
- (C) 19-21-13
- (D) 19-21-14

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

- (A) O
- (B) P
- (C) Q
- (D) N

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

- (A) 94
- (B) 96
- (C) 95
- (D) 93

Q5. Which letter is the 6th letter to the right of the 10th letter from the left end of the English alphabet?

- (A) O
- (B) P
- (C) Q
- (D) N

Q6. In a certain code, the digits are represented by letters as follows: 1 =M, 2 =N, 3 =P, 4 =Q, 5 =R, 6 =S. What is the code for the number **3 6 1 4**?

- (A) P S M Q
- (B) P S Q M
- (C) S P M Q
- (D) P M S Q

Part B: Arrangements and Puzzles



Directions (Q7–Q9): Eight friends A, B, C, D, E, F, G and H are seated around a **square table**, one at each corner and one at the middle of each side, all facing the centre.

- C sits to the immediate right of F.
- A sits to the immediate left of F.
- H sits second to the left of F.
- D sits exactly between H and B.
- G sits to the immediate left of B.
- E sits to the immediate right of C.

(A person's left is the seat next to them in the clockwise direction, and their right is the seat next to them in the anticlockwise direction.)

Q7. Who sits second to the right of B?

- (A) D
- (B) G
- (C) A
- (D) H

Q8. How many persons sit between A and G when counted clockwise starting from A?

- (A) Three
- (B) Two
- (C) Four
- (D) One

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

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



Directions (Q10–Q12): Seven students P, Q, R, S, T, U and V sit in a straight row, all facing North.

- T sits at the extreme left end and R sits at the extreme right end.
- Q sits immediately to the right of T.
- Exactly one student sits between Q and P.
- V sits to the immediate left of P.
- U sits immediately to the left of R.
- S is an immediate neighbour of both P and U.

Q10. Who sits exactly in the middle of the row?

- (A) V
- (B) P
- (C) S
- (D) Q

Q11. How many students sit between V and U?

- (A) Four
- (B) Three
- (C) Two
- (D) One

Q12. Who sits immediately to the right of S?

- (A) U
- (B) R
- (C) P
- (D) V

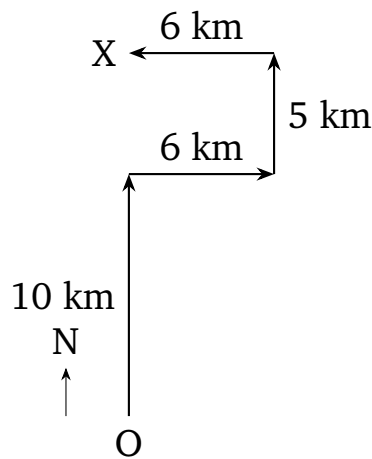
Part C: Blood Relations and Direction Sense

Q13. Pointing to a man, a woman said, “His mother is the only daughter of my father.” How is the woman related to the man?



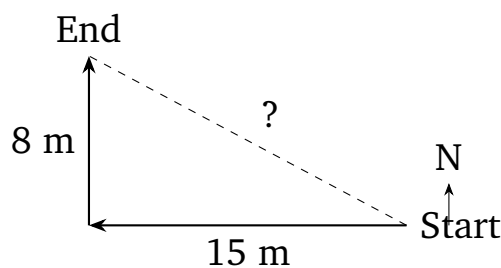
- (A) Sister
- (B) Aunt
- (C) Mother
- (D) Grandmother

Q14. A man starts from point O facing North. He walks 10 km North, then turns right and walks 6 km, then turns left and walks 5 km, and finally turns left and walks 6 km to reach point X. How far, and in which direction, is X from O?



- (A) 15 km, North
- (B) 21 km, North
- (C) 15 km, North-East
- (D) 9 km, North

Q15. A boy walks 15 m towards the West, then turns right and walks 8 m. How far is he now from his starting point?



- (A) 23 m
- (B) 15 m
- (C) 8 m
- (D) 17 m

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

- (A) Mother
- (B) Aunt
- (C) Sister-in-law
- (D) Cousin

Q17. A man is facing South. 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-West
- (B) North-East
- (C) North-West
- (D) South-East

Part D: Syllogisms

Q18. Statements: All books are papers. Some papers are pens.

Conclusions:

I. Some papers are books.

II. Some pens 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: All cups are plates. No plate is a spoon.

Conclusions:

I. All cups are spoons.

II. No cup is a spoon.

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: Some pens are red. Some red things are blue.

Conclusions:

I. Some pens are blue.

II. All pens are red.

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

Q21. Statements: All lions are cats. All cats are mammals.

Conclusions:

I. All lions are mammals.

II. All mammals are lions.

Which of the conclusions follow(s)?

(A) Both I and II follow

(B) Only conclusion II follows

(C) Only conclusion I follows

(D) Neither I nor II follows

Q22. Statements: All apples are fruits. All fruits are sweet.

Conclusions:



- I. All apples are sweet.
 II. Some sweet things are apples.
 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: “Take the new express bus and reach the airport in just 30 minutes.” — an advertisement.

Which of the following is an assumption **implicit** in the statement?

- (A) The express bus never breaks down.
 (B) No other transport goes to the airport.
 (C) Passengers are likely to prefer a faster way to reach the airport.
 (D) Everyone in the city owns a car.

Q24. Argument: The company should switch its factory to solar power, because this will cut its electricity bills.

Which of the following, if true, most **strengthens** the argument?

- (A) Solar panels need occasional cleaning.
 (B) The factory runs mostly at night.
 (C) In comparable factories, installing solar panels cut monthly electricity costs by nearly half.
 (D) Solar power is good for the environment.

Q25. Argument: Our school should replace printed textbooks with tablets, because tablets are lighter to carry.

Which of the following, if true, most **weakens** the argument?

- (A) Tablets are modern devices.



- (B) A tablet can store many books at once.
- (C) Students enjoy using tablets.
- (D) Many students cannot study for long on tablet screens and end up reading less than before.

Q26. Statement: The number of road accidents at a particular crossing has risen sharply this year.

Which of the following is the most appropriate **course of action**?

- (A) The crossing should be closed permanently.
- (B) All vehicles should be banned from the city.
- (C) The accidents should be ignored as unavoidable.
- (D) The authorities should install traffic signals and warning signs at the crossing.

Q27. Statement I: The village received unusually heavy rainfall last week.

Statement II: The river near the village overflowed its banks.

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 effects of some other, independent cause.
- (D) The two statements are unrelated.

Q28. Statement: “Students who solve previous years’ question papers usually perform better in competitive exams than those who do not.”

Which of the following inferences follows most logically?

- (A) Practising previous years’ papers can help improve a student’s exam performance.
- (B) Students who do not practise always fail.
- (C) Competitive exams are not important for anyone.
- (D) Only previous years’ papers matter for success.



Q29. Statement: “The bridge was closed for repairs, so all traffic was diverted through the old road today.”

Which of the following conclusions follows?

- (A) The bridge will never open again.
- (B) The old road normally has no traffic.
- (C) Repairs make a bridge stronger forever.
- (D) The repair work caused traffic to be diverted through the old road 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 can access email and will read the notices sent to them.
- (B) No student ever uses paper for anything.
- (C) Email is completely free of cost.
- (D) All the notices are unimportant.

Part F: Analytical and Miscellaneous

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

- (A) Sharp
- (B) Kitchen
- (C) Metal
- (D) Cut

Q32. Find the odd one out.

- (A) Triangle
- (B) Circle
- (C) Square



(D) Rectangle

Q33. In a certain code, **RIVER** is written as **SJWFS**. How is **LAKE** written in the same code?

(A) MBLE

(B) MBLF

(C) MBKF

(D) LBLF

Q34. In a row of 30 children all facing North, Amit is 13th from the left end. What is his position from the right end?

(A) 15th

(B) 16th

(C) 17th

(D) 18th

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

$$16 \div 8 + 4 \times 2 - 6$$

(A) 8

(B) 4

(C) 10

(D) 6

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

2 3 11

4 5 29

6 7 ?



- (A) 48
- (B) 55
- (C) 42
- (D) 60



Detailed Solutions

Q1.

Solution

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

Step 1: In MOUSE $\rightarrow$ OQWUG, compare letter by letter.

Step 2: M $\rightarrow$ O is a shift of +2; O $\rightarrow$ Q is +2; U $\rightarrow$ W is +2.

Step 3: Check the rest: S $\rightarrow$ U is +2; E $\rightarrow$ G is +2. The rule is: move every letter two places forward.

Step 4: Apply to TIGER: T $\rightarrow$ V, I $\rightarrow$ K, G $\rightarrow$ I, E $\rightarrow$ G, R $\rightarrow$ T, giving **VKIGT**.

Why other options are wrong:

- Option A: VKIGR leaves R shifted by only +0.
- Option B: VKHGT shifts G by only +1.
- Option D: UKIGT shifts T by only +1.

Final Answer: TIGER is coded as VKIGT $\Rightarrow$ 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 given code: G = 7, O = 15, so GO = 7-15. The rule is confirmed.

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

Step 3: S is the 19th letter $\rightarrow$ 19.

Step 4: U is the 21st letter $\rightarrow$ 21; N is the 14th letter $\rightarrow$ 14.

Step 5: Writing the numbers in order gives **19-21-14**.

Why other options are wrong:

- Option A: 19-20-14 uses 20 for U instead of 21.
- Option B: 18-21-14 uses 18 for S instead of 19.



- Option C: 19-21-13 uses 13 for N instead of 14.

Final Answer: SUN is coded as 19-21-14 $\Rightarrow$ D

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

Q3.

Solution

Concept — Letter series: Convert letters to positions and study how the gaps change.

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

Step 2: The gaps are $4 - 2 = 2$, $7 - 4 = 3$, $11 - 7 = 4$. The gap grows 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 A: 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 $\Rightarrow$ B

Answer: (B) [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 $5 \times 2 + 1 = 11$; then $11 \times 2 + 1 = 23$.

Step 3: Continue: $23 \times 2 + 1 = 47$. The rule is “double and add one”.

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

Why other options are wrong:



- Option A: 94 is 47×2 without adding one.
- Option B: 96 adds two instead of one.
- Option D: 93 subtracts one instead of adding.

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

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

Q5.

Solution

Concept — Counting positions in the alphabet: Find the starting letter, then step to the right by adding.

Step 1: The 10th letter from the left is J (position 10).

Step 2: Moving to the right means increasing the position number.

Step 3: The 6th letter to the right of position 10 is at position $10 + 6 = 16$.

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

Why other options are wrong:

- Option A: O is position 15, only 5 places to the right.
- Option C: Q is position 17, 7 places to the right.
- Option D: N is position 14, only 4 places to the right.

Final Answer: The required letter is P $\Rightarrow$ 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 =M, 2 =N, 3 =P, 4 =Q, 5 =R, 6 =S.

Step 2: The number is 3 6 1 4. Replace the first digit: $3 \rightarrow P$.

Step 3: Replace the second digit: $6 \rightarrow S$.

Step 4: Replace the third digit: $1 \rightarrow M$; and the fourth: $4 \rightarrow Q$.



Step 5: Reading in order gives **P S M Q**.

Why other options are wrong:

- Option B: P S Q M swaps the codes for 1 and 4.
- Option C: S P M Q swaps the first two letters.
- Option D: P M S Q swaps the codes for 6 and 1.

Final Answer: The code is P S M Q $\Rightarrow$ A

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

Q7.

Solution

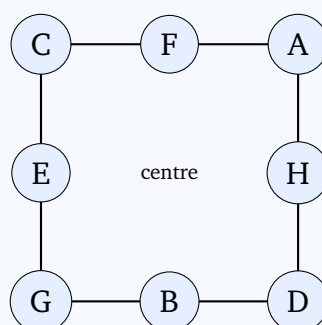
Concept — Square-table seating: Place the friends step by step using the clues, remembering that left means clockwise and right means anticlockwise.

Step 1: “C sits to the immediate right of F” and “A sits to the immediate left of F” fix the order A, F, C going clockwise.

Step 2: “H sits second to the left of F” places H just clockwise of A, extending to H, A, F, C.

Step 3: “D sits exactly between H and B” and “G sits to the immediate left of B” give H, D, B, G going clockwise.

Step 4: “E sits to the immediate right of C” places E next to C, closing the circle. The final clockwise seating is **F, A, H, D, B, G, E, C**.



Step 5: B’s right side is the anticlockwise direction: first D, then H. So second to the right of B is H.

Why other options are wrong:

- Option A: D is only first to the right of B.



- Option B: G is to the immediate left of B, not the right.
- Option C: A is far from B, on the opposite side.

Final Answer: H sits second to the right of B $\Rightarrow$ D

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

Q8.

Solution

Concept — Counting around a square table: Use the seating found above and count in the clockwise direction.

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

Step 2: Start at A and move clockwise: the next seat is H, then D, then B, then G.

Step 3: The persons sitting between A and G (clockwise) are H, D and B.

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

Why other options are wrong:

- Option B: Two misses one of H, D or B.
- Option C: Four would include G itself, the end point.
- Option D: One counts far too few persons.

Final Answer: Three persons sit between A and G clockwise $\Rightarrow$ A

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

Q9.

Solution

Concept — Immediate neighbours: Two persons are immediate neighbours if they sit next to each other on the table.

Step 1: The clockwise order is F, A, H, D, B, G, E, C (and C is next to F, closing the loop).

Step 2: The adjacent pairs are F–A, A–H, H–D, D–B, B–G, G–E, E–C and C–F.

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

Why other options are wrong:



- Option B: A and D have H sitting between them.
- Option C: F and B are on opposite sides of the table.
- Option D: G and C are separated by E.

Final Answer: H and D are immediate neighbours $\Rightarrow$ A

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

Q10.

Solution

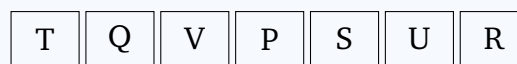
Concept — Linear arrangement: Fix the two ends first, then use the “immediate” and “between” clues.

Step 1: T is at the extreme left (seat 1) and R is at the extreme right (seat 7).

Step 2: “Q immediately to the right of T” puts Q in seat 2.

Step 3: “Exactly one student between Q and P” and “V immediately to the left of P” give V in seat 3 and P in seat 4.

Step 4: “U immediately to the left of R” puts U in seat 6, and “S is a neighbour of both P and U” puts S in seat 5. The row (left to right) is:



(all facing North)

Step 5: The middle seat of a row of 7 is seat 4, occupied by P.

Why other options are wrong:

- Option A: V sits in seat 3.
- Option C: S sits in seat 5.
- Option D: Q sits in seat 2.

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

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



Q11.

Solution

Concept — Counting between two people: Use the row found above.

Step 1: V sits in seat 3 and U sits in seat 6.

Step 2: The seats strictly between them are seat 4 (P) and seat 5 (S).

Step 3: So exactly **two** students sit between V and U.

Why other options are wrong:

- Option A: Four is more than the whole gap allows.
- Option B: Three would need one extra seat between them.
- Option D: One misses either P or S.

Final Answer: Two students sit between V and U $\Rightarrow$ C

Answer: (C) [Go Back to Q11](#)

Q12.

Solution

Concept — Immediate right in a row: For a row facing North, the right side is towards the right end of the row.

Step 1: S sits in seat 5.

Step 2: The seat immediately to the right is seat 6.

Step 3: Seat 6 is occupied by U.

Why other options are wrong:

- Option B: R sits in seat 7, one place beyond U.
- Option C: P sits in seat 4, to the left of S.
- Option D: V sits in seat 3, far to the left.

Final Answer: U sits immediately to the right of S $\Rightarrow$ A

Answer: (A) [Go Back to Q12](#)



Q13.

Solution

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

Step 1: “My father” is the woman’s own father.

Step 2: “The only daughter of my father” must be the woman herself, since she is the sole daughter.

Step 3: So “his mother is the only daughter of my father” means the man’s mother is the woman herself.

Step 4: Being the man’s mother, the woman is his **mother**.

Why other options are wrong:

- Option A: A sister would be a daughter of the man’s parents, not his mother.
- Option B: An aunt would be the sister of a parent.
- Option D: A grandmother would be one generation higher than the mother.

Final Answer: The woman is the man’s mother $\Rightarrow$ C

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

Q14.

Solution

Concept — Direction sense with coordinates: Track each leg as a change in the North–South and East–West positions.

Step 1: Start at $O = (0, 0)$ facing North. Walk 10 km North to reach $(0, 10)$.

Step 2: A right turn makes him face East; walk 6 km East to reach $(6, 10)$.

Step 3: A left turn makes him face North again; walk 5 km North to reach $(6, 15)$.

Step 4: A left turn makes him face West; walk 6 km West to reach $(0, 15)$.

Step 5: The 6 km East and 6 km West cancel out, so X is at $(0, 15)$: that is $10 + 5 = 15$ km due **North** of O.

Why other options are wrong:

- Option B: 21 km adds every leg without cancelling East and West.
- Option C: North-East ignores that the East and West legs cancel.



- Option D: 9 km subtracts the North legs instead of adding them.

Final Answer: X is 15 km North of O $\Rightarrow$ A

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

Q15.

Solution

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

Step 1: The boy walks 15 m West.

Step 2: Facing West, a right turn makes him face North; he walks 8 m North.

Step 3: The two legs (15 m and 8 m) 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 m from the start.

Why other options are wrong:

- Option A: 23 m adds the two legs directly.
- Option B: 15 m uses only the westward leg.
- Option C: 8 m uses only the northward leg.

Final Answer: The distance is 17 m $\Rightarrow$ D

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

Q16.

Solution

Concept — Family tree with in-laws: Draw the relationships and read off the link between S and T.

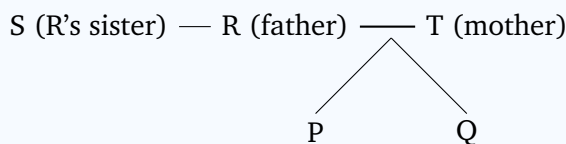
Step 1: P is the brother of Q, so P and Q are siblings.

Step 2: R is the father of Q, so R is a parent of both Q and P.

Step 3: T is the mother of P, so T is the other parent of P and Q; hence R and T are husband and wife.



Step 4: S is the sister of R, so S is the sister of T's husband, which makes S the **sister-in-law** of T.



Why other options are wrong:

- Option A: S is not a parent of T.
- Option B: "Aunt" would describe S's link to P and Q, not to T.
- Option D: A cousin relation is not supported by the tree.

Final Answer: S is the sister-in-law of T $\Rightarrow$ 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: Facing South is a bearing of 180° .

Step 2: Turning 90° clockwise gives $180^\circ + 90^\circ = 270^\circ$, which is West.

Step 3: Turning 45° anticlockwise gives $270^\circ - 45^\circ = 225^\circ$, which is South-West.

Step 4: Turning 180° gives $225^\circ - 180^\circ = 45^\circ$, which is **North-East**.

Why other options are wrong:

- Option A: South-West is only the position after the second turn.
- Option C: North-West would be a bearing of 315° .
- Option D: South-East would be a bearing of 135° .

Final Answer: He now faces North-East $\Rightarrow$ B

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



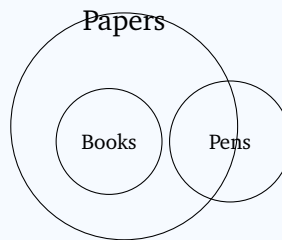
Q18.

Solution

Concept — Syllogism (all + some): An “all” statement can be reversed into a “some” statement, but a “some” link does not carry across freely.

Step 1: “All books are papers” places the book circle inside the paper circle.

Step 2: “Some papers are pens” overlaps the paper circle with the pen circle.



Step 3: Since all books are papers, those books are papers, so “Some papers are books” certainly follows. Conclusion I follows.

Step 4: The pens overlap only the paper circle; nothing forces any pen to be a book. Conclusion II (Some pens are books) does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option B: II is not guaranteed, as pens need not touch the book circle.
- Option C: Since II is uncertain, “both” is wrong.
- Option D: I clearly follows, so “neither” is wrong.

Final Answer: Only Conclusion I follows ⇒ **A**

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

Q19.

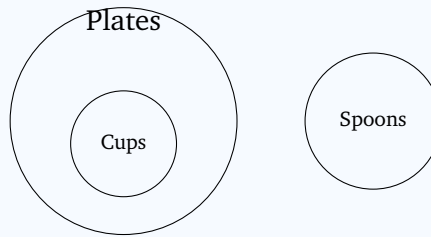
Solution

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

Step 1: “All cups are plates” places the cup circle inside the plate circle.

Step 2: “No plate is a spoon” keeps the plate and spoon circles fully separate.





Step 3: Cups lie inside plates, and no plate is a spoon, so no cup can be a spoon. Conclusion II (No cup is a spoon) follows.

Step 4: Conclusion I (All cups are spoons) directly contradicts this, so it does not follow.

Step 5: Only Conclusion II follows.

Why other options are wrong:

- Option A: I contradicts the “no spoon” link.
- Option C: I fails, so “both” is wrong.
- Option D: II clearly follows, so “neither” is wrong.

Final Answer: Only Conclusion II follows ⇒ **B**

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

Q20.

Solution

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

Step 1: “Some pens are red” overlaps pens with red things.

Step 2: “Some red things are blue” overlaps red things with blue things.

Step 3: The pens that are red and the red things that are blue may be entirely different red things, so no pen need be blue. Conclusion I (Some pens are blue) does not follow.

Step 4: Conclusion II (All pens are red) is far too strong; only some pens are said to be red. It does not follow.

Step 5: Neither conclusion follows.

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 Q20](#)

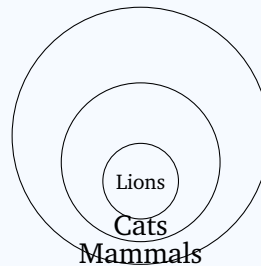
Q21.

Solution

Concept — Syllogism (all + all): Follow the chain of inclusion, but do not assume the wider set has extra members.

Step 1: “All lions are cats” places lions inside cats.

Step 2: “All cats are mammals” places cats inside mammals.



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

Step 4: Conclusion II (All mammals are lions) reverses the chain and is far too strong; many mammals need not be lions. It does not follow.

Step 5: Only Conclusion I follows.

Why other options are wrong:

- Option A: II is invalid, so “both” is wrong.
- Option B: II alone is unsupported.
- Option D: I clearly follows, so “neither” is wrong.

Final Answer: Only Conclusion I follows $\Rightarrow$ **C**

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



Q22.

Solution

Concept — Syllogism (all + all with reverse “some”): Follow the chain, then check whether the reverse “some” is safe.

Step 1: “All apples are fruits” places apples inside fruits.

Step 2: “All fruits are sweet” places fruits inside sweet things.

Step 3: Apples lie inside fruits, which lie inside sweet things, so all apples are sweet. Conclusion I follows.

Step 4: Since apples exist and all of them are sweet, at least those sweet things are apples, so “Some sweet things are apples” also follows. Conclusion II follows.

Step 5: Both conclusions follow.

Why other options are wrong:

- Option A: II is also valid, so “only I” is wrong.
- Option C: I is clearly valid, so “only II” is wrong.
- Option D: “Neither” ignores the clear chain of inclusion.

Final Answer: Both I and II follow ⇒ **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 a fast 30-minute journey to the airport.

Step 2: Such an appeal works only if the advertiser assumes that speed is something travellers care about.

Step 3: So the implicit assumption is that passengers are likely to prefer a faster way to reach the airport (Option C).

Why other options are wrong:

- Option A: A claim that the bus “never” breaks down is not needed for the appeal.



- Option B: The ad never claims to be the only transport option.
- Option D: Whether everyone owns a car is unrelated to the appeal.

Final Answer: The implicit assumption is Option C $\Rightarrow$ C

Answer: (C) [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 solar power will cut the factory's electricity bills.

Step 2: The claim is supported if solar power has actually lowered costs in similar settings.

Step 3: Option C shows that comparable factories cut their monthly electricity costs by nearly half after installing solar panels, directly supporting the claim.

Why other options are wrong:

- Option A: Occasional cleaning is a minor upkeep point, not support.
- Option B: Running mostly at night would reduce solar benefit, weakening the case.
- Option C is correct; Option D: Environmental benefit does not speak to the bills.

Final Answer: Option C most strengthens the argument $\Rightarrow$ C

Answer: (C) [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 tablets only because they are lighter to carry than textbooks.

Step 2: If students cannot study for long on tablet screens and therefore read less, the switch harms the real goal of learning.



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

Why other options are wrong:

- Option A: Being “modern” does not address the benefit of learning.
- Option B: Large storage would support, not weaken, the switch.
- Option C: Enjoyment supports the switch rather than weakening it.

Final Answer: Option D most weakens the argument $\Rightarrow$ D

Answer: (D) [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 a particular crossing.

Step 2: A sensible response is to make the crossing safer so that accidents fall.

Step 3: Option D, installing traffic signals and warning signs, addresses the cause directly and is practical.

Why other options are wrong:

- Option A: Closing the crossing permanently is extreme and disrupts normal traffic.
- Option B: Banning all vehicles from the city is wildly disproportionate.
- Option C: Ignoring the accidents does nothing to help.

Final Answer: Option D is the appropriate course of action $\Rightarrow$ D

Answer: (D) [Go Back to Q26](#)

Q27.

Solution

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

Step 1: Statement I: the village received unusually heavy rainfall.



Step 2: Heavy rainfall raises the water level of nearby rivers.

Step 3: Statement II: the river overflowed its banks. This is the natural 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: An overflowing river does not cause rainfall.
- Option C: The two are directly linked, not effects of a separate cause.
- Option D: They are clearly related, not unrelated.

Final Answer: Statement I is the cause of Statement II $\Rightarrow$ 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 solving previous years' papers to better exam performance.

Step 2: From this it is reasonable to infer that such practice can help improve performance.

Step 3: Option A states exactly this measured inference.

Why other options are wrong:

- Option B: "Always fail" is far too strong; the statement only compares tendencies.
- Option C: The statement never calls competitive exams unimportant.
- Option D: It never claims previous papers are the only thing that matters.

Final Answer: Option A is the logical inference $\Rightarrow$ A

Answer: (A) [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 the bridge was closed for repairs, so traffic was diverted through the old road today.

Step 2: This tells us the repair work led to today's diversion of traffic.

Step 3: Option D restates this cause-and-effect directly, so it follows.

Why other options are wrong:

- Option A: Nothing says the bridge will never reopen; it is only closed for repairs.
- Option B: The statement says nothing about the old road's usual traffic.
- Option C: There is no claim that repairs make bridges stronger forever.

Final Answer: Option D follows from the statement $\Rightarrow$ 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 to reduce paper waste.

Step 2: This decision only works if students can actually receive and read email notices.

Step 3: Option A captures this assumption.

Why other options are wrong:

- Option B: The plan does not assume students never use paper at all.
- Option C: Whether email is free of cost is not the point of the decision.
- Option D: If the notices were unimportant, there would be no reason to send them.

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 pen is a tool whose main purpose is to write.

Step 2: The relationship is “tool : its main action”.

Step 3: The main action performed with a knife is to **cut**, so Option D completes the analogy.

Why other options are wrong:

- Option A: “Sharp” is a property of a knife, not its action.
- Option B: “Kitchen” is a place where a knife is used, not its action.
- Option C: “Metal” is the material of a knife, not its action.

Final Answer: Knife : Cut completes the analogy $\Rightarrow$ **D**

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

Q32.

Solution

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

Step 1: Triangle, Square and Rectangle are all figures made of straight sides and corners (polygons).

Step 2: A Circle has no straight sides and no corners.

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

Why other options are wrong:

- Option A: A triangle is a polygon, like the others.
- Option C: A square is a polygon.
- Option D: A rectangle is a polygon.

Final Answer: Circle is the odd one out $\Rightarrow$ **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 RIVER $\rightarrow$ SJWFS, each letter moves forward by one: $R \rightarrow S$, $I \rightarrow J$, $V \rightarrow W$, $E \rightarrow F$, $R \rightarrow S$.

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

Step 3: Apply to LAKE: $L \rightarrow M$, $A \rightarrow B$, $K \rightarrow L$, $E \rightarrow F$.

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

Why other options are wrong:

- Option A: MBLF leaves E unshifted.
- Option C: MBKF leaves K unshifted.
- Option D: LBLF leaves L unshifted.

Final Answer: LAKE is coded as MBLF $\Rightarrow$ **B**

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

Q34.

Solution

Concept — Position in a row: If a row has N people and someone is m th from the left, then the position from the right is $N - m + 1$.

Step 1: The row has $N = 30$ children.

Step 2: Amit is 13th from the left, so $m = 13$.

Step 3: Position from the right $= 30 - 13 + 1$.

Step 4: $30 - 13 = 17$, and $17 + 1 = 18$, so Amit is 18th from the right.

Why other options are wrong:

- Option A: 15th ignores the correct arithmetic.
- Option B: 16th uses $30 - 13 - 1$ by mistake.
- Option C: 17th forgets to add one for Amit himself.

Final Answer: Amit is 18th 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 normal order of operations.

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

Step 2: Rewrite $16 \div 8 + 4 \times 2 - 6$ as $16 - 8 \times 4 \div 2 + 6$.

Step 3: Do multiplication and division from left to right: $8 \times 4 = 32$.

Step 4: Then $32 \div 2 = 16$.

Step 5: Now add and subtract from left to right: $16 - 16 = 0$, and $0 + 6 = 6$.

Why other options are wrong:

- Option A: 8 comes from a wrong order of operations.
- Option B: 4 misplaces the final $+6$.
- Option C: 10 comes from an incorrect substitution.

Final Answer: The value is 6 $\Rightarrow$ D

Answer: (D) [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: $(2 \times 3) + (2 + 3) = 6 + 5 = 11$, which matches the third number.

Step 2: Row 2: $(4 \times 5) + (4 + 5) = 20 + 9 = 29$, which also matches.

Step 3: The rule is: third number = (product of the two) + (sum of the two).

Step 4: Row 3: $(6 \times 7) + (6 + 7) = 42 + 13 = 55$.

Why other options are wrong:

- Option A: 48 comes from adding only the product and one number.
- Option C: 42 is only the product, missing the sum.
- Option D: 60 overshoots the correct total.

Final Answer: The missing number is 55 $\Rightarrow$ B



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



Answer Key

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

