

Bihar B.Ed CET Logical & Analytical Reasoning

Sample Paper – 8

Duration: 25 Minutes

Maximum Marks: 25

Instructions

- This paper contains **25** Multiple Choice Questions (Single Correct Answer), modelled on the Logical & Analytical Reasoning section of **Bihar B.Ed CET**.
- Each correct answer carries **+1 mark**. There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct. Choose carefully.
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.
- Rough work may be done in the margin of the question paper.

Q1. Find the missing term: 5, 10, 20, 40, 80, _____

- (A) 100
- (B) 120
- (C) 160
- (D) 140

Q2. Find the next term: Z, X, V, T, R, _____

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

Q3. Choose the correct analogy:

Egg : Hen :: Calf : _____



- (A) Lion
- (B) Cow
- (C) Horse
- (D) Sheep

Q4. Choose the correct analogy:

2 : 8 :: 3 : _____

- (A) 9
- (B) 18
- (C) 27
- (D) 12

Q5. Which of the following is the **odd one out**?

- (A) Flute
- (B) Violin
- (C) Guitar
- (D) Sitar

Q6. In a code language, DELHI is written as EFMIJ (each letter shifted by +1). Using the same code, how will MUMBAI be written?

- (A) MVNBAI
- (B) NVNCBJ
- (C) NVMBIJ
- (D) MVNCBJ

Q7. In a code language, A is written as Z, B as Y, C as X, and so on (mirror coding). How is FACE coded?

- (A) UZYW
- (B) VYXU



(C) VYXW

(D) UZXV

Q8. In a family, P is the father of Q, and Q is the mother of R. How is P related to R?

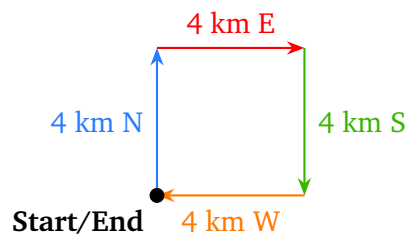
(A) Paternal grandfather

(B) Uncle

(C) Maternal grandfather

(D) Father

Q9. A person starts from a point, walks **4 km towards the North**, turns right and walks **4 km towards the East**, then turns right and walks **4 km towards the South**, and finally turns right and walks **4 km towards the West**. How far is he from his starting point?



(A) 0 km

(B) 4 km

(C) 8 km

(D) 16 km

Q10. Pooja is **5th from the top** and **20th from the bottom** in an examination. How many students appeared in the examination?

(A) 23

(B) 24

(C) 25



(D) 26

Q11. Statements:

Some teachers are doctors.

All doctors are intelligent.

Conclusions:

I. Some teachers are intelligent.

II. All intelligent people are teachers.

Which conclusion(s) follow(s)?

(A) Only I

(B) Only II

(C) Both I and II

(D) Neither I nor II

Q12. Statements:

All workers are voters.

Some voters are educated.

Conclusions:

I. Some workers are educated.

II. Some educated people are voters.

Which conclusion(s) follow(s)?

(A) Only I

(B) Only II

(C) Both I and II

(D) Neither I nor II

Q13. Statement: “Wearing helmets has significantly reduced road accident fatalities.”

Conclusions:

I. Helmets provide effective head protection during accidents.



II. Road accidents always prove fatal.

Which conclusion follows?

- (A) Only II
- (B) Both I and II
- (C) Neither I nor II
- (D) Only I

Q14. Statement: “Visit our heritage museum to discover India’s rich cultural history.”

Assumptions:

- I. People are interested in India’s cultural history.
- II. The museum has exhibits related to India’s cultural history.

Which assumption(s) is/are implicit?

- (A) Only I
- (B) Only II
- (C) Both I and II
- (D) Neither I nor II

Q15. Statement: “Should higher education be made completely free for all students in India?”

Arguments:

- I. **Yes** — it will democratise access to knowledge and create equal opportunities.
- II. **No** — it will place an enormous and unsustainable financial burden on the government.

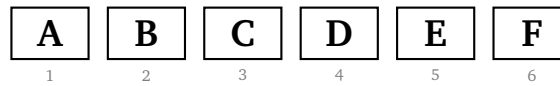
Which argument(s) is/are strong?

- (A) Only I
- (B) Both I and II
- (C) Only II



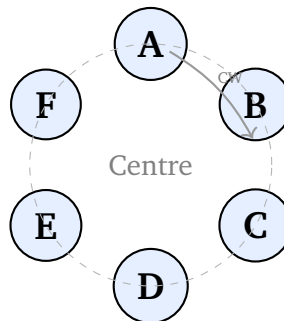
(D) Neither I nor II

- Q16.** In a row of 6 people — A, B, C, D, E, F — A is at the extreme left and F is at the extreme right. B is to the immediate right of A. C is to the immediate right of B. D is between C and E. E is to the immediate left of F. How many people are between B and E?



- (A) 2
(B) 1
(C) 3
(D) 0
- Q17.** Six people A, B, C, D, E, F sit around a circular table, all facing the centre, in the clockwise order: A, B, C, D, E, F. Who is to the **immediate left** of D?

(Immediate left = counter-clockwise neighbour when facing the centre.)



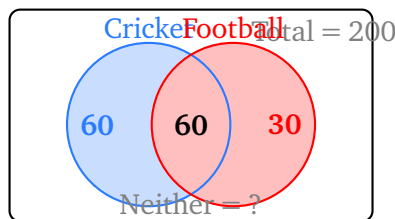
- (A) A
(B) B
(C) E
(D) C
- Q18.** If $\diamond$ means $\div$, $\clubsuit$ means $\times$, $\spadesuit$ means $+$, and $\heartsuit$ means $-$, evaluate:

$$(40 \diamond 8) \clubsuit 3 \spadesuit 6 \heartsuit 4$$



- (A) 13
- (B) 15
- (C) 17
- (D) 19

Q19. In a school of **200 students**: 120 play cricket, 90 play football, and 60 play both. How many students play **neither** cricket nor football?



- (A) 30
- (B) 50
- (C) 70
- (D) 90

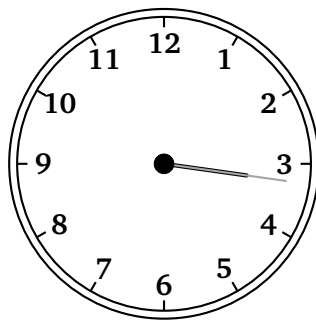
Q20. Republic Day (26 January) 2020 was a **Sunday**. What day of the week was Republic Day **2021**?

(Note: 2020 is a leap year; 29 February 2020 falls within this one-year interval.)

- (A) Tuesday
- (B) Wednesday
- (C) Monday
- (D) Thursday

Q21. Between 3 and 4 o'clock, at what time do the hands of a clock **coincide**?





Hands coincide near $3\text{ h } \frac{180}{11}\text{ min}$

- (A) 3 hours 15 minutes
- (B) 3 hours 20 minutes
- (C) $3\text{ hours } \frac{180}{11}\text{ minutes}$
- (D) 3 hours 18 minutes

Q22. Find the next term in the series: C3, F6, I9, L12, _____

- (A) M12
- (B) N15
- (C) O12
- (D) O15

Q23. Which of the following is **NOT** a perfect square?

- (A) 300
- (B) 121
- (C) 256
- (D) 289

Q24. Find the missing number (?) in the following table:

2	3	5
4	5	9
6	7	?



- (A) 11
- (B) 13
- (C) 14
- (D) 15

Q25. On a standard die (opposite faces always sum to 7), if **1** is at the bottom, which number is on **top**?

- (A) 2
- (B) 3
- (C) 5
- (D) 6



Detailed Solutions

Q1.

Solution

Concept — Geometric Number Series: Each term is obtained by multiplying the previous term by a fixed common ratio.

Step 1 — Find the common ratio:

$$5, \quad 10, \quad 20, \quad 40, \quad 80, \quad ?$$

$$\underbrace{\times 2}, \quad \underbrace{\times 2}, \quad \underbrace{\times 2}, \quad \underbrace{\times 2}, \quad \underbrace{\times ?}$$

The ratio between successive terms is consistently $\times 2$.

Step 2 — Apply the pattern: Missing term $= 80 \times 2 = 160$.

Why other options are wrong:

- Option A (100): Would require $80 + 20 = 100$ — implies an arithmetic pattern, not geometric.
- Option B (120): Would require $80 + 40 = 120$ — no consistent rule from the series.
- Option D (140): No standard series rule produces 140 from 80.

Final Answer: $80 \times 2 = 160 \Rightarrow \boxed{\text{C}}$

Answer: (C) [Go Back to Q1](#)

Q2.

Solution

Concept — Letter Series (Decreasing by 2): Each letter in the series is 2 positions before the previous letter in the alphabet.

Step 1 — Assign positional values:

$$Z(26), \quad X(24), \quad V(22), \quad T(20), \quad R(18), \quad ?$$

$$\underbrace{-2}, \quad \underbrace{-2}, \quad \underbrace{-2}, \quad \underbrace{-2}, \quad \underbrace{-?}$$

Step 2 — Find the next term: $18 - 2 = 16 = \text{P}$.

Why other options are wrong:



- Option A (O): Position 15; differs from R by 3, not 2.
- Option B (N): Position 14; differs from R by 4, not 2.
- Option C (Q): Position 17; differs from R by only 1, not 2.

Final Answer: $R(18) - 2 = P(16) \Rightarrow \boxed{D}$

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

Q3.

Solution

Concept — Word Analogy (Young One and Parent): The relationship is “the young one of”.

Step 1 — Identify the relationship: An *egg* is produced by a *hen*; a calf is the young one born to its mother.

Step 2 — Apply to the second pair: A *calf* is the young one of a **cow**.

Why other options are wrong:

- Option A (Lion): The young one of a lion is a *cub*, not a calf.
- Option C (Horse): The young one of a horse is a *foal*, not a calf.
- Option D (Sheep): The young one of a sheep is a *lamb*, not a calf.

Final Answer: Calf is the young one of a Cow $\Rightarrow \boxed{B}$

Answer: (B) [Go Back to Q3](#)

Q4.

Solution

Concept — Number Analogy (Cubing): The relationship is “number to its cube”.

Step 1 — Identify the rule: $2 \rightarrow 8$: $2^3 = 8$. The rule is $n \rightarrow n^3$.

Step 2 — Apply the rule: $3^3 = 27$.

Why other options are wrong:

- Option A (9): $3^2 = 9$ — squaring, not cubing; inconsistent with $2^3 = 8$.
- Option B (18): $3 \times 6 = 18$ — no systematic rule.
- Option D (12): $3 \times 4 = 12$ — no systematic rule consistent with the pair (2, 8).



Final Answer: $3^3 = 27 \Rightarrow$ C

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

Q5.

Solution

Concept — Odd One Out (Classification by Instrument Type): Instruments are classified by the way they produce sound.

Step 1 — Classify each instrument:

- **Violin** — string instrument (chordophone).
- **Guitar** — string instrument (chordophone).
- **Sitar** — string instrument (chordophone).
- **Flute** — wind instrument (aerophone); sound produced by blowing air.

Step 2 — Identify the odd one: Violin, Guitar, and Sitar all produce sound by vibrating strings. Flute is the only wind instrument — it is the odd one out.

Final Answer: Flute (wind instrument) $\Rightarrow$ A

Answer: (A) [Go Back to Q5](#)

Q6.

Solution

Concept — Coding-Decoding (Letter Shift +1): Each letter of the original word is replaced by the letter one position ahead in the alphabet.

Step 1 — Verify with DELHI: $D \rightarrow E, E \rightarrow F, L \rightarrow M, H \rightarrow I, I \rightarrow J \Rightarrow EFMIJ \checkmark$

Step 2 — Encode MUMBAI:

$$M \rightarrow N, \quad U \rightarrow V, \quad M \rightarrow N, \quad B \rightarrow C, \quad A \rightarrow B, \quad I \rightarrow J$$

Result: **NVNCBJ**.

Why other options are wrong:

- Option A (MVNBAL): First M and A, I are not shifted — only partial encoding.
- Option C (NVMBIJ): B is not shifted to C; incorrect at the 4th character.
- Option D (MVNCBJ): First M is not shifted to N.

Final Answer: MUMBAI $\rightarrow$ NVNCBJ $\Rightarrow$ B



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

Q7.

Solution

Concept — Coding-Decoding (Mirror/Reverse Alphabet): Letter at position n maps to position $27 - n$ ($A \leftrightarrow Z$, $B \leftrightarrow Y$, $C \leftrightarrow X$, ...).

Step 1 — Establish the mapping rule: Position $n \rightarrow$ position $27 - n$.

Step 2 — Encode FACE:

- $F(6) \rightarrow 27 - 6 = 21 \rightarrow U$
- $A(1) \rightarrow 27 - 1 = 26 \rightarrow Z$
- $C(3) \rightarrow 27 - 3 = 24 \rightarrow X$
- $E(5) \rightarrow 27 - 5 = 22 \rightarrow V$

Result: **UZXV**.

Why other options are wrong:

- Option A (UZYW): $Y = 25 \rightarrow B$, $W = 23 \rightarrow D$ — incorrect for A and E.
- Option B (VYXU): V corresponds to E (not F); entire mapping is shifted.
- Option C (VYXW): Same error as B for the first letter.

Final Answer: FACE $\rightarrow$ UZXV $\Rightarrow$ **D**

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

Q8.

Solution

Concept — Blood Relations: Trace the family chain step by step.

Step 1 — Given facts:

- P is the *father* of Q.
- Q is the *mother* of R.

Step 2 — Determine P's relation to R: Q is R's mother. P is Q's father. Therefore P is the father of R's mother $\Rightarrow$ P is R's **maternal grandfather**.

Why other options are wrong:



- Option A (Paternal grandfather): That would require P to be the father of R's father, not R's mother.
- Option B (Uncle): An uncle is a sibling of a parent, not a grandparent.
- Option D (Father): P is two generations above R, not one.

Final Answer: P is R's Maternal Grandfather $\Rightarrow$ C

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

Q9.

Solution

Concept — Direction and Distance (Closed Square Path): Trace each leg of the journey and compute the net displacement.

Step 1 — Trace the path: North 4 km $\rightarrow$ East 4 km $\rightarrow$ South 4 km $\rightarrow$ West 4 km.

Step 2 — Compute net displacement:

- North–South: $+4 - 4 = 0$ km.
- East–West: $+4 - 4 = 0$ km.

Net displacement $= \sqrt{0^2 + 0^2} = 0$ km.

The path forms a complete square, and the person returns exactly to the starting point.

Why other options are wrong:

- Option B (4 km): Only one pair of opposite movements cancelled.
- Option C (8 km): Adds partial segments rather than computing net displacement.
- Option D (16 km): Total distance *walked*, not the straight-line displacement.

Final Answer: Distance from starting point $= 0$ km $\Rightarrow$ A

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



Q10.

Solution

Concept — Ranking (Position from Top and Bottom): Standard formula for total count.

Step 1 — Apply the formula:

$$\text{Total students} = \text{Rank from top} + \text{Rank from bottom} - 1$$

Step 2 — Substitute values:

$$= 5 + 20 - 1 = 24$$

Why other options are wrong:

- Option A (23): Uses $5 + 20 - 2 = 23$ — subtracts 2 instead of 1.
- Option C (25): Uses $5 + 20 = 25$ — forgets to subtract 1 for the overlap.
- Option D (26): Uses $5 + 20 + 1 = 26$ — adds instead of subtracts.

Final Answer: $5 + 20 - 1 = 24$ students $\Rightarrow$ **B**

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

Q11.

Solution

Concept — Syllogism (Venn Diagram Method):

Step 1 — Map the statements: Some teachers are doctors $\Rightarrow$ Teachers $\cap$ Doctors $\neq \emptyset$.

All doctors are intelligent $\Rightarrow$ Doctors $\subseteq$ Intelligent.

Step 2 — Test Conclusion I (Some teachers are intelligent): Since some teachers are doctors, and all doctors are intelligent, those teachers who are doctors are also intelligent. **Conclusion I is valid.**

Step 3 — Test Conclusion II (All intelligent people are teachers): Intelligence includes all doctors and possibly more. There is no basis to claim all intelligent people are teachers. **Conclusion II is invalid.**

Why other options are wrong:

- Option B (Only II): II is definitively not valid.



- Option C (Both): II does not follow from the given statements.
- Option D (Neither): I clearly and necessarily follows.

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

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

Q12.

Solution

Concept — Syllogism:

Step 1 — Map the statements: All workers are voters $\Rightarrow$ Workers $\subseteq$ Voters.
Some voters are educated $\Rightarrow$ Voters $\cap$ Educated $\neq \emptyset$.

Step 2 — Test Conclusion II (Some educated people are voters): “Some voters are educated” is directly convertible to “Some educated people are voters” (valid conversion of a particular affirmative). **Conclusion II is valid.**

Step 3 — Test Conclusion I (Some workers are educated): The educated voters may all belong to the non-worker segment of voters. There is no guarantee that any worker is among the educated voters. **Conclusion I is uncertain and not valid.**

Why other options are wrong:

- Option A (Only I): I cannot be definitively concluded.
- Option C (Both): I does not necessarily follow.
- Option D (Neither): II is clearly and validly concluded.

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

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

Q13.

Solution

Concept — Statement and Conclusions:

Step 1 — Analyse the statement: Helmets have *significantly reduced* road accident fatalities.

Step 2 — Test Conclusion I (Helmets provide effective head protection during accidents): This is a direct, logical inference explaining the mechanism behind the



reduction in fatalities. If helmets reduced deaths, they must protect effectively. **Conclusion I is valid.**

Step 3 — Test Conclusion II (Road accidents always prove fatal): The statement says helmets *reduced* fatalities, implying that not all accidents are fatal (otherwise there would be no room for reduction). “Always fatal” is an extreme over-generalisation. **Conclusion II is invalid.**

Why other options are wrong:

- Option A (Only II): II is invalid and contradicts the logic of the statement.
- Option B (Both): II does not follow from the statement.
- Option C (Neither): I clearly and logically follows.

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

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

Q14.

Solution

Concept — Statement and Assumptions (Implicit Assumptions):

Step 1 — Test Assumption I (People are interested in India’s cultural history): The invitation would be completely pointless if people had no interest in cultural history. The statement implicitly presupposes this interest. **Assumption I is implicit.**

Step 2 — Test Assumption II (The museum has exhibits related to India’s cultural history): The museum is advertised as the place to “discover” India’s cultural history. This only makes sense if the museum actually has such exhibits. **Assumption II is implicit.**

Why other options are wrong:

- Option A (Only I): II is equally and necessarily implicit.
- Option B (Only II): I is equally and necessarily implicit.
- Option D (Neither): Both assumptions clearly underpin the statement.

Final Answer: Both Assumptions I and II are implicit $\Rightarrow$ **C**

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



Q15.

Solution

Concept — Statement and Arguments (Strong vs. Weak Arguments): A strong argument is directly relevant, substantive, and addresses the real issue.

Step 1 — Evaluate Argument I (Yes — democratises access): Educational equity is a genuine and central concern. Free higher education directly addresses inequality of opportunity. This is a substantive, relevant argument. **Argument I is strong.**

Step 2 — Evaluate Argument II (No — financial burden): Fiscal sustainability is a legitimate and serious concern. Free education for all students at the higher level would impose enormous costs. This is a substantive, relevant counter-argument. **Argument II is strong.**

Why other options are wrong:

- Option A (Only I): Argument II is equally strong and must be considered.
- Option C (Only II): Argument I is equally strong and must be considered.
- Option D (Neither): Both arguments are clearly strong and directly relevant.

Final Answer: Both Arguments I and II are strong $\Rightarrow$ **B**

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

Q16.

Solution

Concept — Linear Seating Arrangement: Fix the anchors first, then place others using the given clues.

Step 1 — Fix the anchors: A = position 1 (extreme left). F = position 6 (extreme right).

Step 2 — Place remaining people:

- B is immediately right of A $\Rightarrow$ B = 2.
- C is immediately right of B $\Rightarrow$ C = 3.
- E is immediately left of F $\Rightarrow$ E = 5.
- D is between C(=3) and E(=5) $\Rightarrow$ D = 4.

Final order: A(1) – B(2) – C(3) – D(4) – E(5) – F(6).

Step 3 — Count people between B and E: Positions between 2 and 5: position 3



(C) and position 4 (D) = 2 people.

Why other options are wrong:

- Option B (1): Counts only one of C or D.
- Option C (3): Incorrectly includes B or E themselves.
- Option D (0): C and D are clearly located between B and E.

Final Answer: 2 people (C and D) are between B and E $\Rightarrow$ A

Answer: (A) [Go Back to Q16](#)

Q17.

Solution

Concept — Circular Seating Arrangement:

Step 1 — Establish positions: Clockwise order (given directly): A, B, C, D, E, F.

Step 2 — Identify “immediate left” for circular facing-centre seating: When all persons face the centre, the *immediate left* of a person is the one sitting counter-clockwise from them.

Step 3 — Find the immediate left of D: In the clockwise sequence ...C, D, E..., moving counter-clockwise from D gives C.

Why other options are wrong:

- Option A (A): A is three seats counter-clockwise from D.
- Option B (B): B is two seats counter-clockwise from D.
- Option C (E): E is the immediate *right* (clockwise) neighbour of D, not left.

Final Answer: Immediate left of D is C $\Rightarrow$ D

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



Q18.

Solution

Concept — Mathematical Operations (Symbol Substitution): Replace each symbol with its corresponding operation, then apply BODMAS.

Step 1 — Substitute symbols: $\diamond = \div$, $\clubsuit = \times$, $\spadesuit = +$, $\heartsuit = -$.

$$(40 \div 8) \times 3 + 6 - 4$$

Step 2 — Apply BODMAS:

$$= 5 \times 3 + 6 - 4 \quad (\text{division first}) = 15 + 6 - 4 \quad (\text{multiplication}) = 21 - 4 \quad (\text{addition}) = 17$$

Why other options are wrong:

- Option A (13): Error in order of operations (e.g., adding before multiplying).
- Option B (15): Stops at $15 + 6 - 4$ but miscalculates the subtraction step.
- Option D (19): Arithmetic error at the final addition/subtraction step.

Final Answer: $(40 \div 8) \times 3 + 6 - 4 = 17 \Rightarrow \boxed{\text{C}}$

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

Q19.

Solution

Concept — Venn Diagram (Inclusion–Exclusion Principle):

Step 1 — Find the number of students playing at least one sport:

$$n(\text{Cricket} \cup \text{Football}) = n(\text{Cricket}) + n(\text{Football}) - n(\text{Both}) = 120 + 90 - 60 = 150$$

Step 2 — Find students playing neither:

$$\text{Neither} = \text{Total} - n(\text{Cricket} \cup \text{Football}) = 200 - 150 = 50$$

Verification of individual regions: Cricket only = $120 - 60 = 60$; Both = 60; Football only = $90 - 60 = 30$. Total = $60 + 60 + 30 + 50 = 200$ ✓

Why other options are wrong:

- Option A (30): This is the count of students playing football only.



- Option C (70): Incorrect application of inclusion–exclusion.
- Option D (90): Equal to the football total, not the “neither” count.

Final Answer: Students playing neither = 50 $\Rightarrow$ **B**

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

Q20.

Solution

Concept — Calendar (Odd Days Method):

Step 1 — Count the days in the interval: From 26 January 2020 to 26 January 2021 is exactly one year. Since 2020 is a leap year and 29 February 2020 falls within this period, the interval contains **366 days**.

Step 2 — Find the number of odd days:

$$366 = 52 \times 7 + 2 \Rightarrow \text{Odd days} = 2$$

Step 3 — Advance the day: 26 January 2020 = Sunday. Adding 2 days: Sunday +2 = **Tuesday**.

Why other options are wrong:

- Option B (Wednesday): Requires 3 odd days (non-leap year counting).
- Option C (Monday): Requires only 1 odd day (365-day year).
- Option D (Thursday): Requires 4 odd days — no consistent scenario.

Final Answer: Sunday +2 odd days = Tuesday $\Rightarrow$ **A**

Answer: (A) [Go Back to Q20](#)

Q21.

Solution

Concept — Clock (Coincidence of Hands): The minute hand gains $5\frac{5}{11}$ minutes on the hour hand every hour.

Step 1 — General formula for coincidence: At H o'clock, the hands coincide at:

$$\text{Minutes past } H = \frac{60H}{11}$$



Step 2 — Apply for H = 3:

$$\frac{60 \times 3}{11} = \frac{180}{11} = 16\frac{4}{11} \text{ minutes past 3}$$

Why other options are wrong:

- Option A (15 min): An approximation; the exact value is $\frac{180}{11} \approx 16.36$ min.
- Option B (20 min): Overshoots the coincidence point.
- Option D (18 min): A rounded estimate; not the exact mathematical answer.

Final Answer: 3 hours $\frac{180}{11}$ minutes $\Rightarrow$ C

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

Q22.

Solution

Concept — Alphanumeric Series: Two independent patterns run in parallel — one for letters and one for numbers.

Step 1 — Letter pattern: C(3rd), F(6th), I(9th), L(12th), ... Every **3rd letter** of the alphabet.

Next: $12 + 3 = 15$ th letter = **O**.

Step 2 — Number pattern: 3, 6, 9, 12, ... Multiples of 3, increasing by 3.

Next: $12 + 3 = 15$.

Step 3 — Combine: Next term is **O15**.

Why other options are wrong:

- Option A (M12): M is the 13th letter, not in the pattern; 12 is already used for L12.
- Option B (N15): N is the 14th letter; skips by 2 instead of 3.
- Option C (O12): Letter is correct (O) but number should advance to 15, not stay at 12.

Final Answer: O15 $\Rightarrow$ D

Answer: (D) [Go Back to Q22](#)



Q23.

Solution

Concept — Odd One Out (Perfect Squares): A perfect square is the square of an integer.

Step 1 — Check each option:

- $121 = 11^2$ ✓
- $256 = 16^2$ ✓
- $289 = 17^2$ ✓
- $300: \sqrt{300} = 10\sqrt{3} \approx 17.32$ — not an integer.

Step 2 — 300 is the only number in the list that is **not** a perfect square.

Why other options are wrong:

- Option B (121): $11 \times 11 = 121$ — perfect square.
- Option C (256): $16 \times 16 = 256$ — perfect square.
- Option D (289): $17 \times 17 = 289$ — perfect square.

Final Answer: 300 is NOT a perfect square $\Rightarrow$ A

Answer: (A) [Go Back to Q23](#)

Q24.

Solution

Concept — Missing Number in Grid: Identify the row-wise pattern relating the three columns.

Step 1 — Identify the pattern:

- Row 1: $2 + 3 = 5$ ✓
- Row 2: $4 + 5 = 9$ ✓
- Row 3: $6 + 7 = ?$

Pattern: Column 1 + Column 2 = Column 3.

Step 2 — Apply to Row 3: $6 + 7 = 13$.

Why other options are wrong:

- Option A (11): Uses $6 + 5 = 11$ — takes the wrong column value.
- Option C (14): Uses $7 \times 2 = 14$ — applies multiplication, not addition.



- Option D (15): Uses $8 + 7 = 15$ — takes an incorrect column 1 value.

Final Answer: $6 + 7 = 13 \Rightarrow$ B

Answer: (B) [Go Back to Q24](#)

Q25.

Solution

Concept — Dice (Opposite Faces): On a standard die, each pair of opposite faces sums to 7: (1,6), (2,5), (3,4).

Step 1 — Apply the rule: Bottom face = 1. Top face (opposite to bottom) = $7 - 1 = 6$.

Why other options are wrong:

- Option A (2): $1 + 2 = 3 \neq 7$; 2 is opposite 5, not 1.
- Option B (3): $1 + 3 = 4 \neq 7$; 3 is opposite 4, not 1.
- Option C (5): $1 + 5 = 6 \neq 7$; 5 is opposite 2, not 1.

Final Answer: Top face = $7 - 1 = 6 \Rightarrow$ D

Answer: (D) [Go Back to Q25](#)



Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	D	3	B	4	C	5	A
6	B	7	D	8	C	9	A	10	B
11	A	12	B	13	D	14	C	15	B
16	A	17	D	18	C	19	B	20	A
21	C	22	D	23	A	24	B	25	D

