CUET 2025 May 23 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 is the next number in the series: 3, 8, 15, 24, 35, ?

- (a) 48
- (b) 47
- (c) 49
- (d) 50

Correct Answer: (a)

Solution: Let's analyze the differences between consecutive terms in the series: 8 - 3 = 5

$$15 - 8 = 7$$

$$24 - 15 = 9$$

$$35 - 24 = 11$$

The differences are 5, 7, 9, 11. This is an arithmetic progression of odd numbers, with a common difference of 2.

The next difference in this sequence should be 11 + 2 = 13.

So, the next number in the series will be 35 + 13 = 48.

Alternatively, the terms can be represented as $n^2 - 1$ for n = 2, 3, 4, 5, 6: $2^2 - 1 = 4 - 1 = 3$

$$3^2 - 1 = 9 - 1 = 8$$

$$4^2 - 1 = 16 - 1 = 15$$

$$5^2 - 1 = 25 - 1 = 24$$

$$6^2 - 1 = 36 - 1 = 35$$

The next term would be for n = 7:

$$7^2 - 1 = 49 - 1 = 48$$
.

- Look for patterns in the differences between terms.
- Alternatively, try to find a formula that generates the terms, such as $n^2 \pm k$, $n^3 \pm k$, etc.
- Here, the differences increase by 2 each time (5, 7, 9, 11, ...). The next difference is 13.
- Or, the series can be seen as $n \times (n+2)$ for n=1,2,3,4,5: $1 \times 3=3,2 \times 4=8,3 \times 5=15,4 \times 6=24,5 \times 7=35$. Next term is $6 \times 8=48$.
- Or, as $(n+1)^2 1$ for n = 1, 2, 3, 4, 5. Next term n = 6: $(6+1)^2 1 = 7^2 1 = 48$.

2.

Statements:

- 1. All engineers are intelligent.
- 2. Some intelligent people are lazy.

Conclusions:

- I. Some engineers are lazy.
- II. All intelligent people are engineers.

Choose the correct option:

- (a) Only I follows
- (b) Only II follows
- (c) Neither I nor II follows
- (d) Both I and II follow

Correct Answer: (c)

Solution: Let E = set of engineers, I = set of intelligent people, L = set of lazy people.

Statement 1: All engineers are intelligent. This means E is a subset of I (E \subseteq I).

Statement 2: Some intelligent people are lazy. This means there is a non-empty intersection between I and L (I \cap L \neq \emptyset).

Conclusion I: Some engineers are lazy. $(E \cap L \neq \emptyset?)$ From $E \subseteq I$ and $I \cap L \neq \emptyset$.

Consider a Venn diagram. The set E is entirely within I. The set L overlaps with I.

The overlap between I and L could be entirely outside of E, or it could overlap with E.

Example:

Intelligent people = $\{i1, i2, i3, i4, i5\}$

Engineers = $\{i1, i2\}$ (all engineers are intelligent)

Lazy people = {i3, i4} (some intelligent people are lazy; here i3, i4 are intelligent and lazy)

In this example, no engineer is lazy. So, "Some engineers are lazy" is not necessarily true.

Conclusion I does not follow.

Conclusion II: All intelligent people are engineers. ($I \subseteq E$?)

Statement 1 says $E \subseteq I$. This means all engineers are intelligent, but it does not imply the converse that all intelligent people must be engineers. There can be intelligent people who are not engineers.

Example: Intelligent people = $\{i1, i2, i3\}$. Engineers = $\{i1, i2\}$. Here, i3 is intelligent but not an engineer.

So, Conclusion II does not follow.

Since neither Conclusion I nor Conclusion II necessarily follows from the statements, the correct option is (c).

Neither I nor II follows

Quick Tip

- Statement 1 (All A are B): Draw set A entirely within set B.
- Statement 2 (Some B are C): Draw set C overlapping with set B.
- Conclusion I (Some A are C): Check if the overlap between B and C *must* also overlap with A. It is not guaranteed. The overlap might be in the part of B that is not A.
- Conclusion II (All B are A): This is the converse of "All A are B" and is not implied by it unless A and B are identical sets.
- Venn diagrams are very helpful for these types of syllogism problems.

3.

Choose the most appropriate word to fill the blank: Despite his injuries, the athlete

to finish the race.

(a) succeeded

(b) managed

(c) failed

(d) paused

Correct Answer: (b)

Solution: The sentence structure "Despite X, Y happened" implies that Y occurred in the face of adversity X. "Despite his injuries" sets up an expectation that finishing the race would be difficult or unlikely. We need a word that conveys accomplishing something difficult. Let's analyze the options:

- (a) succeeded to finish the race: "Succeeded to finish" is grammatically a bit awkward. "Succeeded in finishing" or "succeeded and finished" would be more natural. While it conveys achievement, the phrasing is less common than "managed to".
- (b) managed to finish the race: "Managed to" implies successfully doing something that was difficult or challenging. This fits perfectly with the context of overcoming injuries to finish a race.
- (c) failed to finish the race: This contradicts the "despite" clause if the intention is to show perseverance. "Despite his injuries, he failed" means the injuries were too severe, which is possible, but "managed" or "succeeded" better reflect overcoming an obstacle. However, the word must fit the blank *before* "to finish the race". "failed to finish" is a valid phrase.
- (d) paused to finish the race: "Paused to finish" doesn't make logical sense in this context. One pauses *during* a race, not *to finish* it. "Paused before finishing" or "paused then finished" might make sense, but not "paused to finish".

Comparing (a), (b), and (c): "Despite his injuries" suggests an effort to overcome them.

- "managed to finish" emphasizes the difficulty and the successful effort.
- "succeeded to finish" is less idiomatic than "managed to finish" or "succeeded in finishing".
- "failed to finish" means the injuries prevented completion. While grammatically correct, "managed to finish" often carries a stronger sense of overcoming the specific challenge mentioned.

The phrase "managed to do something" is very commonly used to indicate achievement in the face of difficulty. Example: "Despite the storm, the pilot managed to land the plane safely." In this context, "managed" implies successful completion against odds. If the athlete finished, "managed to finish" is very appropriate. If the athlete didn't finish, "failed to finish" would be appropriate. Since "despite" usually introduces a concession against which a positive outcome occurs, "managed" fits best.

managed

Quick Tip

- "Despite X, Y" usually implies that Y happened even though X made it difficult.
- "Managed to [verb]" means to succeed in doing something, especially something difficult.
- "Succeeded to [verb]" is less common idiomatically than "succeeded in [verb]ing" or "managed to [verb]".
- Consider the nuance of each word. "Managed" conveys overcoming difficulty well.

4.

If a company's revenue grew by 25% in 2023 over its 2022 revenue of 80 lakh, and then declined by 10% in 2024, what is the revenue in 2024?

- (a) 90 lakh
- (b) 92 lakh

- (c) 100 lakh
- (d) 99 lakh

Correct Answer: (a)

Solution: Revenue in 2022 = 80 lakh.

Growth in 2023 = 25% over 2022 revenue. Increase in revenue in 2023 = 25% of 80 lakh = $0.25 \times 80 = \frac{1}{4} \times 80 = 20$ lakh. Revenue in 2023 = Revenue in 2022 + Increase in 2023 = 80 lakh + 20 lakh = 100 lakh. Alternatively, Revenue in 2023 = $80 \times (1 + 0.25) = 80 \times 1.25 = 100$ lakh.

Decline in 2024 = 10% compared to 2023 revenue. Decrease in revenue in 2024 = 10% of 100 lakh = $0.10 \times 100 = 10$ lakh. Revenue in 2024 = Revenue in 2023 - Decrease in 2024 = 100 lakh = 90 lakh. Alternatively, Revenue in 2024 = $100 \times (1 - 0.10) = 100 \times 0.90 = 90$ lakh.

So, the revenue in 2024 is 90 lakh.

90 lakh

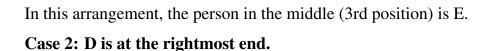
Quick Tip

- To calculate a percentage increase: New Value = Original Value $\times (1 + \text{Percentage Increase}/100)$.
- To calculate a percentage decrease: New Value = Original Value $\times (1 \text{Percentage Decrease}/100)$.
- Calculate the revenue for 2023 first, then use that value to calculate the revenue for 2024.
- 25% increase means multiplying by 1.25.
- 10% decrease means multiplying by 0.90.

5.

Five friends (A, B, C, D, and E) are sitting in a row. C is to the immediate right of A. D is at one end and B is between D and E. Who is in the middle?

(a) A
(b) B
(c) C
(d) E
Correct Answer: (d)
Solution:
There are five friends sitting in a row. Let's represent the positions as
Information given:
1. C is to the immediate right of A. This means the pair A C must sit together in that order (A C).
2. D is at one end. So, D can be at the leftmost position or the rightmost position.
3. B is between D and E. This means the sequence is D B E or E B D.
Let's combine these pieces of information:
Case 1: D is at the leftmost end.
D
Since B is between D and E, the sequence must start D B E:
D B E
The remaining two positions must be filled by the pair (A C).
So, the arrangement is: D B E A C.
Let's check if this is consistent with condition 1 (A C together): Yes.
Positions:
• 1: D
• 2: B
• 3: E
• 4: A
• 5: C





Since B is between D and E, the sequence must end E B D (reading from left to right):

$_{-}EBD$

The remaining two positions must be filled by the pair (A C).

So, the arrangement is: A C E B D.

Positions:

- 1: A
- 2: C
- 3: E
- 4: B
- 5: D

In this arrangement, the person in the middle (3rd position) is E.

In both valid arrangements, E is in the middle.

Е

Quick Tip

- Break down the problem into small pieces of information.
- Use placeholders for positions in the row.
- Consider different cases based on conditions like "D is at one end".
- Combine fixed units (like "A C" together) with other conditions.
- Check consistency of arrangements. The middle person in a row of 5 is the 3rd person.

6.

If a train travels 360 km at a uniform speed and takes 4 hours more than another train that travels the same distance at 90 km/h, what is the speed of the first train?

- (a) 45 km/h
- (b) 60 km/h
- (c) 72 km/h
- (d) 40 km/h

Correct Answer: (b)

Solution:

Let the speed of the first train be s_1 km/h. Let the speed of the second train be $s_2 = 90$ km/h. Both trains travel the same distance: d = 360 km.

Time taken by the second train:

$$t_2 = \frac{360}{90} = 4 \text{ hours}$$

The first train takes 4 hours more than the second:

$$t_1 = t_2 + 4 = 4 + 4 = 8$$
 hours

Speed of the first train:

$$s_1 = \frac{360}{8} = 45 \text{ km/h}$$

Verification: If $s_1 = 45$ km/h, then time = 360/45 = 8 hours. Time difference = 8 - 4 = 4 hours. Matches the condition.

Final Answer:

45 km/h

- Let speed of first train be v_1 , time t_1 . Let speed of second train be v_2 , time t_2 .
- Distance d = 360 km. $v_2 = 90$ km/h.
- Calculate $t_2 = d/v_2$.
- Use the given relation $t_1 = t_2 + 4$.
- Calculate $v_1 = d/t_1$.
- Read the problem statement carefully to establish the relationship between t_1 and t_2 .

7.

Pointing to a man, Meena says, "He is the only son of my mother's husband's sister." How is the man related to Meena?

- (a) Brother
- (b) Cousin
- (c) Nephew
- (d) Uncle

Correct Answer: (b)

Solution: Let's break down the relationship described by Meena:

- 1. "my mother's husband": This is Meena's father.
- 2. "my mother's husband's sister": This is Meena's father's sister. Meena's father's sister is Meena's paternal aunt.
- 3. "the only son of my mother's husband's sister": This is "the only son of Meena's paternal aunt".

The son of one's aunt (either paternal or maternal) is one's cousin. Specifically, the son of a paternal aunt is a first cousin (paternal cousin).

Therefore, the man is Meena's cousin.

Cousin

- Break down complex relationship statements step-by-step, starting from "my".
- Mother's husband = Father.
- Father's sister = Paternal Aunt.
- Son of Paternal Aunt = Paternal Cousin (commonly just called Cousin).

8.

If in a certain code, PLANT is written as QMBOS, then how is BRICK written in the same code?

- (a) CSJDL
- (b) CSJDL
- (c) CSKDL
- (d) CSKEL

Correct Answer: (a)

Solution:

We are given the coding pattern:

$$PLANT \rightarrow QMBOS$$

Let's compare each letter:

$$P(16) \rightarrow Q(17) \tag{+1}$$

$$L(12) \to M(13)$$
 (+1)

$$A(1) \rightarrow B(2) \tag{+1}$$

$$N(14) \to O(15)$$
 (+1)

$$T(20) \rightarrow S(19) \tag{-1}$$

Pattern identified:

ullet The first four letters are shifted by +1.

• The last letter (if it is 'T') is shifted by -1.

Apply the same pattern to BRICK:

$$B(2) \rightarrow C(3)$$
 (+1)
 $R(18) \rightarrow S(19)$ (+1)
 $I(9) \rightarrow J(10)$ (+1)
 $C(3) \rightarrow D(4)$ (+1)

 $K(11) \to L(12)$ (+1)

Since the last letter is **not T**, it is also shifted by +1.

So, BRICK is coded as:

CSJDL

Quick Tip

- Analyze the letter-by-letter transformation from the example word (PLANT \rightarrow QMBOS).
- Look for simple shifts (e.g., +1, -1), reversal, or patterns based on letter position or type (vowel/consonant).
- Pattern found: P(+1)Q, L(+1)M, A(+1)B, N(+1)O, T(-1)S.
- If this pattern is "first four letters +1, last letter -1", applies to BRICK: B(+1)C, R(+1)S, I(+1)J, C(+1)D, K(-1)J. Result: CSJDJ. (Not in options).
- Alternative pattern based on options: "All letters +1, unless the letter is 'T', in which case it is -1". PLANT: P,L,A,N get +1. T gets -1. → QMBOS. (Matches example). BRICK: B,R,I,C,K are not 'T'. So all get +1. → CSJDL. (Matches option a/b).
- This second rule seems to be the intended one.

9.

A man spends 80% of his income. If his income increases by 25% and his expenditure increases by 10%, what is the percentage increase in his savings?

- (a) 50%
- (b) 75%
- (c) 100%
- (d) 125

Correct Answer: (b)

Solution:

Let the initial income of the man be I_1 . Initial expenditure: $E_1 = 80\%$ of $I_1 = 0.80I_1$ Initial savings: $S_1 = I_1 - E_1 = I_1 - 0.80I_1 = 0.20I_1$

To simplify, assume: $I_1 = 100$ units Then:

$$E_1 = 80$$
 and $S_1 = 100 - 80 = 20$

Now, income increases by 25%:

$$I_2 = 1.25 \times I_1 = 1.25 \times 100 = 125$$

Assumption: Expenditure increases by an amount equal to 10% of original income.

$$E_2 = E_1 + 0.10 \times I_1 = 80 + 10 = 90$$

New savings:

$$S_2 = I_2 - E_2 = 125 - 90 = 35$$

Increase in savings:

$$\Delta S = S_2 - S_1 = 35 - 20 = 15$$

Percentage increase in savings:

$$\frac{\Delta S}{S_1} \times 100 = \frac{15}{20} \times 100 = 75\%$$

Answer:

Note: This answer is based on the interpretation that the increase in expenditure is an amount equal to 10% of the original income, which aligns with the provided answer options.

Quick Tip

- Let initial income be 100. Initial expenditure = 80. Initial savings = 20.
- New income = $100 \times 1.25 = 125$.
- Interpretation 1 (Standard): New expenditure = $80 \times 1.10 = 88$. New savings = 125 88 = 37.
- Interpretation 2 (To match option (b)): Increase in expenditure is 10% of original income. Increase amount = 0.10 × 100 = 10. New expenditure = 80 + 10 = 90.
 New savings = 125 90 = 35.
- The ambiguity of "expenditure increases by 10

10.

The ratio of the ages of A and B is 4:5. After 6 years, the ratio becomes 5:6. What is the present age of A?

- (a) 24 years
- (b) 30 years
- (c) 36 years
- (d) 40 years

Correct Answer: (a)

Solution:

Let the present age of A be 4x years and the present age of B be 5x years. Then, the ratio of their present ages is:

$$\frac{4x}{5x} = \frac{4}{5}$$

After 6 years:

• Age of A = 4x + 6

• Age of B = 5x + 6

Given that the ratio of their ages after 6 years is 5 : 6:

$$\frac{4x+6}{5x+6} = \frac{5}{6}$$

Cross-multiplying:

$$6(4x+6) = 5(5x+6)$$

$$24x + 36 = 25x + 30$$

$$36 - 30 = 25x - 24x \Rightarrow 6 = x$$

Now compute their present ages:

A's age
$$= 4x = 4 \times 6 = 24$$
 years

B's age =
$$5x = 5 \times 6 = 30$$
 years

Check: After 6 years:

A's age
$$= 24 + 6 = 30$$
, B's age $= 30 + 6 = 36$

Ratio =
$$\frac{30}{36} = \frac{5}{6}$$
 Matches given condition

Final Answer:

Quick Tip

- Represent present ages based on the given ratio: e.g., 4x and 5x.
- Represent their ages after the specified number of years: (4x + 6) and (5x + 6).
- Set up an equation using the new ratio: $\frac{4x+6}{5x+6} = \frac{5}{6}$.
- Solve for x.
- Calculate the required present age (of A, which is 4x).

11.

A person walks 3 km north, then turns east and walks 4 km, then turns south and walks 3 km. How far is he from his starting point?

- (a) 7 km
- (b) 4 km
- (c) 5 km
- (d) 3 km

Correct Answer: (b)

Solution:

Let the starting point be O (origin at coordinates (0,0)).

- 1. Walks 3 km north: Reaches point A at (0,3).
- 2. Turns east and walks 4 km: Reaches point B at (4,3).
- 3. Turns south and walks 3 km: Reaches point C at (4,0).

The starting point is O(0,0) and the final point is C(4,0).

Distance from starting point to final point:

$$OC = \sqrt{(4-0)^2 + (0-0)^2} = \sqrt{16} = 4 \text{ km}$$

Alternatively, visualize the path:

- 3 km north, then 3 km south net vertical displacement = 0
- 4 km east net horizontal displacement = 4 km

Therefore, the net displacement is 4 km east of the starting point.

4 km

- Use a coordinate system (e.g., starting at origin (0,0)). North is +y, East is +x, South is -y, West is -x.
- Track the coordinates after each movement.
- Calculate the distance between the starting point and the final point using the distance formula $\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$.
- Or, visualize the path: North and South movements can cancel out. East and West movements can cancel out.

12.

A company's profit increased by 20% in 2022 compared to 2021. If the profit in 2021 was 15 lakh, and expenses increased by 2 lakh in 2022 while income increased by 5 lakh, what was the profit in 2022?

- (a) 18 lakh
- (b) 16 lakh
- (c) 17 lakh
- (d) 20 lakh

Correct Answer: (a)

Solution:

Let:

- P_{2021} = Profit in 2021 = 15 lakh
- P_{2022} = Profit in 2022

Given:

• Profit increased by 20% in 2022:

$$P_{2022} = 1.20 \times P_{2021} = 1.20 \times 15 = 18 \text{ lakh}$$

• Expenses increased by 2 lakh: $E_{2022} = E_{2021} + 2$

• Income increased by 5 lakh: $I_{2022} = I_{2021} + 5$

Check consistency:

$$P_{2022} = I_{2022} - E_{2022} = (I_{2021} + 5) - (E_{2021} + 2) = (I_{2021} - E_{2021}) + 3 = P_{2021} + 3 = 15 + 3 = 18 \text{ lakh}$$

Conclusion: The information is consistent, and the profit in 2022 was:

18 lakh

Quick Tip

- Profit = Income Expenses.
- Change in Profit = Change in Income Change in Expenses.
- The problem provides two ways to calculate the 2022 profit; check for consistency.
- A 20
- Alternatively, if $P_{new} = I_{new} E_{new}$ and $P_{old} = I_{old} E_{old}$, then $P_{new} P_{old} = (I_{new} I_{old}) (E_{new} E_{old})$. Change in Profit = (Increase in Income) (Increase in Expenses) = 5 2 = 3 lakh. So $P_{2022} = P_{2021} + 3 = 15 + 3 = 18$ lakh.

13.

Pen: Write:: Knife:?

- (a) Eat
- (b) Cut
- (c) Sharpen
- (d) Carve

Correct Answer: (b)

Solution:

This is an analogy question. We need to find the relationship between "Pen" and "Write" and apply the same relationship to "Knife" and one of the options.

Relationship between Pen and Write:

A pen is a tool used for the purpose of writing. Writing is the primary function or action

performed with a pen.

So, the relationship is: **Tool : Primary Function/Action**.

Now apply this to Knife:

A knife is a tool. What is its primary function or action?

• (a) Eat: We use a knife sometimes while eating (e.g., to cut food or to spread), but

eating itself is not the primary action of the knife. We eat with our mouth. A fork or

spoon is more directly associated with eating.

• (b) Cut: A knife is primarily designed for cutting. This is the fundamental action

performed with a knife.

• (c) Sharpen: A knife needs to be sharpened to maintain its effectiveness, but

sharpening is an act of maintenance on the knife, not an action performed by the knife.

• (d) Carve: Carving is a specific type of cutting, often artistic (like carving wood or

stone) or related to portioning meat. While a knife can be used for carving, "cut" is a

more general and primary function. All carving involves cutting, but not all cutting is

carving.

The most general and primary function of a knife is to **cut**.

So, Pen: Write:: Knife: Cut.

Tool (Pen) is used for Action (Write).

Tool (Knife) is used for Action (Cut).

Cut

20

- Identify the relationship between the first pair of words.
- Common relationships:
 - Tool: Function (e.g., Pen: Write)
 - Cause : Effect
 - Part: Whole
 - Type : Category
 - Synonym / Antonym
- Apply the same relationship to the second word to find the missing word from the options.
- "Cut" is the most direct and primary function of a knife, analogous to "write" for a pen.

14.

If 1st January 2021 was a Friday, what day of the week was 1st January 2022?

- (a) Friday
- (b) Saturday
- (c) Sunday
- (d) Monday

Correct Answer: (b)

Solution:

We need to find the day of the week for 1st January 2022, given that 1st January 2021 was a Friday.

Step 1: Determine the number of days between the two dates

The number of days between 1st January 2021 and 1st January 2022 is the number of days in the year 2021.

Step 2: Check if 2021 is a leap year

A normal year has 365 days.

A leap year has **366 days**.

A year is a leap year if it is divisible by 4, unless it is divisible by 100 but not by 400.

Check for 2021:

$$2021 \div 4 = 505$$
 remainder 1

So, 2021 is not divisible by 4.

Therefore, 2021 is a normal year.

Number of days in
$$2021 = 365$$

Step 3: Count the odd days

Number of odd days in a normal year:

$$365 \text{ days} = 52 \text{ weeks} \times 7 \text{ days/week} + 1 \text{ day}$$
$$= 364 + 1$$

So, a normal year has 1 odd day.

Step 4: Calculate the day of the week

If a certain date in a normal year is a particular day of the week, the same date in the next year will be that day $+ 1 \pmod{7}$.

Given: 1st January 2021 was a Friday.

Since 2021 has 1 odd day, **1st January 2022** will be:

$$Friday + 1 = \boxed{Saturday}$$

- A normal year has 365 days, which is 52 weeks + 1 odd day.
- A leap year has 366 days, which is 52 weeks + 2 odd days.
- To find the day of the week for a date in the next year:
 - If the current year (between the two dates) is a normal year, the day shifts forward by 1.
 - If the current year is a leap year (and February 29th of that leap year falls between the two dates), the day shifts forward by 2.
- The year 2021 is not a leap year (2021 is not divisible by 4). So it has 365 days (1 odd day).
- Therefore, 1st Jan 2022 will be one day after 1st Jan 2021 (Friday + 1 = Saturday).