NMAT Logical Reasoning

Sample Paper – 2

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, **SUN** is written as **VXQ**. How will **MOON** be written in the same code?

(A) PRRP

(B) PRRQ

(C) PQRQ

(D) ORRQ

Q2. If **LAMP** is coded as **12 1 13 16** (each letter replaced by its position in the English alphabet), then how is **KING** coded?

(A) 11 9 15 7

(B) 11 8 14 7

(C) 11 9 14 7

(D) 12 9 14 7

Q3. Find the next term in the letter series: **B, E, H, K, ____**

(A) L

(B) M

(C) O

(D) N

Q4. Find the next term in the number series: **3, 6, 11, 18, 27, ____**

(A) 36

(B) 38

(C) 40

(D) 37

Q5. Which letter lies exactly midway between the 10th letter from the left and the 20th letter from the left of the English alphabet?

(A) M

(B) N

(C) O

(D) P

Q6. In a certain code, the digits are represented by letters as follows: 1 =W, 2 =X, 3 =Y, 4 =Z, 5 =V. What is the code for the number **3 5 1 4**?

(A) Y W V Z

(B) Y V Z W

(C) V Y W Z

(D) Y V W Z

Part B: Arrangements and Puzzles

Directions (Q7–Q9): Eight friends Ann, Bob, Cara, Dev, Eli, Finn, Gia and Hari are seated around a circular table facing the centre.

- Ann sits directly opposite Eli.
- Bob sits to the immediate left of Ann.
- Cara sits to the immediate left of Bob.
- Dev sits directly opposite Hari.
- Finn sits to the immediate left of Eli.
- Gia sits directly opposite Cara.
- Hari sits to the immediate left of Gia.

(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 to the immediate right of Dev?

(A) Eli

(B) Bob

(C) Cara

(D) Gia

Q8. How many persons sit between Ann and Dev when counted clockwise starting from Ann?

(A) Two

(B) Three

(C) One

(D) Four

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

(A) Dev and Eli

(B) Ann and Cara

(C) Bob and Dev

(D) Cara and Eli

Directions (Q10–Q12): In a school, six subjects — English, Science, Maths, History, Hindi and Geography — are taught on six consecutive days from Monday to Saturday, one subject per day.

- English is taught on the first day of the week (Monday).
- Science is taught on the day immediately after English.
- History is taught on Thursday.
- Maths is taught on the day immediately before History.
- Geography is taught on the last day (Saturday).
- Hindi is taught on the day between History and Geography.

Q10. On which day is Maths taught?

(A) Tuesday

(B) Wednesday

(C) Thursday

(D) Monday

Q11. How many subjects are taught between Science and Hindi?

(A) One

(B) Two

(C) Three

(D) Four

Q12. Which subject is taught immediately before Geography?

(A) History

(B) Maths

(C) Science

(D) Hindi

Part C: Blood Relations and Direction Sense

Q13. Pointing to a photograph, a woman said, "He is the son of the only daughter of my mother." How is the man in the photograph related to the woman?

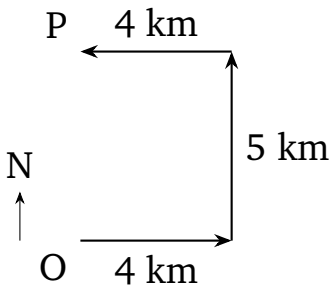
(A) Brother

(B) Nephew

(C) Husband

(D) Son

Q14. A boy starts from his home O and walks 4 km towards the East. He then turns left and walks 5 km, and again turns left and walks 4 km to reach point P. How far, and in which direction, is P from O?



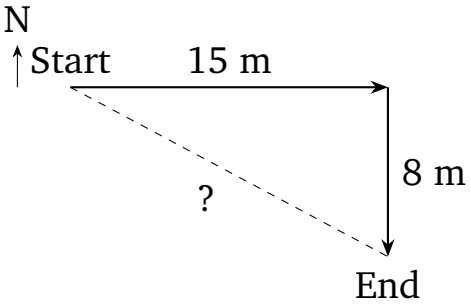
(A) 4 km, East

(B) 9 km, North

(C) 5 km, North

(D) 5 km, South

Q15. A cyclist rides 15 m towards the East, then turns right and rides 8 m. How far is she now from her starting point?



(A) 23 m

(B) 17 m

(C) 7 m

(D) 15 m

Q16. P is the sister 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 person is facing South. He turns 45° in the clockwise direction and then turns a further 90° in the clockwise direction. Which direction is he facing now?

(A) North-West

(B) South-West

(C) North-East

(D) South-East

Part D: Syllogisms

Q18. **Statements:** All cups are plates. All plates are bowls. All bowls are dishes.

Conclusions:

I. All cups are dishes.

II. All dishes are cups.

Which of the conclusions follow(s)?

(A) Both I and II follow

(B) Only conclusion I follows

(C) Only conclusion II follows

(D) Neither I nor II follows

Q19. **Statements:** Some books are pens. All pens are inks. All inks are colours.
Conclusions:
I. Some books are inks.
II. Some books are colours.
Which of the conclusions follow(s)?

(A) Both I and II follow

(B) Only conclusion I follows

(C) Only conclusion II follows

(D) Neither I nor II follows

Q20. **Statements:** No cat is a rat. All rats are mice. Some mice are white.
Conclusions:
I. Some mice are not cats.
II. All rats are white.
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 tables are chairs. Some chairs are desks. Some desks are stools.
Conclusions:
I. Some tables are desks.
II. Some chairs are stools.
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 lions are tigers. No tiger is a bear. All bears are animals.
Conclusions:
I. No lion is a bear.
II. Some animals are not 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

Part E: Critical Reasoning and Verbal Logic

Q23. **Statement:** "Enrol in our online course and double your salary within a year." — an advertisement.
Which of the following is an assumption **implicit** in the statement?

(A) People are generally interested in increasing their salary.

(B) Nobody in the country currently has a job.

(C) Online courses are always cheaper than classroom courses.

(D) Salaries never rise unless a person takes a course.

Q24. **Argument:** The company should switch to solar power, because doing so will cut its electricity costs.
Which of the following, if true, most **strengthens** the argument?

(A) Solar panels need cleaning from time to time.

(B) In comparable firms, installing solar panels reduced electricity bills by nearly half.

(C) The company's rooftop is very large.

(D) Solar power is friendly to the environment.

Q25. **Argument:** The school should make all students wear uniforms, because uniforms improve academic performance.
Which of the following, if true, most **weakens** the argument?

(A) Uniforms are generally liked by parents.

(B) Uniforms are cheap to produce in bulk.

(C) Uniforms create a sense of equality among students.

(D) Schools that introduced uniforms saw no change in students' exam results.

Q26. **Statement:** A large number of road accidents on a certain highway are caused by overspeeding.
Which of the following is the most appropriate **course of action**?

(A) Install speed cameras and strictly enforce the speed limit on the highway.

(B) Close the highway permanently to all traffic.

(C) Ban every type of vehicle from using the highway.

(D) Treat the accidents as unavoidable and take no action.

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

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

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

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

(D) The two statements are unrelated to each other.

Q28. **Statement:** "Children who eat breakfast regularly tend to concentrate better in class than those who skip it."
Which of the following inferences follows most logically?

(A) Children who skip breakfast always fail their examinations.

(B) Breakfast is the only cause of good concentration in class.

(C) Eating breakfast regularly can help a child concentrate better in class.

(D) Every school must provide free breakfast to all its students.

Q29. **Statement:** "Due to a technical fault, all metro services on the blue line were suspended for two hours this morning."
Which of the following conclusions follows?

(A) The blue line has no trains at all.

(B) Technical faults never occur on the metro network.

(C) The blue line metro services were disrupted this morning.

(D) Metro trains run faster whenever there is a technical fault.

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) No student ever reads paper notices.

(B) Sending email is completely free of cost for the college.

(C) The college issues far too many notices each week.

(D) Students have access to email.

Part F: Analytical and Miscellaneous

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

(A) Sharp

(B) Cut

(C) Kitchen

(D) Blade

Q32. Find the odd one out.

(A) Triangle

(B) Circle

(C) Square

(D) Rectangle

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

(A) MJOP

(B) MKPO

(C) NJPO

(D) MJPO

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

(A) 16

(B) 17

(C) 15

(D) 18

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

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

(A) 30

(B) 34

(C) 28

(D) 32

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

2	3	12
3	4	24
4	5	?

(A) 30

(B) 36

(C) 40

(D) 45

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 SUN $\rightarrow$ VXQ, compare letter by letter.

Step 2: S $\rightarrow$ V is a shift of $+3$; U $\rightarrow$ X is $+3$; N $\rightarrow$ Q is $+3$.

Step 3: The rule is: replace every letter by the letter three places ahead in the alphabet.

Step 4: Apply to MOON: M $\rightarrow$ P, O $\rightarrow$ R, O $\rightarrow$ R, N $\rightarrow$ Q, giving **PRRQ**.

Why other options are wrong:

- Option A: PRRP shifts the final N wrongly.
- Option C: PQRQ shifts the first O by only $+2$.
- Option D: ORRQ shifts M by only $+2$.

Final Answer: MOON is coded as PRRQ $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) 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: L $= 12$, A $= 1$, M $= 13$, P $= 16$, so LAMP $= 12\,1\,13\,16$. The rule is confirmed.

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

Step 3: K is the 11th letter $\rightarrow 11$.

Step 4: I is the 9th letter $\rightarrow 9$; N is the 14th letter $\rightarrow 14$; G is the 7th letter $\rightarrow 7$.

Step 5: Writing the numbers in order gives **11 9 14 7**.

Why other options are wrong:

- Option A: 11 9 15 7 uses 15 for N instead of 14.

- Option B: 11 8 14 7 uses 8 for I instead of 9.
- Option D: 12 9 14 7 uses 12 for K instead of 11.

Final Answer: KING is coded as 11 9 14 7 $\Rightarrow$ C

Answer: (C) Go Back to Q2

Q3.

Solution

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

Step 1: Positions: B $= 2$, E $= 5$, H $= 8$, K $= 11$.

Step 2: The differences are $5 - 2 = 3$, $8 - 5 = 3$, $11 - 8 = 3$. The series increases by 3 each time.

Step 3: The next position is $11 + 3 = 14$.

Step 4: The 14th letter of the alphabet is **N**.

Why other options are wrong:

- Option A: L is position 12, a step of only $+1$.
- Option B: M is position 13, a step of $+2$.
- Option C: O is position 15, a step of $+4$.

Final Answer: The next term is N $\Rightarrow$ D

Answer: (D) Go Back to Q3

Q4.

Solution

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

Step 1: Terms: $3, 6, 11, 18, 27$.

Step 2: Differences: $6 - 3 = 3$, $11 - 6 = 5$, $18 - 11 = 7$, $27 - 18 = 9$.

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

Step 4: The next term is $27 + 11 = 38$.

Why other options are wrong:

- Option A: 36 would need a difference of 9, repeating the previous gap.
- Option C: 40 would need a difference of 13, skipping 11.
- Option D: 37 would need a difference of 10, which breaks the odd-number pattern.

Final Answer: The next term is 38 $\Rightarrow$ B

Answer: (B) 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 10th letter from the left is J (position 10).

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

Step 3: The midway position is $\frac{10+20}{2} = \frac{30}{2} = 15$.

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

Why other options are wrong:

- Option A: M is position 13, short of the middle.
- Option B: N is position 14, one short of the middle.
- Option D: P is position 16, one past the middle.

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

Answer: (C) Go Back to Q5

Q6.

Solution

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

Step 1: The key is 1 =W, 2 =X, 3 =Y, 4 =Z, 5 =V.

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

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

Step 4: Replace the third digit: $1 \rightarrow$ W; and the fourth: $4 \rightarrow$ Z.

Step 5: Reading in order gives **Y V W Z**.

Why other options are wrong:

- Option A: Y W V Z swaps the codes for 5 and 1.
- Option B: Y V Z W swaps the codes for 1 and 4.
- Option C: V Y W Z swaps the first two letters.

Final Answer: The code is Y V W Z $\Rightarrow$ D

Answer: (D) Go Back to Q6

Q7.

Solution

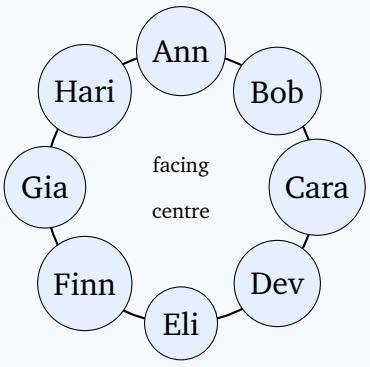
Concept — Circular seating: Place the friends step by step using the clues, remembering that left means clockwise and right means anticlockwise, and that "opposite" means the seat directly across the table.

Step 1: Fix Ann. "Bob to the immediate left of Ann" and "Cara to the immediate left of Bob" give the clockwise chain Ann, Bob, Cara.

Step 2: "Ann sits directly opposite Eli" places Eli four seats from Ann. "Finn to the immediate left of Eli" puts Finn just clockwise of Eli.

Step 3: "Gia sits directly opposite Cara" and "Hari to the immediate left of Gia" fix Gia and Hari; "Dev opposite Hari" then fixes Dev.

Step 4: The complete clockwise order is **Ann, Bob, Cara, Dev, Eli, Finn, Gia, Hari**.



Step 5: Dev's immediate right is the anticlockwise neighbour of Dev, which is

Cara.

Why other options are wrong:

- Option A: Eli sits to the immediate left (clockwise) of Dev.
- Option B: Bob is not adjacent to Dev.
- Option D: Gia sits directly opposite Dev, not beside him.

Final Answer: Cara sits to the immediate right of Dev $\Rightarrow$ $\boxed{C}$

Answer: (C) Go Back to Q7

Q8.

Solution

Concept — Counting on a circle: Use the seating found above and count in the clockwise direction.

Step 1: The clockwise order is Ann, Bob, Cara, Dev, Eli, Finn, Gia, Hari.

Step 2: Start at Ann and move clockwise: the next seat is Bob, then Cara, then Dev.

Step 3: The persons sitting between Ann and Dev (clockwise) are Bob and Cara.

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

Why other options are wrong:

- Option B: Three would include Dev itself, which is the end point.
- Option C: One misses either Bob or Cara.
- Option D: Four counts persons on the far side of the circle.

Final Answer: Two persons sit between Ann and Dev clockwise $\Rightarrow$ $\boxed{A}$

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 circle.

Step 1: The clockwise order is Ann, Bob, Cara, Dev, Eli, Finn, Gia, Hari (and Hari is next to Ann, closing the circle).

Step 2: The adjacent pairs are Ann–Bob, Bob–Cara, Cara–Dev, Dev–Eli, Eli–Finn, Finn–Gia, Gia–Hari and Hari–Ann.

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

Why other options are wrong:

- Option B: Ann and Cara have Bob sitting between them.
- Option C: Bob and Dev have Cara sitting between them.
- Option D: Cara and Eli have Dev sitting between them.

Final Answer: Dev and Eli are immediate neighbours $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q9

Q10.

Solution

Concept — Day-scheduling puzzle: Fix the anchored days first, then use the "immediately before/after" clues.

Step 1: English is on Monday, and Science is immediately after English, so Science is on Tuesday.

Step 2: History is on Thursday, and Maths is immediately before History, so Maths is on Wednesday.

Step 3: Geography is on Saturday, and Hindi lies between History (Thursday) and Geography (Saturday), so Hindi is on Friday.

Step 4: The full schedule is:

Mon	English
Tue	Science
Wed	Maths
Thu	History
Fri	Hindi
Sat	Geography

Step 5: Maths is taught on **Wednesday**.

Why other options are wrong:

- Option A: Science, not Maths, is on Tuesday.

- Option C: History is on Thursday.
- Option D: English is on Monday.

Final Answer: Maths is taught on Wednesday $\Rightarrow$ B

Answer: (B) Go Back to Q10

Q11.

Solution

Concept — Counting between two days: Use the schedule found above.

Step 1: Science is on Tuesday and Hindi is on Friday.

Step 2: The days strictly between them are Wednesday and Thursday.

Step 3: On those days Maths and History are taught, which is **two** subjects.

Why other options are wrong:

- Option A: One would miss either Maths or History.
- Option C: Three would wrongly include Science or Hindi.
- Option D: Four is more days than lie between Tuesday and Friday.

Final Answer: Two subjects are taught between Science and Hindi $\Rightarrow$ B

Answer: (B) Go Back to Q11

Q12.

Solution

Concept — Immediately before: Read off the subject one day earlier than Geography.

Step 1: Geography is taught on Saturday.

Step 2: The day immediately before Saturday is Friday.

Step 3: On Friday, **Hindi** is taught.

Why other options are wrong:

- Option A: History is on Thursday, two days before Geography.
- Option B: Maths is on Wednesday.
- Option C: Science is on Tuesday.

Final Answer: Hindi is taught immediately before Geography $\Rightarrow$ D

Answer: (D) Go Back to Q12

Q13.

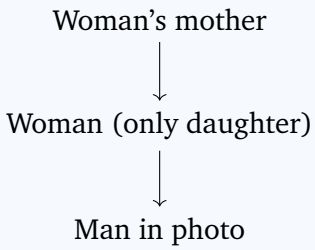
Solution

Concept — Photo-based blood relations: Work outward from the innermost phrase in the statement.

Step 1: "My mother" refers to the woman's own mother.

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

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



Step 4: So the man in the photograph is the woman's **son**.

Why other options are wrong:

- Option A: A brother would be another child of her mother, not her own child.
- Option B: A nephew would be the son of her sibling, but she is the only daughter.
- Option C: A husband has no parent-child link in the statement.

Final Answer: The man is the woman's son $\Rightarrow$ D

Answer: (D) Go Back to Q13

Q14.

Solution

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

Step 1: Facing East, the boy walks 4 km East.

Step 2: A left turn makes him face North; he walks 5 km North.

Step 3: A second left turn makes him face West; he walks 4 km West, cancelling the 4 km he went East.

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

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

Why other options are wrong:

- Option A: 4 km East ignores that the East and West legs cancel.
- Option B: 9 km North adds the North leg to the cancelled legs.
- Option D: 5 km South reverses the correct direction.

Final Answer: P is 5 km North of O $\Rightarrow$ C

Answer: (C) 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 cyclist rides 15 m East.

Step 2: Facing East, a right turn makes her face South; she rides 8 m South.

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 she is 17 m from the start.

Why other options are wrong:

- Option A: 23 m adds the two legs directly.
- Option C: 7 m subtracts the legs instead of using the hypotenuse.
- Option D: 15 m uses only the eastward leg.

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

Answer: (B) Go Back to Q15

Q16.

Solution

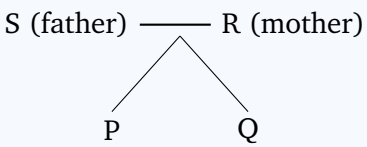
Concept — Family tree: Draw the relationships and read off the link between R and S.

Step 1: P is the sister of Q, so P and Q are siblings (both female where stated).

Step 2: Q is the daughter of R, so R is a parent of Q, and hence of P as well.

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, so R is the mother, i.e. the wife of S.



Why other options are wrong:

- Option A: A sister relation is not supported; R is a parent, not a sibling.
- Option B: R is a parent of the children, not a daughter of 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

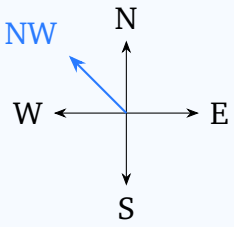
Concept — Turning directions: Measure directions as bearings from North, adding for clockwise turns.

Step 1: The man starts facing South, which is a bearing of $180°$.

Step 2: Turning $45°$ clockwise gives $180° + 45° = 225°$, which is South-West.

Step 3: Turning a further $90°$ clockwise gives $225° + 90° = 315°$.

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



Why other options are wrong:

- Option B: South-West is only the direction after the first turn.
- Option C: North-East would need a net bearing of $45°$.
- Option D: South-East would need a net bearing of $135°$.

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

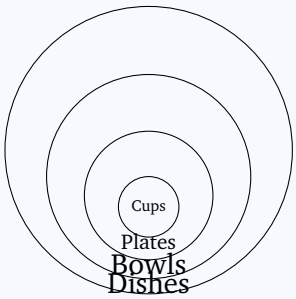
Answer: (A) Go Back to Q17

Q18.

Solution

Concept — Syllogism (chain of "all"): When several "all" statements share middle terms, the first term is included in the last, but the reverse is not guaranteed. A Venn diagram makes this clear.

Step 1: "All cups are plates" places cups inside plates; "All plates are bowls" places plates inside bowls; "All bowls are dishes" places bowls inside dishes.



Step 2: Since cups lie inside plates, inside bowls, inside dishes, every cup is a dish. So Conclusion I (All cups are dishes) follows.

Step 3: Conclusion II (All dishes are cups) reverses the chain; the dish circle is far larger than the cup circle, so this does not follow.

Step 4: Only Conclusion I follows.

Why other options are wrong:

- Option A: II fails, so "both" is wrong.
- Option C: II alone is invalid.
- Option D: I clearly follows, so "neither" is wrong.

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

Answer: (B) Go Back to Q18

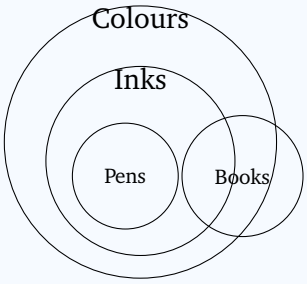
Q19.

Solution

Concept — Syllogism (some + all + all): A "some" link can be carried forward through a chain of "all" statements.

Step 1: "Some books are pens" means the book and pen circles overlap.

Step 2: "All pens are inks" places the pen circle inside the ink circle, and "All inks are colours" places the ink circle inside the colour circle.



Step 3: The books that are pens lie inside the ink circle, so those books are inks. Conclusion I (Some books are inks) follows.

Step 4: Since inks lie inside colours, those same books are also colours. Conclusion II (Some books are colours) follows.

Step 5: Both conclusions follow.

Why other options are wrong:

- Options B and C: Each accepts only one conclusion, but both are valid.
- Option D: "Neither" ignores the overlap carried through the chain.

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

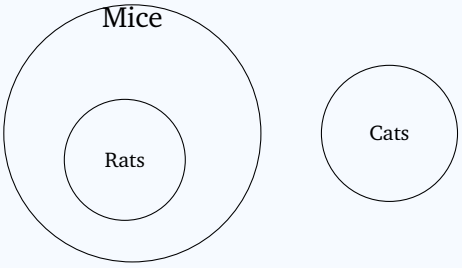
Answer: (A) Go Back to Q19

Q20.

Solution

Concept — Syllogism (no + all + some): Combine an exclusion with an inclusion; a "some" statement about a wider set does not fix a smaller set.

Step 1: "No cat is a rat" keeps the cat and rat circles separate; "All rats are mice" places the rat circle inside the mice circle.



Step 2: Rats are mice, and no rat is a cat, so those rats are mice that are not cats. Conclusion I (Some mice are not cats) follows.

Step 3: "Some mice are white" does not say the white mice are the rats, so "All rats are white" (Conclusion II) is not guaranteed.

Step 4: Only Conclusion I follows.

Why other options are wrong:

- Option B: II is unsupported, as whiteness is not tied to the rats.
- Option C: II fails, so "both" is wrong.
- Option D: I clearly follows, so "neither" is wrong.

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

Answer: (A) Go Back to Q20

Q21.

Solution

Concept — Syllogism (some + some + some): A chain made only of "some" statements gives no definite link between the end terms.

Step 1: "Some tables are chairs" overlaps tables with chairs.

Step 2: "Some chairs are desks" overlaps chairs with desks, but the chairs that are tables need not be the chairs that are desks.

Step 3: "Some desks are stools" overlaps desks with stools, again possibly a different part of the desk circle.

Step 4: So Conclusion I (Some tables are desks) is not forced.

Step 5: Likewise Conclusion II (Some chairs are stools) is not forced, since the chair–desk overlap and the desk–stool overlap may be separate.

Why other options are wrong:

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

Final Answer: Neither conclusion follows $\Rightarrow$ D

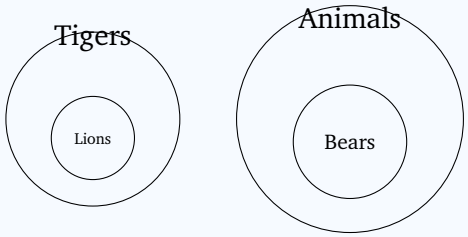
Answer: (D) Go Back to Q21

Q22.

Solution

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

Step 1: "All lions are tigers" places lions inside tigers; "No tiger is a bear" keeps the tiger and bear circles separate.



Step 2: Lions are tigers, and no tiger is a bear, so no lion is a bear. Conclusion I follows.

Step 3: "All bears are animals" puts bears inside animals, and no bear is a tiger, so those bears are animals that are not tigers. Conclusion II (Some animals are not tigers) follows.

Step 4: Both conclusions follow.

Why other options are wrong:

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

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

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

Answer: (C) Go Back to Q22

Q23.

Solution

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

Step 1: The advertisement tries to attract people by promising to "double your salary".

Step 2: Such an appeal only works if the advertiser assumes that people actually want to increase their salary.

Step 3: So the implicit assumption is that people are generally interested in increasing their salary (Option A).

Why other options are wrong:

- Option B: The ad does not assume nobody has a job.
- Option C: Nothing is said comparing course prices.
- Option D: The ad does not claim salaries never rise on their own.

Final Answer: The implicit assumption is Option A $\Rightarrow$ 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 solar power will cut the company's electricity costs.

Step 2: Costs fall only if solar power actually lowers electricity bills in practice.

Step 3: Option B shows that in comparable firms solar panels reduced bills by nearly half, directly supporting the claim.

Why other options are wrong:

- Option A: Occasional cleaning is a minor drawback, not support.
- Option C: A large rooftop only enables panels; it does not show costs fall.
- Option D: Environmental benefit does not address electricity cost.

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 recommends uniforms only because they supposedly improve academic performance.

Step 2: If schools that introduced uniforms saw no change in exam results, then the claimed benefit does not exist.

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

Why other options are wrong:

- Option A: Parents liking uniforms does not affect performance.
- Option B: A low cost supports, rather than weakens, the idea.
- Option C: A sense of equality is a separate benefit, not the performance claim.

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 directly address the problem in a reasonable, practical way.

Step 1: The problem is that overspeeding causes many accidents on the highway.

Step 2: A sensible response is to control speed by monitoring and enforcing the

limit.

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

Why other options are wrong:

- Option B: Closing the highway is extreme and impractical.
- Option C: Banning all vehicles defeats the purpose of the highway.
- Option D: Ignoring the accidents does nothing to help.

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

Answer: (A) Go Back to Q26

Q27.

Solution

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

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

Step 2: Prolonged heavy rain naturally causes water to collect in low-lying areas.

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

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

Why other options are wrong:

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

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

Answer: (A) Go Back to Q27

Q28.

Solution

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

Step 1: The statement links regular breakfast to better concentration in class.

Step 2: From this it is reasonable to infer that eating breakfast regularly can help a child concentrate better.

Step 3: Option C states exactly this measured inference.

Why other options are wrong:

- Option A: "Always fail" is far too strong.
- Option B: Breakfast being the "only" cause is not claimed.
- Option D: Providing free breakfast is a course of action, not an inference.

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

Answer: (C) Go Back to Q28

Q29.

Solution

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

Step 1: The statement says all blue-line metro services were suspended for two hours because of a technical fault.

Step 2: A two-hour suspension of services is exactly a disruption of those services.

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

Why other options are wrong:

- Option A: Suspended trains still exist; the line clearly has trains.
- Option B: The statement shows a technical fault did occur.
- Option D: Nothing suggests trains run faster during faults.

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

Answer: (C) Go Back to Q29

Q30.

Solution

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

Step 1: The college decides to send all notices to students by email.

Step 2: This plan can work only if the college assumes that students can actually receive and read email.

Step 3: Option D captures this assumption.

Why other options are wrong:

- Option A: Whether students read paper notices is not the assumption behind switching to email.
- Option B: The cost of email is not what makes the plan sensible.
- Option C: The number of notices is not assumed by the decision.

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

Answer: (D) Go Back to Q30

Q31.

Solution

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

Step 1: A pen is a tool whose main function is to write.

Step 2: The relationship is "tool : its main function".

Step 3: The main function of a knife is to **cut**, so Option B completes the analogy.

Why other options are wrong:

- Option A: "Sharp" is a property of a knife, not its function.
- Option C: "Kitchen" is where a knife may be used, not its function.
- Option D: "Blade" is a part of a knife, not its function.

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

Answer: (B) 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 made of straight sides and have corners.

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 straight-sided figure, like the others.
- Option C: A square has straight sides and corners.
- Option D: A rectangle has straight sides and corners.

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 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 A: MJOP swaps the codes for O and N.
- Option B: MKPO shifts I by $+2$ instead of $+1$.
- Option C: NJPO shifts L by $+2$ instead of $+1$.

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

Answer: (D) Go Back to Q33

Q34.

Solution

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

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

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

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

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

Why other options are wrong:

- Option B: 17 adds the two ranks without removing the double count.
- Option C: 15 subtracts one too many.
- Option D: 18 double counts Meena twice.

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

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 $+ \to \times$, $- \to +$, $\times \to \div$, $\div \to -$.

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

Step 3: Do multiplication and division first: $8 \times 4 = 32$.

Step 4: Then $6 \div 3 = 2$.

Step 5: Now add and subtract from left to right: $32 - 2 = 30$, and $30 + 2 = 32$.

Why other options are wrong:

- Option A: 30 stops before adding the final 2.
- Option B: 34 adds the 2 without subtracting first.
- Option C: 28 subtracts an extra amount incorrectly.

Final Answer: The value is 32 $\Rightarrow$ $\boxed{\text{D}}$

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: $2 \times 3 = 6$, and $6 \times 2 = 12$, which matches the third number.

Step 2: Row 2: $3 \times 4 = 12$, and $12 \times 2 = 24$, which also matches.

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

Step 4: Row 3: $4 \times 5 = 20$, and $20 \times 2 = 40$.

Why other options are wrong:

- Option A: 30 does not fit the rule.
- Option B: 36 comes from an incorrect rule.
- Option D: 45 overshoots the correct total.

Final Answer: The missing number is 40 $\Rightarrow$ C

Answer: (C) Go Back to Q36

Answer Key

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