

# ATMA Analytical Reasoning Skills Sample Paper – 5

Duration: 60 Minutes

Maximum Marks: 60

## Instructions

- This paper contains **60** Multiple Choice Questions (Single Correct Answer) in two parts (Part I and Part II), modelled on the Analytical Reasoning Skills portion of **ATMA** entrance.
- Each correct answer carries **+1 mark**. Each incorrect answer attracts a **penalty of 0.25 mark**; an unattempted question carries **0** mark.
- Only **one** option is correct. Choose carefully.
- Syllabus level: **Logical reasoning & data interpretation (ATMA Analytical Reasoning Skills)**
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

## Part I: Analytical Reasoning Skills

**Q1.** Find the next term in the series: 3, 6, 11, 18, 27, ?

- (A) 34
- (B) 36
- (C) 38
- (D) 40

**Q2.** Find the next term in the letter series: B, D, G, K, ?

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



Q3. Author : Book :: Composer : ?

- (A) Orchestra
- (B) Piano
- (C) Stage
- (D) Symphony

Q4.  $7 : 50 :: 9 : ?$  (apply the same rule that takes 7 to 50).

- (A) 80
- (B) 82
- (C) 90
- (D) 72

Q5. Choose the odd one out: Triangle, Square, Circle, Pentagon.

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

Q6. In a certain code, CAT is written as C3A1T20 and DOG is written as D4O15G7 (each letter is followed by its position in the alphabet). How is FOX written in this code?

- (A) F6O15X24
- (B) F6O14X23
- (C) F5O15X24
- (D) F6O16X24

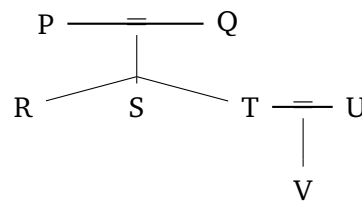
Q7. A word of four letters is coded by this rule: the **first** and **last** letters are each shifted one step forward in the alphabet (kept as letters), while the two **middle** letters are replaced by their alphabet position numbers. For



example, MIND is coded as N9 14 E ( $M \rightarrow N$ ,  $I = 9$ ,  $N = 14$ ,  $D \rightarrow E$ ). Using the same rule, how is BOLD coded?

- (A) C 16 12 E
- (B) C 15 12 E
- (C) C 15 12 F
- (D) B 15 11 E

**Q8.** Study the family tree below. In it a horizontal bar denotes a married couple and a downward line denotes a parent–child link.



*P* is the father and *Q* the mother of *R*, *S* and *T*. *T* is married to *U*, and *V* is their child. How is *V* related to *R*?

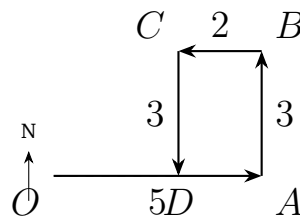
- (A) Son
- (B) Brother
- (C) Father
- (D) Nephew or niece

**Q9.** Pointing to a photograph, a woman said, “She is the daughter of my grandfather’s only son.” How is the woman in the photograph related to the speaker?

- (A) Sister (or herself)
- (B) Aunt
- (C) Cousin
- (D) Niece

**Q10.** A delivery rider starts at point *O* and follows the route shown below: 5 km East to *A*, then 3 km North to *B*, then 2 km West to *C*, then 3 km South to *D*.

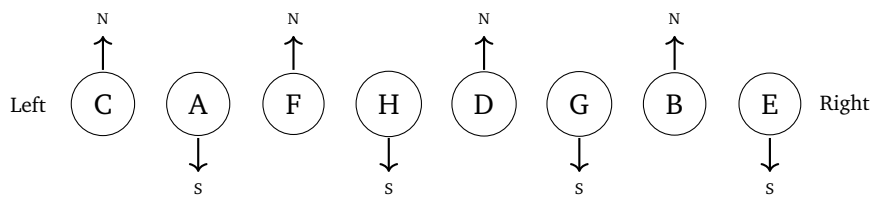




How far and in which direction is *D* from the starting point *O*?

- (A) 5 km East
- (B) 2 km West
- (C) 3 km East
- (D) 3 km North

**Q11. Directions (Q11–Q13):** Eight friends *A, B, C, D, E, F, G, H* sit in a straight row. Some face North and some face South, as shown.



The seating from left to right is *C, A, F, H, D, G, B, E*. Arrows pointing up mean the person faces North; arrows pointing down mean South. Who sits exactly in the middle of the row (i.e., 4th and 5th seats)?

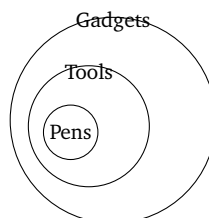
- (A) *F* and *H*
- (B) *H* and *D*
- (C) *D* and *G*
- (D) *A* and *F*

**Q12.** (Refer to the seating in Q11.) How many people sit between *A* and *G*?

- (A) 2
- (B) 5
- (C) 4
- (D) 3



- Q13.** (Refer to the seating in Q11.) Which of the following pairs sit at the two extreme ends of the row?
- (A) *C* and *E*
  - (B) *C* and *B*
  - (C) *A* and *E*
  - (D) *C* and *G*
- Q14.** Five people compare ages. Ravi is older than Sunil but younger than Tarun. Meena is older than Tarun. Naveen is the youngest of all. Who is the oldest?
- (A) Tarun
  - (B) Ravi
  - (C) Meena
  - (D) Sunil
- Q15.** A training programme runs Monday to Friday with exactly one session each day: Finance, HR, Marketing, Operations and Strategy (one per day, no repeats). Finance is on Monday. Operations is immediately after Marketing. Strategy is on Friday. HR is not on Tuesday. On which day is Marketing scheduled?
- (A) Tuesday
  - (B) Wednesday
  - (C) Thursday
  - (D) Monday
- Q16. Statements:** All pens are tools. All tools are gadgets.  
**Conclusions:** (I) All pens are gadgets. (II) Some gadgets are pens.

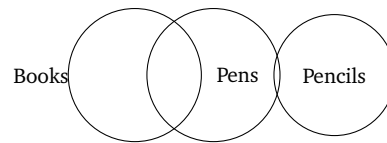


Which conclusion(s) follow?

- (A) Only I follows
- (B) Only II follows
- (C) Neither follows
- (D) Both I and II follow

**Q17. Statements:** Some books are pens. No pen is a pencil.

**Conclusions:** (I) Some books are not pencils. (II) All pens are books.



Which conclusion(s) follow?

- (A) Only II follows
- (B) Both follow
- (C) Only I follows
- (D) Neither follows

**Q18. Statement:** “The state government has announced a complete ban on single-use plastic bags from next month.”

**Conclusions:** (I) The government wants to reduce plastic pollution.

(II) All shopkeepers will stop using plastic bags immediately.

Which conclusion follows logically?

- (A) Only I follows
- (B) Only II follows
- (C) Both follow
- (D) Neither follows

**Q19. Statement:** “Please confirm your seat at least 48 hours before departure.”— a notice from an airline.

**Assumptions:** (I) Seats may be reassigned if not confirmed in time.



(II) All passengers can access the confirmation system.  
Which assumption is implicit?

- (A) Only II is implicit
- (B) Only I is implicit
- (C) Both are implicit
- (D) Neither is implicit

**Q20.** In a code:  $P@Q$  means  $P > Q$ ;  $P\#Q$  means  $P < Q$ ;  $P\&Q$  means  $P = Q$ .  
Given  $A@B$ ,  $B\&C$  and  $C@D$ , which of the following is definitely true?

- (A)  $D@A$
- (B)  $A\#C$
- (C)  $B\#D$
- (D)  $A@D$

**Q21.** In a class, Anil ranks 7th from the top and 26th from the bottom. How many students are there in the class?

- (A) 32
- (B) 33
- (C) 31
- (D) 34

**Q22.** If 1st March 2025 was a Saturday, what day of the week was 1st March 2026? (Note: 2026 is not a leap year, but count the days from 1 March 2025 to 1 March 2026.)

- (A) Saturday
- (B) Monday
- (C) Sunday
- (D) Friday



**Q23.** Find the missing number that completes the pattern:

4 7 11  
9 5 14  
6 8 ?

(In each row, the third number is obtained by a fixed operation on the first two.)

- (A) 13
- (B) 14
- (C) 15
- (D) 12

**Q24. Question:** What is the two-digit number?

**Statement I:** The sum of its digits is 9.

**Statement II:** The number is divisible by 9 and is greater than 50 but less than 60.

Which statement(s) are sufficient to answer the question?

- (A) Statement I alone is sufficient
- (B) Statement II alone is sufficient
- (C) Both together are needed
- (D) Statement II alone is sufficient (I alone is not)

**Q25. Question:** Is  $x$  greater than  $y$ ?

**Statement I:**  $x - y = 4$ .

**Statement II:**  $x + y = 10$ .

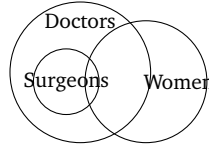
Which statement(s) are sufficient to answer the question?

- (A) Statement I alone is sufficient
- (B) Statement II alone is sufficient
- (C) Both together are needed
- (D) Neither is sufficient



**Q26.** Which diagram best represents the relationship among **Doctors**, **Surgeons** and **Women**?

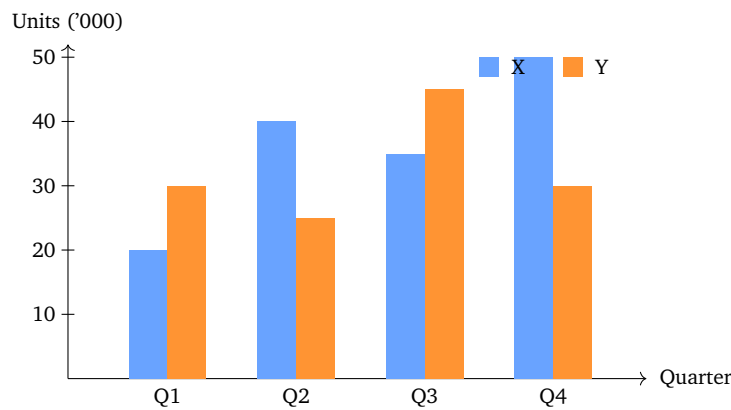
(A surgeon is a kind of doctor; a doctor, a surgeon or a woman may overlap by gender.)



Choose the option that matches the correct relationship.

- (A) Three separate non-overlapping circles
- (B) Surgeons fully inside Doctors, with Women overlapping both
- (C) Women fully inside Surgeons
- (D) Doctors fully inside Women

**Q27. Directions (Q27–Q30):** The grouped bar chart shows the number of units (in thousands) of **Product X** and **Product Y** sold by a company in four quarters Q1–Q4.



(Values: Q1: X= 20, Y= 30; Q2: X= 40, Y= 25; Q3: X= 35, Y= 45; Q4: X= 50, Y= 30, all in thousands.)

In which quarter is the difference between sales of Product X and Product Y the greatest?

- (A) Q1
- (B) Q3



(C) Q4

(D) Q2

**Q28.** (Refer to the chart in Q27.) What is the ratio of Product X sales to Product Y sales in Q2?

(A) 5 : 8

(B) 4 : 3

(C) 3 : 5

(D) 8 : 5

**Q29.** (Refer to the chart in Q27.) By what percentage did the sales of Product X increase from Q1 to Q4?

(A) 100%

(B) 120%

(C) 150%

(D) 60%

**Q30.** (Refer to the chart in Q27.) What is the total number of units (X and Y together, in thousands) sold across all four quarters?

(A) 250

(B) 275

(C) 300

(D) 260

### Part II: Analytical Reasoning Skills

**Q31.** Find the next term in the series: 5, 11, 23, 47, 95, ?

(A) 185

(B) 187

(C) 189



(D) 191

**Q32.** Find the next term in the series: 2, 5, 10, 17, 26, ?

(A) 35

(B) 36

(C) 37

(D) 38

**Q33.** Hand : Glove :: Foot :?

(A) Sock

(B) Shoe-lace

(C) Toe

(D) Leg

**Q34.** 6 : 42 :: 9 :? (apply the same rule that takes 6 to 42).

(A) 72

(B) 81

(C) 99

(D) 90

**Q35.** Choose the odd one out: 64, 27, 100, 8.

(A) 64

(B) 100

(C) 27

(D) 8

**Q36.** In a certain code, TIGER is written as UJHFS (each letter is moved one step forward in the alphabet). How is LION written in the same code?

(A) MJPO



- (B) MJOP
- (C) KHNM
- (D) NKQP

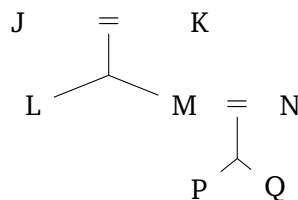
**Q37.** In a certain code, MUMBAI is written as LTLAZH (each letter is moved one step backward in the alphabet). How is CHENNAI written in the same code?

- (A) DIFOOBJ
- (B) BGCMMZH
- (C) BGDMMZH
- (D) BGDLLZH

**Q38.** *A* is the father of *B*. *C* is the sister of *B*. *D* is the mother of *C*. How is *D* related to *A*?

- (A) Sister
- (B) Wife
- (C) Daughter
- (D) Mother

**Q39.** Study the family tree below. A horizontal bar denotes a married couple and a downward line denotes a parent–child link.



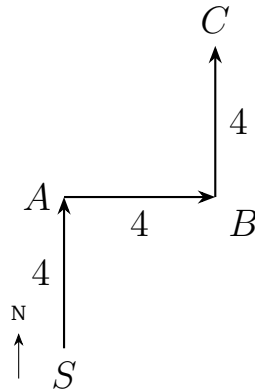
*J* and *K* are the parents of *L* and *M*. *M* is married to *N*, and *P* and *Q* are the children of *M* and *N*. How is *P* related to *L*?

- (A) Son
- (B) Brother



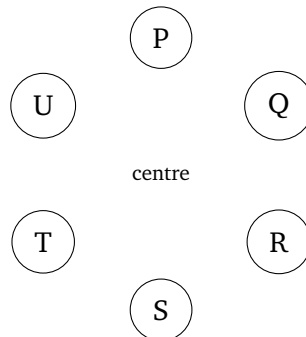
- (C) Grandson
- (D) Nephew or niece

**Q40.** A surveyor starts at point *S* and walks 4 km North to *A*, then 4 km East to *B*, then 4 km North to *C*, as shown.



In which direction is *C* from the starting point *S*?

- (A) North-West
  - (B) North-East
  - (C) South-East
  - (D) East
- Q41. Directions (Q41–Q43):** Six people *P, Q, R, S, T, U* sit around a circular table facing the centre. Their positions are shown below (read clockwise).



Going clockwise from *P* the order is *P, Q, R, S, T, U*. Who sits exactly opposite to *P*?

- (A) *Q*



- (B) *T*
- (C) *S*
- (D) *R*

**Q42.** (Refer to the arrangement in Q41.) Who sits immediately to the right of *R*?

- (A) *Q*
- (B) *S*
- (C) *T*
- (D) *P*

**Q43.** (Refer to the arrangement in Q41.) Counting clockwise, how many people sit between *Q* and *T* (from *Q* to *T*)?

- (A) 1
- (B) 4
- (C) 3
- (D) 2

**Q44.** Five boys are compared by height. Kiran is taller than Lalit but shorter than Manish. Nitin is taller than Manish. Omkar is the shortest. Who is the second tallest?

- (A) Nitin
- (B) Kiran
- (C) Manish
- (D) Lalit

**Q45.** Four people – *W*, *X*, *Y*, *Z* – live on floors 1 to 4 of a building (floor 1 is the lowest). *W* lives above *X*. *Z* lives on the topmost floor. *Y* lives immediately below *Z*. On which floor does *X* live?

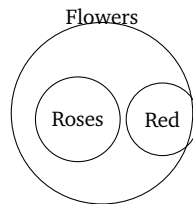
- (A) Floor 1



- (B) Floor 2
- (C) Floor 3
- (D) Floor 4

**Q46. Statements:** All roses are flowers. Some flowers are red.

**Conclusions:** (I) Some roses are red. (II) All flowers are roses.

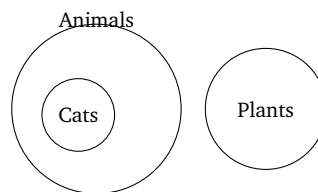


Which conclusion(s) follow?

- (A) Only I follows
- (B) Only II follows
- (C) Both follow
- (D) Neither follows

**Q47. Statements:** All cats are animals. No animal is a plant.

**Conclusions:** (I) No cat is a plant. (II) Some animals are cats.



Which conclusion(s) follow?

- (A) Both I and II follow
- (B) Only I follows
- (C) Only II follows
- (D) Neither follows

**Q48. Statement:** “Many road accidents on the highway occur at night due to poor lighting.”



**Courses of Action:** (I) Street lights should be installed along the highway. (II) The highway should be closed at night.

Which course of action follows?

- (A) Only II follows
- (B) Only I follows
- (C) Both follow
- (D) Neither follows

**Q49. Statement:** “Carry a valid photo ID to enter the examination hall.”—an instruction to candidates.

**Assumptions:** (I) Candidates possess a valid photo ID. (II) No candidate will attempt to enter without an ID.

Which assumption is implicit?

- (A) Only I is implicit
- (B) Only II is implicit
- (C) Both are implicit
- (D) Neither is implicit

**Q50.** In a code:  $X \star Y$  means  $X \geq Y$ ;  $X \bullet Y$  means  $X \leq Y$ ;  $X \circ Y$  means  $X = Y$ . Given  $A \star B$ ,  $B \circ C$  and  $C \star D$ , which of the following is definitely true?

- (A)  $A \bullet D$
- (B)  $D \star A$
- (C)  $A \star D$
- (D)  $B \bullet D$

**Q51.** In a row of children, Priya is 11th from the left and 9th from the right. How many children are there in the row?

- (A) 20
- (B) 19



(C) 21

(D) 18

**Q52.** What is the angle between the hour hand and the minute hand of a clock at exactly 3:00?

(A)  $30^\circ$

(B)  $60^\circ$

(C)  $45^\circ$

(D)  $90^\circ$

**Q53.** Find the missing number that completes the pattern:

4 6 20

3 5 16

5 7 ?

(In each row, the third number is obtained by a fixed operation on the first two.)

(A) 21

(B) 20

(C) 18

(D) 24

**Q54. Question:** What is the age of the father?

**Statement I:** The father is 30 years older than his son.

**Statement II:** The son is 12 years old.

Which statement(s) are sufficient to answer the question?

(A) Statement I alone is sufficient

(B) Statement II alone is sufficient

(C) Either alone is sufficient

(D) Both together are needed



**Q55. Question:** Is the integer  $N$  even?

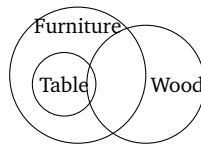
**Statement I:**  $N$  is a multiple of 4.

**Statement II:**  $N + 1$  is odd.

Which statement(s) are sufficient to answer the question?

- (A) Either statement alone is sufficient
- (B) Statement I alone only
- (C) Statement II alone only
- (D) Both together are needed

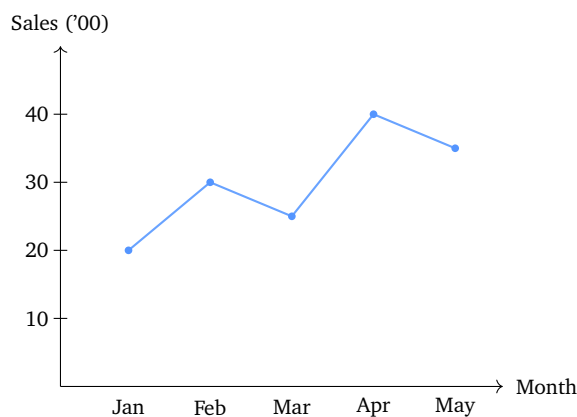
**Q56.** Which of the following best represents the relationship among **Furniture**, **Table** and **Wood**?



Choose the option that matches the correct relationship.

- (A) Three separate non-overlapping circles
- (B) Table fully inside Furniture, with Wood overlapping both
- (C) Wood fully inside Table
- (D) Furniture fully inside Wood

**Q57. Directions (Q57–Q60):** The line graph shows the number of laptops (in hundreds) sold by a store over five months, January to May.



(Values: Jan= 20, Feb= 30, Mar= 25, Apr= 40, May= 35, all in hundreds.)

In which month were the most laptops sold?

- (A) February
- (B) May
- (C) April
- (D) March

**Q58.** (Refer to the graph in Q57.) By what percentage did sales rise from January to April?

- (A) 50%
- (B) 80%
- (C) 120%
- (D) 100%

**Q59.** (Refer to the graph in Q57.) What is the average monthly sales (in hundreds) over the five months?

- (A) 28
- (B) 30
- (C) 32
- (D) 35

**Q60.** (Refer to the graph in Q57.) The sales in which pair of consecutive months differ the most?

- (A) March to April
- (B) January to February
- (C) April to May
- (D) February to March



## Detailed Solutions

Q1.

### Solution

**Concept — Number series with growing differences:** Inspect the gaps between consecutive terms to find the rule.

**Step 1 — Differences:**  $6 - 3 = 3$ ,  $11 - 6 = 5$ ,  $18 - 11 = 7$ ,  $27 - 18 = 9$ .

**Step 2 — Pattern:** The differences are 3, 5, 7, 9, ... (odd numbers increasing by 2). The next difference is 11.

**Step 3 — Next term:**  $27 + 11 = 38$ .

**Final Answer:**  $38 \Rightarrow$

[Go Back to Q1](#)

Q2.

### Solution

**Concept — Letter series via position gaps:** Convert letters to positions and study the jumps.

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

**Step 2 — Gaps:**  $4 - 2 = 2$ ,  $7 - 4 = 3$ ,  $11 - 7 = 4$ . The gaps are 2, 3, 4, ...; the next gap is 5.

**Step 3 — Next term:**  $11 + 5 = 16 \Rightarrow$  the 16th letter is P.

**Final Answer:** P  $\Rightarrow$

[Go Back to Q2](#)

Q3.

### Solution

**Concept — Maker-to-creation analogy:** Match the creator with the thing they create.

**Step 1 — First pair:** An author creates a book (a written work).

**Step 2 — Apply to second pair:** A composer creates a symphony (a musical work). An orchestra performs music but is not created by the composer; a piano is an instrument; a stage is a venue.



**Final Answer:** Symphony  $\Rightarrow$

**Answer: (D)** [Go Back to Q3](#)

Q4.

### Solution

**Concept — Numeric analogy by a hidden formula:** Find the operation linking 7 to 50.

**Step 1 — Test**  $7 \rightarrow 50$ :  $7^2 = 49$ , and  $49 + 1 = 50$ . So the rule is  $n^2 + 1$ .

**Step 2 — Apply to 9:**  $9^2 + 1 = 81 + 1 = 82$ .

**Final Answer:** 82  $\Rightarrow$

**Answer: (B)** [Go Back to Q4](#)

Q5.

### Solution

**Concept — Classification:** Find the property shared by all but one.

**Step 1 — Examine the figures:** Triangle, Square and Pentagon are polygons made of straight sides (3, 4 and 5 sides respectively).

**Step 2 — Identify the misfit:** A circle has no straight sides; it is a curved closed figure.

**Final Answer:** Circle  $\Rightarrow$

**Answer: (C)** [Go Back to Q5](#)

Q6.

### Solution

**Concept — Letter + position coding:** Each letter is written, then followed by its alphabet position number.

**Step 1 — Confirm rule:** CAT  $\rightarrow$  C3A1T20 (C= 3, A= 1, T= 20). DOG  $\rightarrow$  D4O15G7.

**Step 2 — Apply to FOX:** F= 6, O= 15, X= 24, giving F6O15X24.

**Why other options are wrong:**

- (B) uses O14, X23: wrong positions.



- (C) uses F5: F is the 6th letter.
- (D) uses O16: O is the 15th letter.

**Final Answer:** F6O15X24  $\Rightarrow$

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

Q7.

### Solution

**Concept — Mixed shift-and-position coding:** The first and last letters move one step forward (and stay letters); the two middle letters become their alphabet position numbers.

**Step 1 — Confirm with MIND:** M  $\rightarrow$  N, I = 9, N = 14, D  $\rightarrow$  E, giving N914E. The rule checks out.

**Step 2 — Apply to BOLD:** First letter B  $\rightarrow$  C. Middle letter O = 15. Middle letter L = 12. Last letter D  $\rightarrow$  E.

**Step 3 — Assemble:** C1512E.

**Why other options are wrong:**

- (A) uses 16 for O, but O is the 15th letter.
- (C) ends in F, but D  $\rightarrow$  E (not F).
- (D) keeps B unchanged, but the first letter must shift to C.

**Final Answer:** C1512E  $\Rightarrow$

**Answer: (B)** [Go Back to Q7](#)

Q8.

### Solution

**Concept — Reading a family tree:** Trace each link in the diagram.

**Step 1 — Generations:** *P* and *Q* are a couple; their children are *R*, *S* and *T*. So *R*, *S*, *T* are siblings.

**Step 2 — Next generation:** *T* married *U*, and *V* is the child of *T* and *U*. So *V* is the child of *R*'s sibling *T*.

**Step 3 — Relation of *V* to *R*:** *V* is the son or daughter of *R*'s brother/sister, i.e.,



$R$ 's nephew or niece (gender of  $V$  not given).

**Final Answer:** Nephew or niece  $\Rightarrow$

**Answer: (D)** [Go Back to Q8](#)

Q9.

### Solution

**Concept — Decoding a relationship statement:** Resolve from the innermost phrase outward.

**Step 1 — “my grandfather’s only son”:** The grandfather’s only son is the speaker’s father.

**Step 2 — “daughter of my father”:** The daughter of the speaker’s father is the speaker’s sister (or the speaker herself).

**Final Answer:** Sister (or herself)  $\Rightarrow$

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

Q10.

### Solution

**Concept — Net displacement from a route:** Add up east-west and north-south moves separately.

**Step 1 — East-west:**  $+5$  (East to  $A$ ) then  $-2$  (West to  $C$ ) =  $+3$  km East.

**Step 2 — North-south:**  $+3$  (North to  $B$ ) then  $-3$  (South to  $D$ ) =  $0$ .

**Step 3 — Position of  $D$ :**  $D$  is 3 km East of  $O$  and level with it (no net north-south shift).

**Final Answer:** 3 km East  $\Rightarrow$

**Answer: (C)** [Go Back to Q10](#)



Q11.

**Solution**

**Concept — Reading a linear seating row:** List the order and pick required positions.

**Step 1 — Order:** Left to right:  $C(1), A(2), F(3), H(4), D(5), G(6), B(7), E(8)$ .

**Step 2 — Middle of 8 seats:** The two central seats are the 4th and 5th, occupied by  $H$  and  $D$ .

**Final Answer:**  $H$  and  $D \Rightarrow$

[Go Back to Q11](#)

Q12.

**Solution**

**Concept — Counting between two seats:** Use seat numbers.

**Step 1 — Positions:**  $A$  is at seat 2;  $G$  is at seat 6.

**Step 2 — People in between:** Seats 3, 4, 5 hold  $F, H, D$  — that is 3 people.

**Final Answer:**  $3 \Rightarrow$

[Go Back to Q12](#)

Q13.

**Solution**

**Concept — Extreme ends of a row:** The first and last seats.

**Step 1 — Ends:** Seat 1 is  $C$ ; seat 8 is  $E$ .

**Final Answer:**  $C$  and  $E \Rightarrow$

[Go Back to Q13](#)

Q14.

**Solution**

**Concept — Building an order from comparisons:** Chain the inequalities.

**Step 1 — From the clues:**  $\text{Sunil} < \text{Ravi} < \text{Tarun}$ , and  $\text{Tarun} < \text{Meena}$ , and Naveen is youngest.



**Step 2 — Full order (oldest to youngest):** Meena > Tarun > Ravi > Sunil > Naveen.

**Final Answer:** Meena  $\Rightarrow$

**Answer:** (C) [Go Back to Q14](#)

Q15.

### Solution

**Concept — Constraint scheduling:** Place fixed items first, then fit the rest.

**Step 1 — Fixed days:** Finance = Monday and Strategy = Friday. The remaining days Tuesday, Wednesday and Thursday must hold HR, Marketing and Operations in some order.

**Step 2 — “Operations immediately after Marketing”:** Marketing and Operations are consecutive, in the order Marketing then Operations. Within Tue–Thu the only consecutive pairs are (Tue,Wed) and (Wed,Thu).

**Step 3 — Test (Tue,Wed):** Marketing = Tuesday, Operations = Wednesday, leaving HR = Thursday. The rule “HR not on Tuesday” is satisfied. Valid.

**Step 4 — Test (Wed,Thu):** Marketing = Wednesday, Operations = Thursday, leaving HR = Tuesday. This breaks “HR not on Tuesday.” Rejected.

**Step 5 — Conclude:** The only valid schedule is Mon Finance, Tue Marketing, Wed Operations, Thu HR, Fri Strategy. So Marketing is on Tuesday.

**Final Answer:** Tuesday  $\Rightarrow$

**Answer:** (A) [Go Back to Q15](#)

Q16.

### Solution

**Concept — Universal syllogism:** “All A are B” chained with “All B are C” gives “All A are C.”

**Step 1 — Chain:** All pens are tools, all tools are gadgets  $\Rightarrow$  all pens are gadgets. Conclusion I follows.

**Step 2 — Converse:** If all pens are gadgets, then certainly some gadgets are pens (pens exist within gadgets). Conclusion II follows.

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



**Answer: (D)** [Go Back to Q16](#)

Q17.

### Solution

**Concept — Particular + negative premises:** Track what is guaranteed.

**Step 1 — Conclusion I:** Some books are pens, and no pen is a pencil. Those books that are pens cannot be pencils, so some books are not pencils. Conclusion I follows.

**Step 2 — Conclusion II:** “Some books are pens” does not make all pens books. Conclusion II does not follow.

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

**Answer: (C)** [Go Back to Q17](#)

Q18.

### Solution

**Concept — Statement and conclusion:** A conclusion follows only if it is a reasonable inference, not an over-statement.

**Step 1 — Conclusion I:** Banning plastic bags is a means to reduce plastic pollution — a reasonable purpose. I follows.

**Step 2 — Conclusion II:** “All shopkeepers will stop immediately” is an extreme assumption about behaviour and cannot be concluded. II does not follow.

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

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

Q19.

### Solution

**Concept — Implicit assumption:** An assumption is something taken for granted that makes the statement meaningful.

**Step 1 — Assumption I:** The notice asks for confirmation, implying that without it the seat may be reassigned — otherwise the request would be pointless. I is implicit.

**Step 2 — Assumption II:** “All passengers can access the system” is too sweeping



and not necessary for the notice to make sense. II is not implicit.

**Final Answer:** Only I is implicit  $\Rightarrow$

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

**Q20.**

### Solution

**Concept — Coded inequalities:** Translate symbols and combine.

**Step 1 — Translate:**  $A@B \Rightarrow A > B$ ;  $B\&C \Rightarrow B = C$ ;  $C@D \Rightarrow C > D$ .

**Step 2 — Combine:** Since  $B = C$ ,  $A > B = C > D$ , so  $A > D$ , i.e.,  $A@D$ .

**Step 3 — Check options:**  $A@D$  is definitely true.  $D@A$  is false;  $A\#C$  means  $A < C$  but  $A > B = C$  so false;  $B\#D$  means  $B < D$  but  $B = C > D$  so false.

**Final Answer:**  $A@D \Rightarrow$

**Answer: (D)** [Go Back to Q20](#)

**Q21.**

### Solution

**Concept — Rank-from-top and rank-from-bottom:** Total = (rank from top) + (rank from bottom) - 1.

**Step 1 — Apply:**  $7 + 26 - 1 = 32$ .

**Final Answer:**  $32 \Rightarrow$

**Answer: (A)** [Go Back to Q21](#)

**Q22.**

### Solution

**Concept — Day shift over a year:** A common (non-leap) year of 365 days advances the weekday by 1 ( $365 = 52 \times 7 + 1$ ).

**Step 1 — Span:** From 1 March 2025 to 1 March 2026 is exactly 365 days, because Feb 2026 has 28 days (2026 is not a leap year) and the period does not include Feb 29.

**Step 2 — Apply:** 1 March 2025 was Saturday; add 1 odd day  $\Rightarrow$  Sunday.



**Final Answer:** Sunday  $\Rightarrow$

**Answer: (C)** [Go Back to Q22](#)

**Q23.**

### Solution

**Concept — Row operation in a grid:** Find a fixed rule linking the first two entries to the third.

**Step 1 — Test the rule “third = first + second”:** Row 1:  $4 + 7 = 11$ , which matches the third entry 11.

**Step 2 — Verify on Row 2:**  $9 + 5 = 14$ , which matches the third entry 14. The rule is confirmed.

**Step 3 — Apply to Row 3:**  $6 + 8 = 14$ .

**Final Answer:** 14  $\Rightarrow$

**Answer: (B)** [Go Back to Q23](#)

**Q24.**

### Solution

**Concept — Data sufficiency:** Test each statement alone for a unique answer.

**Step 1 — Statement I alone:** Digit sum = 9 allows 18, 27, 36, 45, 54, 63, 72, 81, 90 — many numbers. Not sufficient.

**Step 2 — Statement II alone:** Divisible by 9, between 50 and 60: only 54. Unique. Sufficient.

**Step 3 — Conclude:** Statement II alone is sufficient while Statement I alone is not.

**Final Answer:** Statement II alone is sufficient (I alone is not)  $\Rightarrow$

**Answer: (D)** [Go Back to Q24](#)



Q25.

**Solution**

**Concept — Data sufficiency on an inequality:** Determine if  $x > y$  can be decided.

**Step 1 — Statement I alone:**  $x - y = 4 > 0 \Rightarrow x > y$ . Decided. Sufficient.

**Step 2 — Statement II alone:**  $x + y = 10$  tells nothing about which is larger (e.g.,  $x = 6, y = 4$  or  $x = 4, y = 6$ ). Not sufficient.

**Step 3 — Conclude:** Statement I alone is sufficient.

**Final Answer:** Statement I alone is sufficient  $\Rightarrow$  **A**

**Answer: (A)** [Go Back to Q25](#)

Q26.

**Solution**

**Concept — Logical Venn relationships:** Decide containment and overlap among the three classes.

**Step 1 — Surgeons vs Doctors:** Every surgeon is a doctor, so the Surgeons circle lies entirely inside the Doctors circle.

**Step 2 — Women:** A woman may be a doctor, a surgeon, or neither, so the Women circle overlaps both Doctors and Surgeons partially.

**Final Answer:** Surgeons fully inside Doctors, with Women overlapping both  $\Rightarrow$  **B**

**Answer: (B)** [Go Back to Q26](#)

Q27.

**Solution**

**Concept — Reading a grouped bar chart:** Compare paired values per quarter.

**Step 1 — Differences ( $|X - Y|$ ):** Q1 :  $|20 - 30| = 10$ ; Q2 :  $|40 - 25| = 15$ ; Q3 :  $|35 - 45| = 10$ ; Q4 :  $|50 - 30| = 20$ .

**Step 2 — Largest:** Q4 has the greatest difference, 20 thousand.

**Final Answer:** Q4  $\Rightarrow$  **C**

**Answer: (C)** [Go Back to Q27](#)



Q28.

**Solution**

**Concept — Ratio from chart values:** Form and simplify the ratio.

**Step 1 — Q2 values:**  $X = 40, Y = 25$ .

**Step 2 — Simplify:**  $40 : 25 = 8 : 5$  (divide both by 5).

**Final Answer:**  $8 : 5 \Rightarrow$   D

Answer: (D) [Go Back to Q28](#)

Q29.

**Solution**

**Concept — Percentage increase:**  $\frac{\text{new} - \text{old}}{\text{old}} \times 100\%$ .

**Step 1 — Product X:**  $Q1 = 20, Q4 = 50$ .

**Step 2 — Compute:**  $\frac{50 - 20}{20} \times 100 = \frac{30}{20} \times 100 = 150\%$ .

**Final Answer:**  $150\% \Rightarrow$   C

Answer: (C) [Go Back to Q29](#)

Q30.

**Solution**

**Concept — Grand total from the chart:** Add all eight bars.

**Step 1 — Product X total:**  $20 + 40 + 35 + 50 = 145$ .

**Step 2 — Product Y total:**  $30 + 25 + 45 + 30 = 130$ .

**Step 3 — Combined:**  $145 + 130 = 275$  thousand.

**Final Answer:**  $275 \Rightarrow$   B

Answer: (B) [Go Back to Q30](#)



Q31.

**Solution**

**Concept — Multiply-and-add series:** Test a rule of the form “ $\times k + c$ ”.

**Step 1 — Check  $\times 2 + 1$ :**  $5 \times 2 + 1 = 11$ ;  $11 \times 2 + 1 = 23$ ;  $23 \times 2 + 1 = 47$ ;  $47 \times 2 + 1 = 95$ . The rule holds throughout.

**Step 2 — Next term:**  $95 \times 2 + 1 = 191$ .

**Final Answer:**  $191 \Rightarrow$

[Go Back to Q31](#)

Q32.

**Solution**

**Concept — Series with growing differences:** Inspect the gaps.

**Step 1 — Differences:**  $5 - 2 = 3$ ,  $10 - 5 = 5$ ,  $17 - 10 = 7$ ,  $26 - 17 = 9$ .

**Step 2 — Pattern:** The gaps are 3, 5, 7, 9, ... (odd numbers +2 each time). The next gap is 11.

**Step 3 — Next term:**  $26 + 11 = 37$ . (Equivalently the terms are  $n^2 + 1$ :  $5^2 + 1 = 26$ ,  $6^2 + 1 = 37$ .)

**Final Answer:**  $37 \Rightarrow$

[Go Back to Q32](#)

Q33.

**Solution**

**Concept — Body-part to its covering:** Match each part with what is worn on it.

**Step 1 — First pair:** A glove is the close-fitting covering worn on the hand.

**Step 2 — Apply to second pair:** The close-fitting covering worn on the foot is a sock. (A shoe-lace is only a part; a toe is part of the foot; a leg is a different limb.)

**Final Answer:** Sock  $\Rightarrow$

[Go Back to Q33](#)



Q34.

**Solution**

**Concept — Numeric analogy by a hidden formula:** Find the operation linking 6 to 42.

**Step 1 — Test 6 → 42:**  $6 \times 7 = 42$ , i.e., the rule is  $n \times (n + 1)$ .

**Step 2 — Apply to 9:**  $9 \times (9 + 1) = 9 \times 10 = 90$ .

**Final Answer:**  $90 \Rightarrow$

**Answer: (D)** [Go Back to Q34](#)

Q35.

**Solution**

**Concept — Classification by a number property:** Find the property shared by all but one.

**Step 1 — Check for perfect cubes:**  $64 = 4^3$ ,  $27 = 3^3$ ,  $8 = 2^3$  are all perfect cubes.

**Step 2 — The misfit:**  $100 = 10^2$  is a perfect square, not a perfect cube.

**Final Answer:**  $100 \Rightarrow$

**Answer: (B)** [Go Back to Q35](#)

Q36.

**Solution**

**Concept — Forward-shift coding:** Each letter is replaced by the next letter in the alphabet (+1).

**Step 1 — Confirm rule:**  $T \rightarrow U$ ,  $I \rightarrow J$ ,  $G \rightarrow H$ ,  $E \rightarrow F$ ,  $R \rightarrow S$  gives UJHFS. The rule checks out.

**Step 2 — Apply to LION:**  $L \rightarrow M$ ,  $I \rightarrow J$ ,  $O \rightarrow P$ ,  $N \rightarrow O$ , giving MJPO.

**Final Answer:** MJPO  $\Rightarrow$

**Answer: (A)** [Go Back to Q36](#)



Q37.

**Solution**

**Concept — Backward-shift coding:** Each letter is replaced by the previous letter in the alphabet ( $-1$ ).

**Step 1 — Confirm rule:**  $M \rightarrow L$ ,  $U \rightarrow T$ ,  $M \rightarrow L$ ,  $B \rightarrow A$ ,  $A \rightarrow Z$ ,  $I \rightarrow H$  gives LTLAZH. The rule checks out.

**Step 2 — Apply to CHENNAI:**  $C \rightarrow B$ ,  $H \rightarrow G$ ,  $E \rightarrow D$ ,  $N \rightarrow M$ ,  $N \rightarrow M$ ,  $A \rightarrow Z$ ,  $I \rightarrow H$ , giving BGDMMZH.

**Final Answer:** BGDMMZH  $\Rightarrow$

**Answer:** (C) [Go Back to Q37](#)

Q38.

**Solution**

**Concept — Resolving a relationship chain:** Link each clue.

**Step 1 — Children of one couple:**  $B$  and  $C$  are siblings (since  $C$  is  $B$ 's sister), and  $A$  is their father.

**Step 2 —  $D$ 's role:**  $D$  is the mother of  $C$ , hence the mother of  $A$ 's children, i.e.,  $A$ 's wife.

**Final Answer:** Wife  $\Rightarrow$

**Answer:** (B) [Go Back to Q38](#)

Q39.

**Solution**

**Concept — Reading a family tree:** Trace each link.

**Step 1 — Generations:**  $J$  and  $K$  are a couple; their children are  $L$  and  $M$ , so  $L$  and  $M$  are siblings.

**Step 2 — Next generation:**  $M$  married  $N$ , and  $P$  (with  $Q$ ) is their child. So  $P$  is the child of  $L$ 's sibling  $M$ .

**Step 3 — Relation of  $P$  to  $L$ :**  $P$  is the son or daughter of  $L$ 's brother/sister, i.e.,  $L$ 's nephew or niece (gender of  $P$  not given).

**Final Answer:** Nephew or niece  $\Rightarrow$



Answer: (D) [Go Back to Q39](#)

Q40.

### Solution

**Concept — Net displacement direction:** Add the east-west and north-south moves separately.

**Step 1 — North-south:** +4 (North to  $A$ ) then +4 (North to  $C$ ) = +8 km North.

**Step 2 — East-west:** +4 (East to  $B$ ) = +4 km East.

**Step 3 — Direction of  $C$  from  $S$ :**  $C$  is to the North and to the East of  $S$ , i.e., in the North-East direction.

**Final Answer:** North-East  $\Rightarrow$

Answer: (B) [Go Back to Q40](#)

Q41.

### Solution

**Concept — Opposite seats in a circle of six:** A person directly across is 3 places away.

**Step 1 — Clockwise order:**  $P(1), Q(2), R(3), S(4), T(5), U(6)$ .

**Step 2 — Opposite of  $P$ :** Moving 3 places from  $P$  lands on  $S$  (the 4th position). So  $S$  sits exactly opposite  $P$ .

**Final Answer:**  $S \Rightarrow$

Answer: (C) [Go Back to Q41](#)

Q42.

### Solution

**Concept — “Right” when facing the centre:** For a person facing the centre, the immediate right is the *anticlockwise* neighbour.

**Step 1 — Clockwise order:**  $P, Q, R, S, T, U$ . So the anticlockwise neighbour of  $R$  is  $Q$ .

**Step 2 — Conclude:** Immediately to the right of  $R$  sits  $Q$ .

**Final Answer:**  $Q \Rightarrow$



Answer: (A) [Go Back to Q42](#)

Q43.

### Solution

**Concept — Counting along an arc:** List the people passed when moving clockwise.

**Step 1 — Clockwise from  $Q$  to  $T$ :**  $Q \rightarrow R \rightarrow S \rightarrow T$ .

**Step 2 — People in between:**  $R$  and  $S$  lie between  $Q$  and  $T$ , that is 2 people.

**Final Answer:**  $2 \Rightarrow$

Answer: (D) [Go Back to Q43](#)

Q44.

### Solution

**Concept — Building an order from comparisons:** Chain the inequalities.

**Step 1 — From the clues:**  $Lalit < Kiran < Manish$ ,  $Manish < Nitin$ , and Omkar is shortest.

**Step 2 — Full order (tallest to shortest):**  $Nitin > Manish > Kiran > Lalit > Omkar$ .

**Step 3 — Second tallest:** Manish is just below Nitin.

**Final Answer:** Manish  $\Rightarrow$

Answer: (C) [Go Back to Q44](#)

Q45.

### Solution

**Concept — Placing items on floors:** Use the fixed clues first.

**Step 1 — Fixed positions:**  $Z$  is on the topmost floor (Floor 4).  $Y$  is immediately below  $Z$ , so  $Y$  is on Floor 3.

**Step 2 — Remaining floors:** Floors 1 and 2 are left for  $W$  and  $X$ . Since  $W$  lives above  $X$ ,  $W$  is on Floor 2 and  $X$  is on Floor 1.

**Final Answer:** Floor 1  $\Rightarrow$



Answer: (A) [Go Back to Q45](#)

Q46.

### Solution

**Concept — “Some” premises give no fixed link:** A particular premise cannot force an overlap.

**Step 1 — Conclusion I:** “All roses are flowers” and “Some flowers are red” do not guarantee that the *red* flowers are the rose ones; the red flowers could all be non-roses. So I does not follow.

**Step 2 — Conclusion II:** “All roses are flowers” does not make all flowers roses. So II does not follow.

**Final Answer:** Neither follows  $\Rightarrow$   D

Answer: (D) [Go Back to Q46](#)

Q47.

### Solution

**Concept — Universal + negative premises:** Track what is guaranteed.

**Step 1 — Conclusion I:** All cats are animals and no animal is a plant; hence no cat can be a plant. I follows.

**Step 2 — Conclusion II:** Since all cats are animals and cats exist, some animals are indeed cats. II follows.

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

Answer: (A) [Go Back to Q47](#)

Q48.

### Solution

**Concept — Course of action:** A valid action should address the problem and be practical.

**Step 1 — Course I:** Poor lighting causes the accidents, so installing street lights directly removes the cause. I follows.

**Step 2 — Course II:** Closing the highway at night is extreme and impractical, blocking essential travel. II does not follow.



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

**Answer:** (B) [Go Back to Q48](#)

Q49.

### Solution

**Concept — Implicit assumption:** Something taken for granted for the instruction to make sense.

**Step 1 — Assumption I:** Asking candidates to carry a photo ID presumes they possess one; otherwise the instruction is meaningless. I is implicit.

**Step 2 — Assumption II:** “No candidate will attempt to enter without an ID” is a prediction about behaviour, not a necessary presupposition. II is not implicit.

**Final Answer:** Only I is implicit  $\Rightarrow$   A

**Answer:** (A) [Go Back to Q49](#)

Q50.

### Solution

**Concept — Coded inequalities:** Translate the symbols and combine.

**Step 1 — Translate:**  $A \star B \Rightarrow A \geq B$ ;  $B \circ C \Rightarrow B = C$ ;  $C \star D \Rightarrow C \geq D$ .

**Step 2 — Combine:** Since  $B = C$ , we get  $A \geq B = C \geq D$ , hence  $A \geq D$ , i.e.,  $A \star D$ .

**Step 3 — Check options:**  $A \star D$  is definitely true.  $A \bullet D$  ( $A \leq D$ ) need not hold;  $D \star A$  ( $D \geq A$ ) need not hold;  $B \bullet D$  ( $B \leq D$ ) is false since  $B = C \geq D$ .

**Final Answer:**  $A \star D \Rightarrow$   C

**Answer:** (C) [Go Back to Q50](#)

Q51.

### Solution

**Concept — Position from both ends:** Total = (position from left) + (position from right) - 1.

**Step 1 — Apply:**  $11 + 9 - 1 = 19$ .

**Final Answer:** 19  $\Rightarrow$   B



**Answer: (B)** [Go Back to Q51](#)

Q52.

### Solution

**Concept — Angle between clock hands:** Each hour mark is  $30^\circ$  apart ( $360^\circ \div 12$ ).

**Step 1 — At 3:00:** The minute hand points at 12 and the hour hand points at 3.

**Step 2 — Compute:** The gap is 3 hour marks, so  $3 \times 30^\circ = 90^\circ$ .

**Final Answer:**  $90^\circ \Rightarrow$

**Answer: (D)** [Go Back to Q52](#)

Q53.

### Solution

**Concept — Row operation in a grid:** Find a fixed rule linking the first two entries to the third.

**Step 1 — Test “third = (first + second)  $\times 2$ ”:** Row 1:  $(4 + 6) \times 2 = 10 \times 2 = 20$ , matching the third entry.

**Step 2 — Verify on Row 2:**  $(3 + 5) \times 2 = 8 \times 2 = 16$ , matching the third entry. The rule is confirmed.

**Step 3 — Apply to Row 3:**  $(5 + 7) \times 2 = 12 \times 2 = 24$ .

**Final Answer:**  $24 \Rightarrow$

**Answer: (D)** [Go Back to Q53](#)

Q54.

### Solution

**Concept — Data sufficiency:** Decide whether the father’s age can be pinned to one value.

**Step 1 — Statement I alone:** “Father is 30 years older than his son” gives a relation but no son’s age, so the father’s age is unknown. Not sufficient.

**Step 2 — Statement II alone:** “Son is 12” gives no link to the father’s age. Not sufficient.

**Step 3 — Both together:** Father =  $12 + 30 = 42$  years. Unique. Sufficient only



when combined.

**Final Answer:** Both together are needed  $\Rightarrow$  D

**Answer: (D)** [Go Back to Q54](#)

**Q55.**

### Solution

**Concept — Data sufficiency on parity:** Check whether each statement alone settles “is  $N$  even”.

**Step 1 — Statement I alone:** A multiple of 4 is always even. Settled. Sufficient.

**Step 2 — Statement II alone:**  $N + 1$  is odd  $\Rightarrow N$  is even. Settled. Sufficient.

**Step 3 — Conclude:** Either statement alone answers the question.

**Final Answer:** Either statement alone is sufficient  $\Rightarrow$  A

**Answer: (A)** [Go Back to Q55](#)

**Q56.**

### Solution

**Concept — Logical Venn relationships:** Decide containment and overlap among the three classes.

**Step 1 — Table vs Furniture:** Every table is a piece of furniture, so the Table circle lies entirely inside the Furniture circle.

**Step 2 — Wood:** Some furniture (and some tables) are made of wood, but wood also exists on its own, so the Wood circle overlaps both Furniture and Table partially.

**Final Answer:** Table fully inside Furniture, with Wood overlapping both  $\Rightarrow$  B

**Answer: (B)** [Go Back to Q56](#)



Q57.

**Solution**

**Concept — Reading a line graph:** The highest point marks the maximum.

**Step 1 — Monthly values:** Jan= 20, Feb= 30, Mar= 25, Apr= 40, May= 35 (hundreds).

**Step 2 — Maximum:** The greatest value is 40, in April.

**Final Answer:** April  $\Rightarrow$   C

Answer: (C) [Go Back to Q57](#)

Q58.

**Solution**

**Concept — Percentage rise:**  $\frac{\text{new} - \text{old}}{\text{old}} \times 100\%$ .

**Step 1 — Values:** January = 20, April = 40.

**Step 2 — Compute:**  $\frac{40 - 20}{20} \times 100 = \frac{20}{20} \times 100 = 100\%$ .

**Final Answer:** 100%  $\Rightarrow$   D

Answer: (D) [Go Back to Q58](#)

Q59.

**Solution**

**Concept — Average of the data points:** Sum the five values and divide by 5.

**Step 1 — Sum:**  $20 + 30 + 25 + 40 + 35 = 150$ .

**Step 2 — Average:**  $150 \div 5 = 30$  (hundreds).

**Final Answer:** 30  $\Rightarrow$   B

Answer: (B) [Go Back to Q59](#)



Q60.

**Solution**

**Concept — Largest month-to-month change:** Compute each consecutive difference.

**Step 1 — Differences:** Jan→Feb =  $|30 - 20| = 10$ ; Feb→Mar =  $|25 - 30| = 5$ ;  
Mar→Apr =  $|40 - 25| = 15$ ; Apr→May =  $|35 - 40| = 5$ .

**Step 2 — Largest:** The biggest jump is 15, from March to April.

**Final Answer:** March to April ⇒

[Go Back to Q60](#)



## Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	A	3	D	4	B	5	C
6	A	7	B	8	D	9	A	10	C
11	B	12	D	13	A	14	C	15	A
16	D	17	C	18	A	19	B	20	D
21	A	22	C	23	B	24	D	25	A
26	B	27	C	28	D	29	C	30	B
31	D	32	C	33	A	34	D	35	B
36	A	37	C	38	B	39	D	40	B
41	C	42	A	43	D	44	C	45	A
46	D	47	A	48	B	49	A	50	C
51	B	52	D	53	D	54	D	55	A
56	B	57	C	58	D	59	B	60	A

