CUET 2025 June 2 General Aptitude Test Question Paper With Solutions

Time Allowed :1 Hours	**Maximum Marks :**250	**Total questions :**50

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The test is of 1 hour duration.
2. The question paper consists of 50 questions. The maximum marks are 250.
3. 5 marks are awarded for every correct answer, and 1 mark is deducted for every wrong answer.

1. What comes next in the series? $2, 6, 12, 20, 30, \ ?$

(A) 40

(B) 42

(C) 36

(D) 44

Correct Answer: (B) 42

Solution:

Step 1: Observe the pattern in the series.

Let's examine the difference between consecutive terms:

$$6 - 2 = 4, \quad 12 - 6 = 6, \quad 20 - 12 = 8, \quad 30 - 20 = 10$$

So the differences are increasing by 2 each time: $+4, +6, +8, +10$

Step 2: Add the next difference (which should be +12) to the last term:

$$30 + 12 = 42$$

Quick Tip

Look at the difference between terms in a number series to detect patterns. Increasing or constant differences often indicate polynomial relationships.

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2. A and B can complete a task in the ratio 3:2. If together they complete the task in 20 days, how long will A alone take?

(A) 30 days

(B) 32 days

(C) 36 days

(D) 40 days

Correct Answer: (A) 30 days

Solution:

Step 1: Interpret the Ratio

The phrase "A and B can complete a task in the ratio 3:2" is interpreted as their **work rate ratio** (efficiency):

- Let A's work rate = $3k$ units/day
- Let B's work rate = $2k$ units/day

Step 2: Combined Work Rate

When working together:

$$\text{Combined rate} = 3k + 2k = 5k \text{ units/day}$$

Step 3: Total Work Calculation

They complete the task in 20 days together:

$$\text{Total work} = \text{Rate} \times \text{Time} = 5k \times 20 = 100k \text{ units}$$

Step 4: Time for A Alone

A's time to complete the work alone:

$$\text{Time}_A = \frac{\text{Total work}}{\text{A's rate}} = \frac{100k}{3k} = \frac{100}{3} \text{ days} \approx 33.\overline{3} \text{ days}$$

Step 5: Matching with Options

The exact time ($\frac{100}{3}$ days) doesn't match any options exactly. The closest is:

- (A) 30 days (under by 3.33 days)
- (D) 40 days (over by 6.66 days)

Alternative Interpretation

If we interpret the ratio as **time ratio** (3:2):

$$\text{A's time} = 3x \tag{1}$$

$$\text{B's time} = 2x \tag{2}$$

$$\text{Combined rate} = \frac{1}{3x} + \frac{1}{2x} = \frac{5}{6x} \tag{3}$$

$$\frac{5}{6x} = \frac{1}{20} \implies x = \frac{50}{3} \tag{4}$$

$$\text{A's time} = 3x = 50 \text{ days (not an option)} \tag{5}$$

Conclusion

The most reasonable answer based on the work rate interpretation is $\boxed{A}$ (30 days), acknowledging it's an approximation of the exact $\frac{100}{3}$ days solution.

Quick Tip

Use the formula: If two people work in a ratio and total time is known, distribute the work accordingly and then calculate individual time as: Time_A = Total time ÷ A's fraction

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3. Statement: "Every student must carry their ID card to enter the library."

Assumption:

1. Students without ID cards can't be identified.

2. ID cards help ensure security and regulation.

(A) Only assumption 1 is implicit

(B) Only assumption 2 is implicit

(C) Both are implicit

(D) Neither is implicit

Correct Answer: (B) Only assumption 2 is implicit

Solution:

Step 1: Analyze assumption 1:

This is not necessarily true. The rule doesn't imply that students can't be identified without ID — just that it's a rule to carry it.

Step 2: Analyze assumption 2:

Yes, asking students to carry ID cards logically assumes that they are needed for regulation and security.

So, only assumption 2 is valid.

Quick Tip

In assumption questions, only consider what is logically implied by the statement — not what might happen incidentally or outside the scope.

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4. A person walks 10 m North, then turns right and walks 5 m, then turns right again and walks 10 m. What direction is he facing now?

(1) North

(2) South

(3) East

(4) West

Correct Answer: (3) East

Solution:

Understanding Directions and Turns

To solve this problem, we need to carefully track both the movement and the facing direction after each turn. Remember that:

- A right turn changes your facing direction 90° clockwise
- The cardinal directions follow this sequence: North → East → South → West → North...

Step-by-Step Movement Analysis

Initial Position

- Starting point: Arbitrary origin (0,0)
- Initial facing direction: **North**

First Movement: 10 m North

- Action: Walks straight 10 meters North
- Result: Moves from (0,0) to (0,10)
- Facing direction remains: **North** (since no turn was made)

First Right Turn

- Current facing direction before turn: North
- Turning right from North:
  - North → East (90° clockwise turn)
- New facing direction: **East**

Second Movement: 5 m East

- Action: Walks 5 meters in the current facing direction (East)

- Result: Moves from (0,10) to (5,10)
- Facing direction remains: **East**

Second Right Turn

- Current facing direction before turn: East
- Turning right from East:
  - East $\rightarrow$ South (90° clockwise turn)
- New facing direction: **South**

Third Movement: 10 m South

- Action: Walks 10 meters in the current facing direction (South)
- Result: Moves from (5,10) to (5,0)
- Facing direction remains: **South**

Final Orientation After completing all movements:

- Final position: (5,0) relative to starting point
- Final facing direction: **South**

Verification

Let's verify the direction sequence:

1. Start facing North
2. After first right turn: East
3. After second right turn: South

This confirms our step-by-step analysis is correct.

Conclusion

After carefully tracking each movement and turn, we determine that the person is facing **South** at the end of all movements.

Answer The correct answer is $\boxed{2}$ (South).

Quick Tip

To solve direction problems, track each turn and direction step-by-step. Turning right from North leads to East; turning right from East leads to South.

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5. Pointing to a man, Rani says, ”He is the son of my mother’s only daughter.” How is the man related to Rani?

(A) Nephew

(B) Brother

(C) Cousin

(D) Son

Correct Answer: (B) Brother

Solution:

Step 1: Break Down the Statement

We need to analyze the phrase: ”He is the son of my mother’s only daughter.”

Step 2: Identify ”My Mother’s Only Daughter”

- ”My mother” refers to Rani’s mother.
- ”Only daughter” of Rani’s mother:
  - Rani could be this only daughter, or
  - Someone else could be the only daughter
- Since Rani is speaking, and assuming she is female (implied by the name), she is likely the ”only daughter.”
- Therefore, ”my mother’s only daughter” is Rani herself.

Step 3: Analyze ”Son of My Mother’s Only Daughter”

Now, the man is described as:

- ”The son of [my mother’s only daughter]”
- From Step 2, we’ve established that ”my mother’s only daughter” is Rani.
- Therefore, the man is ”the son of Rani.”

Step 4: Verify Possible Scenarios

Let's double-check if there are other interpretations:

- Could "my mother's only daughter" be someone other than Rani?
  - Only possible if Rani has a sister, but the term "only daughter" excludes this possibility.
- Is Rani necessarily the "only daughter"?
  - Yes, because if there were another daughter, she wouldn't be the "only" daughter.

Step 5: Determine the Relationship

Given that:

- The man is the son of Rani.
- Therefore, the man is Rani's son.

Conclusion

The man is Rani's son.

Answer

The correct answer is $\boxed{D}$ (Son).

Quick Tip

In blood relation questions, replace the phrases with actual names for clarity. Here: "My mother's only daughter" = Rani $\rightarrow$ "He is Rani's son."

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6. If DOOR is coded as EPPQ, then how is FISH coded?

(1) GJTG

(2) GJTI

(3) GKTJ

(4) GJUI

Correct Answer: (1) GJTG

Solution:

Pattern Analysis for DOOR $\rightarrow$ EPPQ

Letter	Alphabet Position	Transformation	Coded Letter
D (4)	4	+1	E (5)
O (15)	15	+1	P (16)
O (15)	15	+1	P (16)
R (18)	18	-1	Q (17)

Pattern Identified:

- First three letters: +1 position
- Last letter: -1 position

Applying Pattern to FISH

Letter	Alphabet Position	Transformation	Coded Letter
F (6)	6	+1	G (7)
I (9)	9	+1	J (10)
S (19)	19	+1	T (20)
H (8)	8	-1	G (7)

Result: FISH $\rightarrow$ GJTG

Conclusion The correct coding should be $\boxed{GJTG}$, but this option is not listed among the choices. There appears to be an error in the provided options.

Quick Tip

To decode letter patterns, convert each character to its alphabetical position (A = 1 to Z = 26), apply the transformation, and then revert.

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7. If $3 \times 4 = 25$**,** $5 \times 2 = 27$**,** $6 \times 3 = 39$**, then what is** $7 \times 5 =$?

(1) 61

(2) 65

(3) 71

(4) 73

Correct Answer: (3) 61

Solution:

Step 1: Analyze the given examples to identify the pattern

Let's examine how the result is obtained from the two numbers in each example. A common approach in such puzzles is to look at the product of the numbers and any additional value needed to reach the given result.

1. For $3 \times 4 = 25$: The direct product of the numbers is $3 \times 4 = 12$. The difference between the given result and the product is $25 - 12 = 13$.
2. For $5 \times 2 = 27$: The direct product of the numbers is $5 \times 2 = 10$. The difference between the given result and the product is $27 - 10 = 17$.
3. For $6 \times 3 = 39$: The direct product of the numbers is $6 \times 3 = 18$. The difference between the given result and the product is $39 - 18 = 21$.

Step 2: Identify the pattern in the "added" values

The values we added in each case are $13, 17, 21$.

Let's observe the relationship between these numbers:

- $17 - 13 = 4$
- $21 - 17 = 4$

This shows that the "added" values form an arithmetic progression with a common difference of 4.

Step 3: Determine the rule for the "added" value

Let the first number be A and the second number be B. We need to find a rule for the added value (K) in terms of A and B. Given the arithmetic progression, a linear relationship of the form $K = pA + qB$ is a good candidate.

Using the first two examples to set up a system of equations:

$$\text{For } (A, B) = (3, 4): \quad 3p + 4q = 13 \qquad (1) \tag{6}$$

$$\text{For } (A, B) = (5, 2): \quad 5p + 2q = 17 \qquad (2) \tag{7}$$

To solve for p and q: Multiply equation (2) by 2: $2 \times (5p + 2q) = 2 \times 17$ $10p + 4q = 34 \quad \&(3)$

Subtract equation (1) from equation (3):

$(10p + 4q) - (3p + 4q) = 34 - 13$

$7p = 21$

$p = 3$

Substitute the value of $p = 3$ into equation (2):

$5(3) + 2q = 17$

$15 + 2q = 17$

$2q = 2$

$q = 1$

Thus, the rule for the added value K is $\mathbf{K = 3A + B}$.

Step 4: Formulate the complete pattern

Based on our analysis, the complete pattern for the operation $A \times B$ is:

$\mathbf{A \times B = (A \times B) + (3A + B)}$

Step 5: Verify the complete pattern with all given examples

Let's ensure this rule holds true for all the provided examples:

- For $3 \times 4 = 25$: $(3 \times 4) + (3 \times 3 + 4) = 12 + (9 + 4) = 12 + 13 = 25$. (Matches)
- For $5 \times 2 = 27$: $(5 \times 2) + (3 \times 5 + 2) = 10 + (15 + 2) = 10 + 17 = 27$. (Matches)
- For $6 \times 3 = 39$: $(6 \times 3) + (3 \times 6 + 3) = 18 + (18 + 3) = 18 + 21 = 39$. (Matches)

The pattern is consistent and validated across all examples.

Step 6: Apply the pattern to solve the target problem

Now, we will use this established pattern to find the value of 7×5.

Here, $A = 7$ and $B = 5$.

Applying the rule:

$7 \times 5 = (7 \times 5) + (3 \times 7 + 5)$

$= 35 + (21 + 5)$

$= 35 + 26$

$= 61$

The final answer is $\mathbf{61}$.

Quick Tip

In number puzzles, check for patterns beyond standard arithmetic—try differences, sequences in the added values, or relations like square, cube, or increasing arithmetic sequences.

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8. A train crosses a platform 200 m long in 36 seconds and a pole in 18 seconds. Find the speed of the train.

(A) 20 m/s

(B) 15 m/s

(C) 25 m/s

(D) 10 m/s

Correct Answer: (A) 10 m/s

Solution: Let the speed of the train be v m/s

Time to cross a pole $= 18$ sec $\implies$ Length of train $= 18v$

Time to cross a platform $= 36$ sec $\implies$ Total distance $= 36v$

Also, Total distance $=$ Length of train $+$ Length of platform $= 18v + 200$

$$36v = 18v + 200 \Rightarrow 18v = 200 \Rightarrow v = \frac{200}{18} \approx 11.11 \text{ m/s}$$

Note: Nearest option is 10 m/s.

Quick Tip

When a train crosses a pole, it covers its own length. When it crosses a platform, it covers its own length plus platform length.

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9. Which of the following does not belong to the group?

(A) 121

(B) 144

(C) 169

(D) 225

Correct Answer: (B) 144

Solution: Step 1: Identify the nature of the numbers. All options are perfect squares:

$$121 = 11^2, \quad 144 = 12^2, \quad 169 = 13^2, \quad 225 = 15^2$$

Step 2: Analyze the base numbers.

- $11, 13, 15$ are odd numbers.
- 12 is an even number.

Step 3: Identify the odd one out. Only 144 is the square of an even number. Others are squares of odd numbers.

Hence, 144 does not belong to the group.

Quick Tip

Odd-one-out problems often rely on number properties such as parity, primality, or patterns.

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10. If TEAM is coded as UFBN, then WORK is coded as:

(A) XPSL

(B) XQSL

(C) XPSM

(D) XQTM

Correct Answer: (A) XPSL

Solution: TEAM $\rightarrow$ UFBN:

Each letter in TEAM is replaced by the next letter in the alphabet:

$$\text{T} \rightarrow \text{U}$$

$$\text{E} \rightarrow \text{F}$$

$$\text{A} \rightarrow \text{B}$$

$$\text{M} \rightarrow \text{N}$$

So the pattern is: shift each letter +1 forward.

Apply the same to WORK:

$$\text{W} \rightarrow \text{X}$$

$$\text{O} \rightarrow \text{P}$$

$$\text{R} \rightarrow \text{S}$$

$$\text{K} \rightarrow \text{L}$$

$$\text{WORK} \rightarrow \textbf{XPSL}$$

Quick Tip

In alphabet coding, check for consistent letter shifts (forward or backward) across the word.

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11. A number is increased by 25% and then decreased by 20%. What is the net % change?

A) 0%

B) 2% decrease

C) 5% increase

D) 10% increase

Correct Answer: (A) 0%

Solution: Step 1: Calculate the effect of 25% increase.

If the original number is x, after a 25% increase, it becomes:

$$x \times \left(1 + \frac{25}{100}\right) = 1.25x.$$

Step 2: Calculate the effect of 20% decrease on the new number. After decreasing by 20%, the number becomes:

$$1.25x \times \left(1 - \frac{20}{100}\right) = 1.25x \times 0.8 = 1.0x.$$

Step 3: Find the net change.

The final number is $1.0x$, which is the same as the original number x.

So, the net percentage change is:

$$\frac{1.0x - x}{x} \times 100\% = 0\%.$$

Quick Tip

When successive percentage increases and decreases are applied, multiply the corresponding multipliers:

$$(1 + \frac{p}{100}) \times (1 - \frac{q}{100})$$

to find the net effect.

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12. What is the angle between the hour and minute hand at 3:30?

A) 60°

B) 75°

C) 90°

D) 105°

Correct Answer: (B) 75°

Solution: Step 1: Calculate the minute hand angle from 12 o'clock.

At 30 minutes, the minute hand is at:

$$30 \times 6 = 180^\circ,$$

since each minute corresponds to 6°.

Step 2: Calculate the hour hand angle from 12 o'clock.

At 3:00, the hour hand is at $3 \times 30 = 90^\circ$.

In 30 minutes, the hour hand moves further:

$$\frac{30}{60} \times 30 = 15^\circ.$$

So, at 3:30, hour hand angle is:

$$90^\circ + 15^\circ = 105^\circ.$$

Step 3: Calculate the angle between the two hands.

Difference between hour and minute hands:

$$|105^\circ - 180^\circ| = 75^\circ.$$

Since this is less than 180°, it is the required angle.

Quick Tip

- Minute hand moves 6° per minute. - Hour hand moves 0.5° per minute (30 degrees per hour). - Angle between hands = absolute difference of their positions.
