CG Pre B.Ed. 2026

Question Paper with Solutions

Conducted by CGSSB

General Instructions

(i) **Duration:** The total duration of the examination is 120 minutes.

(ii) **Total Marks:** The paper carries a maximum of 100 marks.

(iii) **Questions:** The paper has 100 questions.

(iv) **Marking Scheme:** Each question carries 1 mark and there is no negative marking for incorrect answers.

1. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-
Assertion [As] : Mercury is the farthest planet from the Sun.
Reason [R] : Mercury is the smallest planet in the entire solar system.

(A) Both [As] and [R] are true, and [R] is the correct explanation of [As].
(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].
(C) [As] is true, but [R] is false.
(D) [As] is false, but [R] is true.

Correct Answer: (D) [As] is false, but [R] is true.

Solution:

Step 1: Understanding the Question:
We need to analyze the correctness of the given Assertion [As] and Reason [R] and determine the relationship between them.

Step 2: Detailed Explanation:

- Let us evaluate the Assertion [As]: "Mercury is the farthest planet from the Sun." This statement is scientifically false. Mercury is actually the closest planet to the Sun, while Neptune is the farthest.
- Let us evaluate the Reason [R]: "Mercury is the smallest planet in the entire solar system." This statement is scientifically true. Since Pluto was reclassified as a dwarf planet, Mercury is indeed the smallest of the eight planets in our solar system.
- Since the Assertion is false and the Reason is true, we conclude that [As] is false, but [R] is true.

Step 3: Final Answer:

(D) [As] is false, but [R] is true.

Quick Tip: In Assertion-Reason questions, always evaluate the two statements independently first. If you find that either statement is false, you can immediately eliminate three options and arrive at the correct answer without needing to find a causal relationship.

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2. Read the following information carefully and answer the question from the given options:
If 'A + B' means 'A' is the son of 'B', 'A − B' means 'A' is the wife of 'B', 'A × B' means 'A' is the brother of 'B', 'A ÷ B' means 'A' is the mother of 'B' and 'A = B' means 'A' is the sister of 'B'.
What does 'P + R − Q' mean?

(A) 'Q' is the father of 'P'
(B) 'Q' is the uncle of 'P'
(C) 'Q' is the son of 'P'
(D) 'Q' is the brother of 'P'

Correct Answer: (A) 'Q' is the father of 'P'

Solution:

Step 1: Understanding the Question:

We are given coded relationships between variables. We need to decode the expression 'P + R − Q' to identify the relationship between Q and P.

Step 2: Detailed Explanation:

Let us break down the expression 'P + R − Q' step-by-step:

- Part 1: 'P + R'

According to the given definition, '+' means 'is the son of'. Therefore, 'P + R' means P is the son of R. This implies P is male and R is a parent of P.

- Part 2: 'R − Q'

According to the given definition, '−' means 'is the wife of'. Therefore, 'R − Q' means R is the wife of Q. This implies R is female and Q is male, being the husband of R.

- Combining both parts:

Since R is the mother of P (as P is her son) and R is married to Q, Q must be the father of P. Therefore, 'Q' is the father of 'P'.

Step 3: Final Answer:

(A) 'Q' is the father of 'P'

Quick Tip: Draw a simple family tree using symbols for gender (e.g., + for male, − for female) and relationships (e.g., horizontal lines for marriage/siblings and vertical lines for generations) to easily trace the family lineage.

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3. If OVER is coded as QYIW and UP as WS, then STAR is coded as:

(A) UWEV

(B) UWDV

(C) UVBS

(D) UWEW

Correct Answer: (D) UWEW

Solution:

Step 1: Understanding the Question:

We need to identify the pattern used to encode the words 'OVER' to 'QYIW' and 'UP' to 'WS', and then apply this pattern to encode the word 'STAR'.

Step 2: Detailed Explanation:

Let us find the letter-to-letter shifts by looking at their numerical positions in the alphabet:

For the word 'OVER' coded as 'QYIW':

- O (15) → Q (17) : Shift is +2
- V (22) → Y (25) : Shift is +3
- E (5) → I (9) : Shift is +4
- R (18) → W (23) : Shift is +5

The pattern is an increasing incremental shift: +2, +3, +4, +5.

Let us verify this with 'UP' coded as 'WS':

- U (21) → W (23) : Shift is +2
- P (16) → S (19) : Shift is +3

The pattern holds true.

Now, let us apply this pattern to 'STAR':

- S (19) +2 → U (21)
- T (20) +3 → W (23)
- A (1) +4 → E (5)
- R (18) +5 → W (23)

Combining these letters, 'STAR' is coded as 'UWEW'.

Step 3: Final Answer:

(D) UWEW

Quick Tip: Always write down the numerical values of the letters on your rough sheet. Working with numbers (15 → 17) is faster and less prone to manual counting errors than working with letters.

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4. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-
Assertion [As] : The Indian Constitution came into force with effect from 26^{th} January 1950.
Reason [R] : 26^{th} January is celebrated as Republic Day.

(A) Both [As] and [R] are true, and [R] is the correct explanation of [As].
(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].
(C) [As] is true, but [R] is false.
(D) [As] is false, but [R] is true.

Correct Answer: (B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].

Solution:

Step 1: Understanding the Question:
We need to evaluate the truth value of the given Assertion [As] and Reason [R] and determine if the Reason explains why the Assertion occurred.

Step 2: Detailed Explanation:
- Let us evaluate the Assertion [As]: "The Indian Constitution came into force with effect from 26^{th} January 1950." This statement is historically correct.
- Let us evaluate the Reason [R]: "26^{th} January is celebrated as Republic Day." This statement is also correct because India became a democratic republic on this date.
- Now, let us check for a causal connection:
Does the Constitution coming into force happen *because* 26^{th} January is celebrated as Republic Day? No. In fact, the reverse is true: 26^{th} January is celebrated as Republic Day *because* the Constitution came into force on that day.
Therefore, while both statements are true, [R] is not the correct explanation of [As].

Step 3: Final Answer:

(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].

Quick Tip: To test if [R] is the correct explanation of [As], read the assertion, insert the word "BECAUSE", and then read the reason. If the resulting sentence makes logical and historical sense, then [R] is the correct explanation. Here, "The Constitution came into force because we celebrate Republic Day" is logically incorrect.

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5. Some equations have been solved based on a certain system. From the given options, write the answer of the equation that has not been solved-

$7 - 4 - 1 = 714$

$9 - 2 - 3 = 932$

$8 - 0 - 4 = ?$

(A) 804

(B) 840

(C) 408

(D) 480

Correct Answer: (B) 840

Solution:

Step 1: Understanding the Question:

We need to decode the mathematical operation system used in the examples to solve the final equation.

Step 2: Detailed Explanation:

Let us represent the LHS of each equation as three digits: $A - B - C$.

- For the first equation: $7 - 4 - 1$. Here, $A = 7, B = 4, C = 1$.

The result is 714. Notice the placement of digits:

- First digit of output is A (which is 7).
- Second digit of output is C (which is 1).
- Third digit of output is B (which is 4).

So, the pattern is: $A - B - C \rightarrow ACB$.

- Let us check this pattern with the second equation: $9 - 2 - 3$. Here, $A = 9, B = 2, C = 3$.

According to the pattern ACB, the output should be 932. This perfectly matches the given result.

- Let us apply this pattern to the third equation: $8 - 0 - 4$. Here, $A = 8, B = 0, C = 4$.

Applying the pattern ACB, the result is 840.

Step 3: Final Answer:

(B) 840

Quick Tip: In these types of puzzles, do not perform actual subtraction. Treat the operators merely as separators of digits and track how the positions of the digits rearrange from the left-hand side to the right-hand side.

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6. Find the next term in the alpha-numeric series-

Z1A, X2D, V6G, T21J, R88M, P445P, ?

(A) N2676S

(B) N2676T

(C) T2670N

(D) T2676N

Correct Answer: (A) N2676S

Solution:

Step 1: Understanding the Question:

We need to identify the mathematical and alphabetical patterns governing the three distinct parts (first letter, middle number, last letter) of each term in the series to find the next term.

Step 2: Detailed Explanation:

Let us analyze each of the three components separately:

1. **First Letter Series:**

$$Z\ (26) \rightarrow X\ (24) \rightarrow V\ (22) \rightarrow T\ (20) \rightarrow R\ (18) \rightarrow P\ (16)$$

The letters are moving backward by 2 steps. The next letter must be $16 - 2 = 14$, which corresponds to **N**.

2. **Middle Number Series:**

The numbers are: $1, 2, 6, 21, 88, 445$

Let us find the relationship:

- $1 \times 1 + 1 = 2$
- $2 \times 2 + 2 = 6$
- $6 \times 3 + 3 = 21$
- $21 \times 4 + 4 = 88$
- $88 \times 5 + 5 = 445$

Following this rule, the next number is:

- $445 \times 6 + 6 = 2670 + 6 = 2676$

3. **Last Letter Series:**

$$A\ (1) \rightarrow D\ (4) \rightarrow G\ (7) \rightarrow J\ (10) \rightarrow M\ (13) \rightarrow P\ (16)$$

The letters are moving forward by 3 steps. The next letter must be $16 + 3 = 19$, which corresponds to **S**.

Combining the three parts, we get **N2676S**.

Step 3: Final Answer:

(A) N2676S

Quick Tip: To save time, look at the options first. Since the first letter is N in both options A and B, you only need to determine whether the last letter is S or T, which is much faster than computing the entire middle number.

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7. In the following sequence find the odd one out-

(A) Eyes
(B) Nose
(C) Eat
(D) Oats

Correct Answer: (D) Oats

Solution:

Step 1: Understanding the Question:
We need to analyze the common relationships among the given choices to identify the option that does not belong to the group.

Step 2: Detailed Explanation:
Let us classify the given options:
- **Eyes** is a physical sensory organ located on the human face.
- **Nose** is a physical sensory organ located on the human face.
- **Eat** is a biological function associated with the mouth, which is located on the human face.
- **Oats** is an agricultural cereal grain and a food product.

While Eyes, Nose, and the action of eating are all directly related to the anatomy and biological functions of the human head/face, ”Oats” is an external food item. Thus, ”Oats” is the odd one out.

Step 3: Final Answer:
(D) Oats

Quick Tip: When resolving "odd one out" word problems, think of the broadest semantic category that unites three of the options. Here, "parts and functions of the human face" neatly groups Eyes, Nose, and Eat together.

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8. Match the following-

Column-I	Column-II
(a) Women, Mothers, Widows	(I) 
(b) Authors, Teachers, Men	(II) 
(c) Sparrows, Birds, Mice	(III) 
(d) Tea, Coffee, Beverages	(IV) 

Choose the correct answer from the options given below:

(A) a-IV, b-I, c-II, d-III

(B) a-I, b-II, c-III, d-IV

(C) a-IV, b-III, c-II, d-I

(D) a-I, b-IV, c-III, d-II

Correct Answer: (A) a-IV, b-I, c-II, d-III

Solution:

Step 1: Understanding the Question:

We need to match the word groups in Column-I to their logical representation using Venn diagrams in Column-II.

Step 2: Detailed Explanation:

Let us analyze each group individually:

- **(a) Women, Mothers, Widows:**

All mothers are women, and all widows are women. Some mothers are also widows, and some widows are mothers. Thus, both ”Mothers” and ”Widows” circles must reside completely inside the larger ”Women” circle and must intersect each other. This is represented by diagram (IV). Thus, a-IV.

- **(b) Authors, Teachers, Men:**

Some authors are teachers, some teachers are men, and some men are authors. There are also individuals who are authors, teachers, and men simultaneously. This is represented by three mutually intersecting circles, which is diagram (I). Thus, b-I.

- **(c) Sparrows, Birds, Mice:**

All sparrows are birds, so the ”Sparrows” circle is completely inside the ”Birds” circle. Mice are mammals and are completely separate from birds. This is represented by a circle inside a circle with a separate external circle, which is diagram (II). Thus, c-II.

- **(d) Tea, Coffee, Beverages:**

Both tea and coffee are types of beverages, so both circles are completely inside the ”Beverages” circle. However, tea and coffee are entirely distinct from each other and do not intersect. This is represented by one large circle containing two separate smaller circles, which is diagram (III). Thus, d-III.

Comparing this matching (a-IV, b-I, c-II, d-III) with the options, it corresponds to Option (A).

Step 3: Final Answer:

(A) a-IV, b-I, c-II, d-III

Quick Tip: To solve matching questions quickly, find the easiest pair first. For example, "Tea, Coffee, Beverages" easily corresponds to (III). Knowing d-III immediately eliminates options B, C, and D, leading directly to option A!

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9. If all the surfaces of a cube of 15 cm side are coloured black and then cut into smaller cubes of sides 3 cm each, then find how many cubes will have only one surface coloured in black?

(A) 18
(B) 24
(C) 36
(D) 54

Correct Answer: (D) 54

Solution:

Step 1: Understanding the Question:
A large painted cube of side 15 cm is cut into smaller cubes of side 3 cm. We need to determine the number of smaller cubes that have exactly one face painted.

Step 2: Key Formula or Approach:
When a larger cube of side L is cut into smaller cubes of side s, the number of divisions along one edge is:

$$n = \frac{L}{s}$$

The number of smaller cubes having exactly one face painted is given by:

$$N_1 = 6 \times (n-2)^2$$

Step 3: Detailed Explanation:

Given:

- Side of larger cube, $L = 15\,\text{cm}$
- Side of smaller cubes, $s = 3\,\text{cm}$

First, calculate n:

$$n = \frac{15}{3} = 5$$

Now, substitute $n = 5$ into the formula for one-face painted cubes:

$$N_1 = 6 \times (5 - 2)^2$$

$$N_1 = 6 \times (3)^2$$

$$N_1 = 6 \times 9 = 54$$

Thus, there are 54 smaller cubes with only one surface painted black.

Step 4: Final Answer:

(D) 54

Quick Tip: Remember the formulas for a cut painted cube:

- 3 faces painted = 8 (always the corners)
- 2 faces painted = $12(n - 2)$ (on the edges)
- 1 face painted = $6(n - 2)^2$ (on the face centers)
- 0 faces painted = $(n - 2)^3$ (the inner core)

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10. Arrange the following in a meaningful order-

Doctor, Fever, Medicine, Medical shop

(A) Medicine, Doctor, Medical shop, Fever

(B) Doctor, Medical shop, Medicine, Fever

(C) Fever, Doctor, Medical shop, Medicine

(D) Medical shop, Medicine, Fever, Doctor

Correct Answer: (C) Fever, Doctor, Medical shop, Medicine

Solution:

Step 1: Understanding the Question:

We need to arrange the given terms in a logical and chronological order of real-world events.

Step 2: Detailed Explanation:

Let us analyze the sequence of events when someone falls ill:

1. First, a person gets a symptom of illness, which is a Fever.
2. Due to the illness, the person goes to consult a Doctor.
3. The doctor writes a prescription, and the patient goes to a Medical shop.
4. At the medical shop, the patient purchases and receives the Medicine.

Tracing this chronologically:

$$\text{Fever} \rightarrow \text{Doctor} \rightarrow \text{Medical shop} \rightarrow \text{Medicine}$$

This sequence corresponds to the order presented in Option (C).

Step 3: Final Answer:

(C) Fever, Doctor, Medical shop, Medicine

Quick Tip: In logical sequencing questions, identify the starting event and the final outcome first. Here, "Fever" is clearly the trigger (start) and "Medicine" is the final resolution (end), which helps you identify Option (C) immediately.

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11. Gyan Prakash left for his college in his car -

(J) He drove 15 km towards the North and then 10 km towards the West.

(K) He then turned South and covered 5 km.

(L) Further, he turned to the East and moved 8 km.

(M) Finally, he turned right and drove 10 km.

How far and in which direction is he from his starting point?

(A) 2 km West

(B) 5 km East

(C) 3 km North

(D) 6 km South

Correct Answer: (A) 2 km West

Solution:

Step 1: Understanding the Question:

We need to track the movement of Gyan Prakash along different directions (North, South, East, West) and calculate his final distance and direction relative to his starting point.

Step 2: Key Formula or Approach:

We can use a 2D Cartesian coordinate system to track the positions:

- Let the starting point be the origin $(0, 0)$.
- North represents $+y$ direction, South represents $-y$ direction.
- East represents $+x$ direction, West represents $-x$ direction.

Step 3: Detailed Explanation:

Let's calculate his coordinates after each step:

1. Initial Position: $(0, 0)$
2. Step (J): He drove 15 km North, then 10 km West.

- Going 15 km North: $(0, 15)$
- Going 10 km West: $(-10, 15)$

3. Step (K): He turned South and covered 5 km.

- Going 5 km South: $(-10, 15 - 5) = (-10, 10)$

4. Step (L): He turned East and moved 8 km.

- Going 8 km East: $(-10 + 8, 10) = (-2, 10)$

5. Step (M): Finally, he turned right and drove 10 km.

- Since he was moving East, turning right means turning towards the South.

- Going 10 km South: $(-2, 10 - 10) = (-2, 0)$

At the end of his journey, his coordinates are $(-2, 0)$.

Comparing $(-2, 0)$ with the starting point $(0, 0)$:

- The distance is 2 km.

- The direction is along the negative x-axis, which is West.

Therefore, he is 2 km West from his starting point.

Step 4: Final Answer:

(A) 2 km West

Quick Tip: Always draw a quick direction compass (N, S, E, W) on your rough sheet. Draw each movement vector proportionally to scale so you can visually verify your mathematical coordinates.

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12. In the series given below how many 8s are there each of which is exactly divisible by its preceding as well as succeeding numbers?

2, 8, 3, 8, 2, 4, 8, 2, 4, 8, 6, 8, 2, 8, 2, 4, 8, 3, 8, 2, 8, 6

(A) 1

(B) 2

(C) 3

(D) 4

Correct Answer: (B) 2

Solution:

Step 1: Understanding the Question:

We need to find the number of times the digit '8' appears in the given sequence such that 8 is completely divisible (leaving a remainder of 0) by both the number immediately before it (preceding) and the number immediately after it (succeeding).

Step 2: Detailed Explanation:

Let us identify all the occurrences of 8 and check their preceding and succeeding numbers:

1. First 8: 2, **8**, 3
- Preceding: 2 (8 is divisible by 2)
- Succeeding: 3 (8 is not divisible by 3) → **No**
2. Second 8: 3, **8**, 2
- Preceding: 3 (8 is not divisible by 3) → **No**
3. Third 8: 4, **8**, 2
- Preceding: 4 (8 is divisible by 4)
- Succeeding: 2 (8 is divisible by 2) → **Yes (1)**
4. Fourth 8: 4, **8**, 6
- Preceding: 4 (8 is divisible by 4)
- Succeeding: 6 (8 is not divisible by 6) → **No**
5. Fifth 8: 6, **8**, 2
- Preceding: 6 (8 is not divisible by 6) → **No**
6. Sixth 8: 2, **8**, 2
- Preceding: 2 (8 is divisible by 2)
- Succeeding: 2 (8 is divisible by 2) → **Yes (2)**
7. Seventh 8: 4, **8**, 3
- Preceding: 4 (8 is divisible by 4)
- Succeeding: 3 (8 is not divisible by 3) → **No**
8. Eighth 8: 3, **8**, 2
- Preceding: 3 (8 is not divisible by 3) → **No**
9. Ninth 8: 2, **8**, 6
- Preceding: 2 (8 is divisible by 2)
- Succeeding: 6 (8 is not divisible by 6) → **No**

Thus, there are exactly 2 such 8s in the series (in the triplets 4, **8**, 2 and 2, **8**, 2).

Step 3: Final Answer:

(B) 2

Quick Tip: Since the number is 8, its only single-digit divisors are 1, 2, 4, and 8. Therefore, any 8 surrounded by numbers containing 3, 5, 6, 7, or 9 can be instantly crossed out without performing any division.

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13. Six friends are sitting in a circle and playing cards. Ashok is to the left of Dinesh. Raghav is between Sumit and Amit. Ramesh is between Ashok and Sumit. Who is sitting to the right of Raghav?

(A) Ashok
(B) Amit
(C) Dinesh
(D) Sumit

Correct Answer: (D) Sumit

Solution:

Step 1: Understanding the Question:
We need to arrange six friends (Ashok, Dinesh, Raghav, Sumit, Amit, Ramesh) in a circular seating arrangement facing inwards and determine who sits immediately to the right of Raghav.

Step 2: Detailed Explanation:
Let us place the friends at six positions numbered 1 to 6 around a circle in a clockwise direction:
- Let us place Dinesh at Position 1.
- "Ashok is to the left of Dinesh": Since everyone faces the center of the circle, the left of Dinesh is clockwise. Thus, place Ashok at Position 2.
- "Ramesh is between Ashok and Sumit": Since Ashok is at Position 2, Ramesh must be at

Position 3 and Sumit must be at Position 4.

- "Raghav is between Sumit and Amit": Since Sumit is at Position 4, Raghav must be at Position 5 and Amit must be at Position 6.

Now let us verify the full circle arrangement:

- Position 1: Dinesh
- Position 2: Ashok
- Position 3: Ramesh
- Position 4: Sumit
- Position 5: Raghav
- Position 6: Amit

Let us find who is sitting to the right of Raghav (at Position 5):

- Since everyone faces the center, the right direction of any person is in the counter-clockwise direction.
- The position immediately counter-clockwise to Position 5 is Position 4.
- Position 4 is occupied by Sumit.

Therefore, Sumit is sitting to the right of Raghav.

Step 3: Final Answer:

(D) Sumit

Quick Tip: In circular arrangement problems facing inwards:

- Left direction corresponds to the Clockwise direction.
- Right direction corresponds to the Counter-Clockwise direction.

Keeping this simple rule in mind avoids confusion when determining left/right relative to a person's perspective.

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14. In the following question there is a certain relationship between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives having the same relation with this word as in the pair given; find the correct option-

Menu : Food :: Catalogue : ?

(A) Rack

(B) Newspaper

(C) Library

(D) Books

Correct Answer: (D) Books

Solution:

Step 1: Understanding the Question:

We need to identify the logical relationship between the first pair of words (Menu and Food) and apply the same analogy to find the missing word that relates to ”Catalogue”.

Step 2: Detailed Explanation:

- Let us analyze the first pair: ”Menu : Food”. A menu is a systematic, itemized list of all the food options available in a restaurant.
- Now apply this logic to the second pair: ”Catalogue : ?”. A catalogue is a systematic, itemized list of all the books available in a library, bookstore, or publisher’s collection.

Therefore, ”Catalogue” is to ”Books” what ”Menu” is to ”Food”.

Step 3: Final Answer:

(D) Books

Quick Tip: Think of the relationship as ”List of : Items on the list”.

- Menu → list of Food.
- Catalogue → list of Books (or goods/services).

This helps avoid choosing ”Library” (which is the location where books are kept, not the items listed in a catalogue).

15. A, B, C, D, E, F and G are members of a family consisting of four adults & three children, two of whom F and G are girls.

(J) A and D are brothers and A is a doctor.

(K) E is an engineer married to one of the brothers and has two children.

(L) B is married to D and G is their child.

Who is C?

(A) A and E's son

(B) B and D's son

(C) A and E's daughter

(D) B and D's daughter

Correct Answer: (A) A and E's son

Solution:

Step 1: Understanding the Question:

We need to construct a family tree based on the given clues about 7 members (A, B, C, D, E, F, G) consisting of 4 adults, 3 children, and identify the identity and relationship of C.

Step 2: Detailed Explanation:

Let us list and analyze the clues systematically:

- Total members = 7 (4 adults, 3 children).
- F and G are girls (female children). Since there are 3 children in total, and two of them are girls (F and G), the third child must be a boy.
- Clue (J): A and D are brothers. Both are male adults. A is a doctor.
- Clue (K): E is an engineer married to one of the brothers and has two children.
- Clue (L): B is married to D, and G is their child.

Now let's reconstruct the relationships:

- Since D is married to B, the other brother A must be married to E.
- Married couples (Adults):

1. (A, E)

2. (D, B)

This accounts for all 4 adults (A, D, E, B).

- Children distribution:

- G is the child of (D, B). G is a girl.

- E (who is married to A) has two children. Since the total number of children is 3, these two children must be the remaining members: C and F.

- Therefore, the children of A and E are C and F.

- Identifying genders of children:

- We are given that F and G are girls.

- This leaves C to be the only boy (son) among the three children.

- Therefore, C is the son of A and E.

Step 3: Final Answer:

(A) A and E's son

Quick Tip: Always separate the information into "Adults" and "Children" lists. By identifying that the adults are completely accounted for by the two married couples (A-E and D-B), you can quickly focus on assigning the remaining children (C, F, G) to their respective parents.

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16. If the first and fifth position of the numbers 5, 3, 2, 6, 4, 1, 8, 9 are exchanged and the positions of the second and sixth numbers are also exchanged and so on. Find the sixth number from the right of the rearranged pattern-

(A) 2

(B) 4

(C) 6

(D) 8

Correct Answer: (D) 8

Solution:

Step 1: Understanding the Question:

We are given a sequence of numbers and a rule for swapping their positions. We need to find the rearranged sequence and locate the sixth number when counting from the right.

Step 2: Detailed Explanation:

Let the original positions of the numbers be:

- Position 1: 5
- Position 2: 3
- Position 3: 2
- Position 4: 6
- Position 5: 4
- Position 6: 1
- Position 7: 8
- Position 8: 9

Now, let us apply the exchange rules "first and fifth exchanged, second and sixth exchanged, and so on":

- Exchange Position 1 and Position 5: (5 ↔ 4)
- Exchange Position 2 and Position 6: (3 ↔ 1)
- Exchange Position 3 and Position 7: (2 ↔ 8)
- Exchange Position 4 and Position 8: (6 ↔ 9)

Now, let's write down the numbers in their new positions (from Position 1 to 8):

- Position 1: 4
- Position 2: 1
- Position 3: 8
- Position 4: 9
- Position 5: 5
- Position 6: 3
- Position 7: 2
- Position 8: 6

The rearranged sequence is: '4, 1, 8, 9, 5, 3, 2, 6'.

We need to find the sixth number from the right of this rearranged pattern:

- 1st from right: 6

- 2nd from right: 2
- 3rd from right: 3
- 4th from right: 5
- 5th from right: 9
- 6th from right: 8

Therefore, the sixth number from the right is 8.

Step 3: Final Answer:

(D) 8

Quick Tip: Notice that "6th from right" in an 8-element list is equivalent to the "3rd from left" (since $8 - 6 + 1 = 3$). The 3rd position in the new list is occupied by the element swapped from the 7th position of the original list. The 7th element of the original list is 8, so the answer is 8. This saves you from writing out the entire rearranged sequence!

---

17. It is given that

$\times$ denotes greater than,

ϕ denotes equal to,

$<$ denotes not less than,

$\perp$ denotes not equal to,

Δ denotes less than,

$+$ denotes not greater than.

Choose the correct statement from the following-

If a $\times$ b Δ c it follows that-

(A) a ϕ c Δ b

(B) b $<$ a $\times$ c

(C) a $<$ b $+$ c

(D) c $+$ b $<$ a

Correct Answer: (C) a < b + c

Solution:

Step 1: Understanding the Question:

We need to translate the coded mathematical symbols into standard inequality operators and evaluate which of the given options logically follows from the statement "a × b Δ c".

Step 2: Key Formula or Approach:

First, let us construct a translation key for all the symbols:

- × →> (greater than)
- ϕ →= (equal to)
- <→≮ which is ≥ (not less than)
- ⊥→≠ (not equal to)
- Δ →< (less than)
- + →≯ which is ≤ (not greater than)

Step 3: Detailed Explanation:

Translate the given expression "a × b Δ c":

- "a × b" → $a > b$
- "b Δ c" → $b < c$

So, the given condition is: $a > b$ and $b < c$.

Now let us translate and evaluate each option:

- Option (A): "a ϕ c Δ b"
- Translation: $a = c$ and $c < b$.
- Since we are given $b < c$, $c < b$ is false. Thus, Option (A) is incorrect.
- Option (B): "b < a × c"
- Translation: $b \geq a$ and $a > c$.
- Since we are given $a > b$, $b \geq a$ is false. Thus, Option (B) is incorrect.
- Option (C): "a < b + c"
- Translation: $a \geq b$ and $b \leq c$.
- We are given $a > b$, which logically implies $a \geq b$ is true.
- We are given $b < c$, which logically implies $b \leq c$ is true.

- Since both parts of the inequality are true, Option (C) is correct.
- Option (D): "c + b < a"
- Translation: $c \leq b$ and $b \geq a$.
- Since we are given $b < c$, $c \leq b$ is false. Thus, Option (D) is incorrect.

Step 4: Final Answer:

(C) a < b + c

Quick Tip: Always simplify "not less than" ($\not<$) to "greater than or equal to" ($\geq$) and "not greater than" ($\not>$) to "less than or equal to" ($\leq$) immediately. It avoids double-negative confusion during calculations.

---

18. Match the following-

Column-I (a, b **as given in Euclidean Algorithm** $a = bq + r$)	**Column-II** (**Values of** q **and** r)
(a) $a = -112, b = -7$	**(I)** $q = -13, r = 1$
(b) $a = 118, b = -9$	**(II)** $q = 14, r = 3$
(c) $a = -109, b = 6$	**(III)** $q = -19, r = 5$
(d) $a = 115, b = 8$	**(IV)** $q = 16, r = 0$

Choose the correct answer from the options given below:

(A) a-III, b-I, c-IV, d-II

(B) a-III, b-II, c-IV, d-I

(C) a-IV, b-I, c-III, d-II

(D) a-IV, b-II, c-III, d-I

Correct Answer: (C) a-IV, b-I, c-III, d-II

Solution:

Step 1: Understanding the Question:

We need to find the quotient q and remainder r for each pair of numbers a and b using the Euclidean division algorithm and match them with Column-II.

Step 2: Key Formula or Approach:

According to the Euclidean Division Lemma, for any two integers a and b (where $b \neq 0$), there exist unique integers q and r such that:

$$a = bq + r, \quad \text{where } 0 \leq r < |b|$$

Note that the remainder r must always be non-negative.

Step 3: Detailed Explanation:

Let us compute q and r for each pair:

- Pair (a): $a = -112, b = -7$

We need: $-112 = -7q + r$ with $0 \leq r < 7$.

Since -112 is exactly divisible by -7:

$$-112 = -7(16) + 0 \implies q = 16, r = 0$$

This matches with (IV). Thus, a-IV.

- Pair (b): $a = 118, b = -9$

We need: $118 = -9q + r$ with $0 \leq r < 9$.

Let's find the quotient:

$$118 = -9(-13) + 1 = 117 + 1 \implies q = -13, r = 1$$

Since $r = 1$ satisfies $0 \leq 1 < 9$, this is correct.

This matches with (I). Thus, b-I.

- Pair (c): $a = -109, b = 6$

We need: $-109 = 6q + r$ with $0 \leq r < 6$.

Since a is negative, we find the multiple of 6 just smaller than -109, which is -114:

$$-109 = 6(-19) + 5 = -114 + 5 \implies q = -19, r = 5$$

Since $r = 5$ satisfies $0 \leq 5 < 6$, this is correct.

This matches with (III). Thus, c-III.

- Pair (d): $a = 115, b = 8$

We need: $115 = 8q + r$ with $0 \leq r < 8$.

$$115 = 8(14) + 3 = 112 + 3 \implies q = 14, r = 3$$

Since $r = 3$ satisfies $0 \leq 3 < 8$, this is correct.

This matches with (II). Thus, d-II.

Combining these results: a-IV, b-I, c-III, d-II, which corresponds to Option (C).

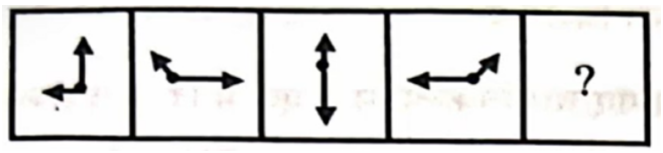
Step 4: Final Answer:

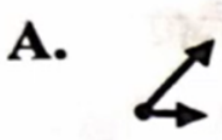
(C) a-IV, b-I, c-III, d-II

Quick Tip: Remember that the remainder r in Euclidean division is strictly non-negative ($r \geq 0$). When dividing negative numbers, choose q such that the product bq is less than or equal to a, so that r remains positive.

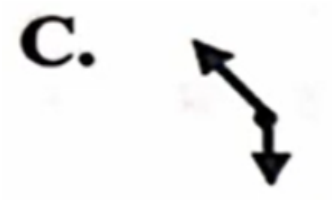
---

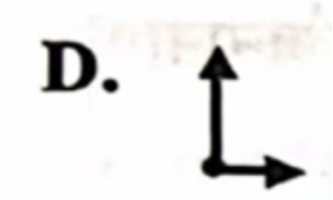
19. Which is the figure pattern that comes next in the following sequence?



A. 

B. 

C. 

D. 

(A) Fig A

(B) Fig B

(C) Fig C

(D) Fig D

Correct Answer: (A) Fig A

Solution:

Step 1: Understanding the Question:

We need to find the next figure in a sequence of shapes made of two connected arrowheads by observing the patterns of rotation and angular variation.

Step 2: Detailed Explanation:

Let us measure the angle between the two arrowheads in each step of the sequence:

- Figure 1: One arrow points Up (90°) and the other points Right (0°). The angle between them is 90°.
- Figure 2: One arrow points Top-Left (135°) and the other points Right (0°). The angle between them is 135°.
- Figure 3: One arrow points Up (90°) and the other points Down (270°). The angle between them is 180° (straight line).
- Figure 4: One arrow points Left (180°) and the other points Top-Right (45°). The angle between them is 225°.

We can see that the angle between the two arrowheads increases by 45° at each consecutive step:

$$90° \rightarrow 135° \rightarrow 180° \rightarrow 225° \rightarrow 270°$$

In the next term (Figure 5), the angle between the two arrows must be 270° (which appears as a 90° corner angle but is measured from the other side).
Let us look at the options:
- Option (A) features two arrows pointing Top-Right and Bottom-Right, connected at a vertex on the left. The angle between them is indeed 90°, which represents the required 270° reflex angle.
Therefore, Option (A) is the next figure in the sequence.

Step 3: Final Answer:
(A) A corner pointing Top-Right and Bottom-Right, with the vertex at the Left

Quick Tip: In non-verbal reasoning series involving joint lines or clock hands, focus on the interior angle between the arms. The progressive increase of 45° (half of a right angle) is one of the most common patterns in such tests.

---

20. Four friends Amrita, Deepa, Smita and Rhea complete their PhD in different number of years.
(K) The one who took maximum time took eight years to complete her PhD, while the one who took the least time took only three years to complete it.
(L) Rhea took more time only than Amrita and completed her PhD in five years.
(M) Smita did not take longer time than Deepa to complete her PhD.
Arrange the names of the friends in order from the minimum to the maximum number of years taken to complete their PhD.

(A) Amrita → Rhea → Smita → Deepa
(B) Amrita → Rhea → Deepa → Smita

(C) Smita → Amrita → Rhea → Deepa

(D) Smita → Amrita → Deepa → Rhea

Correct Answer: (A) Amrita → Rhea → Smita → Deepa

Solution:

Step 1: Understanding the Question:

We need to determine the chronological order (from minimum to maximum years) of the time taken by four friends to complete their PhD based on the given inequality clues.

Step 2: Detailed Explanation:

Let the number of years taken by Amrita, Deepa, Smita, and Rhea be T_A, T_D, T_S, and T_R.

- Clue (K):
- Maximum time = 8 years
- Minimum time = 3 years
- Clue (L): "Rhea took more time only than Amrita and completed her PhD in five years."
- This means Rhea took more time than *only* Amrita, and everyone else took more time than Rhea.
- This implies Amrita took the least time, which is 3 years.
- So we have: $T_A = 3$ years and $T_R = 5$ years.
- Since $T_R = 5$ and both Deepa and Smita took more time than Rhea, their times must be greater than 5 years (and one of them must be the maximum of 8 years).
- Clue (M): "Smita did not take longer time than Deepa to complete her PhD."
- This translates to: $T_S \leq T_D$. Since they took different numbers of years, $T_S < T_D$.
- Thus, Deepa must have taken the maximum time of 8 years.

Ordering the times from minimum to maximum:

$$T_A < T_R < T_S < T_D \implies \text{Amrita} \rightarrow \text{Rhea} \rightarrow \text{Smita} \rightarrow \text{Deepa}$$

This matches Option (A).

Step 3: Final Answer:

(A) Amrita → Rhea → Smita → Deepa

Quick Tip: Pay close attention to the word "only" in statement L. "Rhea took more time ONLY than Amrita" means that except for Amrita, everyone else took more time than Rhea. This immediately places Amrita at the absolute bottom of the list and Rhea in the second position from the bottom.

---

21. In this question three words are given which are related in some way. The same relationship obtains among the words in one of the four alternatives given under it, find the correct alternative-

Music : Guitar : Performer

(A) Dance : Tune : Instrument

(B) Food : Recipe : Cook

(C) Patient : Medicine : Doctor

(D) Trick : Rope : Acrobat

Correct Answer: (D) Trick : Rope : Acrobat

Solution:

Step 1: Understanding the Question:

We need to analyze the logical relationship between the three terms in "Music : Guitar : Performer" and find the option that shares the exact same relationship.

Step 2: Detailed Explanation:

Let us decode the relationship between the words in the given analogy:

- Performer is the human agent (the artist) who performs an act.
- Guitar is the physical tool or instrument used by the performer to execute their performance.
- Music is the artistic output or creation produced by the performer using that instrument.

So, the relationship is: **Output/Creation : Tool/Instrument : Agent/Artist**.

Now, let us evaluate the options:
- Option (A) Dance : Tune : Instrument: "Instrument" is not a human agent. Thus, this is incorrect.
- Option (B) Food : Recipe : Cook: "Recipe" is a set of instructions, not a physical tool/instrument. Thus, this is incorrect.
- Option (C) Patient : Medicine : Doctor: "Patient" is not an artistic output/creation. Thus, this is incorrect.
- Option (D) Trick : Rope : Acrobat:
- Acrobat is the human agent (the artist).
- Rope is the physical tool/instrument used by the acrobat to execute their performance.
- Trick is the artistic output/act created by the acrobat using the rope.
This matches the original relationship perfectly.

Step 3: Final Answer:
(D) Trick : Rope : Acrobat

Quick Tip: To solve word-triplet analogies, define a generalized sentence that connects the three terms: "An **Acrobat** uses a **Rope** to perform a **Trick**," which matches "A **Performer** uses a **Guitar** to produce **Music**."

---

22. What will be the next term in the sequence?

$\frac{17}{14}, \frac{18}{13}, \frac{16}{15}, \frac{19}{12}, \frac{?}{?}$

(A) $\frac{20}{13}$
(B) $\frac{21}{25}$
(C) $\frac{15}{16}$
(D) $\frac{17}{18}$

Correct Answer: (C) $\frac{15}{16}$

Solution:

Step 1: Understanding the Question:

We need to determine the next term in the given fractional sequence by finding separate mathematical patterns for the numerators and the denominators.

Step 2: Detailed Explanation:

Let us analyze the numerators and denominators as two independent series:

1. Numerator Series:

The numerators are: $17, 18, 16, 19$

Let us observe the differences:

- $17 \rightarrow 18$ (differs by $+1$)
- $18 \rightarrow 16$ (differs by -2)
- $16 \rightarrow 19$ (differs by $+3$)

The pattern of differences is an alternating sequence of addition and subtraction with increasing integers: $+1, -2, +3, -4, \ldots$

Therefore, the next numerator must be:

- $19 - 4 = 15$

2. Denominator Series:

The denominators are: $14, 13, 15, 12$

Let us observe the differences:

- $14 \rightarrow 13$ (differs by -1)
- $13 \rightarrow 15$ (differs by $+2$)
- $15 \rightarrow 12$ (differs by -3)

The pattern of differences is an alternating sequence of subtraction and addition with increasing integers: $-1, +2, -3, +4, \ldots$

Therefore, the next denominator must be:

- $12 + 4 = 16$

Combining the two results, the next term in the sequence is $\frac{15}{16}$.

Step 3: Final Answer:

(C) $\frac{15}{16}$

Quick Tip: For fraction series, also check if there is an alternative pattern of jumping terms:
- Numerators: $17 \to 16\ (-1)$, $18 \to 19\ (+1)$.
- Denominators: $14 \to 15\ (+1)$, $13 \to 12\ (-1)$.
This alternate-term method often yields the same correct answer faster and with less computation!

---

23. Read the information given below and answer the questions that follow-
(J) If P + Q means; P is the brother of Q.
(K) P $\times$ Q means; P is the father of Q; and
(L) P $-$ Q means; P is the sister of Q.
Then, which of the following represents S is the niece of T?

(A) T $\times$ M + S $-$ K
(B) K $-$ S $\times$ M + T
(C) T + M $\times$ S $-$ K
(D) T $\times$ S + M $-$ K

Correct Answer: (C) T + M $\times$ S $-$ K

Solution:

Step 1: Understanding the Question:
We need to find the coded expression representing "S is the niece of T". "Niece" means S must be female, and her parent must be a sibling of T.

Step 2: Detailed Explanation:
Let us translate the family relationships of the options:
- Gender Constraint: Since S is a niece, S must be female.
- In (B): $S \times M$ means S is the father of M. Thus, S is male, which is incorrect.
- In (D): $S + M$ means S is the brother of M. Thus, S is male, which is incorrect.
This leaves options (A) and (C). Let's evaluate them:
- Option (A): $T \times M + S - K$

- $T \times M$: T is the father of M.
- $M + S$: M is the brother of S.
- $S - K$: S is the sister of K.

Since T is the father of M, and M is the sibling of S, T must be the father of S. Thus, S is the daughter of T, not the niece. So Option (A) is incorrect.

- Option (C): $T + M \times S - K$
- $T + M$: T is the brother of M.
- $M \times S$: M is the father of S.
- $S - K$: S is the sister of K (which confirms S is female).

Since M is the father of S, and T is the brother of M, T is the paternal uncle of S. Since S is female, S is indeed the niece of T.

Thus, Option (C) represents "S is the niece of T".

Step 3: Final Answer:

(C) T + M × S − K

Quick Tip: Always apply gender elimination first! Since "niece" is female, look at the symbol immediately following 'S'. S must be followed by '-' (sister) to be female. This immediately eliminates options B and D.

---

24. Which is the missing number in the given number sequence?

7, 15, 32, ——, 138, 281

(A) 67

(B) 65

(C) 69

(D) 63

Correct Answer: (A) 67

Solution:

Step 1: Understanding the Question:

We need to find the missing term in the given numerical sequence by determining the underlying mathematical pattern.

Step 2: Detailed Explanation:

Let the terms of the sequence be $T_1, T_2, T_3, T_4, T_5, T_6$.

- $T_1 = 7$
- $T_2 = 15$
- $T_3 = 32$
- $T_4 = ?$
- $T_5 = 138$
- $T_6 = 281$

Let us test a multiplication-addition pattern where each term is twice the preceding term plus an increasing integer:

$$T_n = 2 \times T_{n-1} + (n - 1)$$

Let us check:

- $T_2 = 2 \times T_1 + 1 = 2 \times 7 + 1 = 15$ (Correct)
- $T_3 = 2 \times T_2 + 2 = 2 \times 15 + 2 = 32$ (Correct)

Using this pattern, the fourth term T_4 should be:

- $T_4 = 2 \times T_3 + 3 = 2 \times 32 + 3 = 64 + 3 = 67$

Let us verify if $T_4 = 67$ satisfies the rest of the sequence:

- $T_5 = 2 \times T_4 + 4 = 2 \times 67 + 4 = 134 + 4 = 138$ (Correct)
- $T_6 = 2 \times T_5 + 5 = 2 \times 138 + 5 = 276 + 5 = 281$ (Correct)

Since the pattern holds true, the missing number is 67.

Step 3: Final Answer:

(A) 67

Quick Tip: To find the pattern of rapidly increasing series, look at the ratio of consecutive terms. Since $15/7 \approx 2$, $32/15 \approx 2$, and $281/138 \approx 2$, the pattern is highly likely to involve multiplication by 2.

---

25. P, Q, R, S, T, V and W are seven friends who left for seven destinations Delhi, Chennai, Hyderabad, Bangalore, Kolkata, Chandigarh and Jaipur, each on a different day of the week-

(K) R left for Jaipur on Monday. On Sunday, one of them left for Bangalore.

(L) T left the next day of P who left for Chandigarh and on the previous day of W.

(M) S left for Kolkata on Friday.

(N) Q did not leave for either Hyderabad or Bangalore and W left for Delhi.

What is the correct sequence of departure of the friends from Monday to Sunday?

(A) R → P → T → W → S → Q → V

(B) R → T → P → W → S → Q → V

(C) R → W → P → T → S → V → Q

(D) R → W → T → P → S → V → Q

Correct Answer: (A) R → P → T → W → S → Q → V

Solution:

Step 1: Understanding the Question:

We are given scheduling details for seven friends (P, Q, R, S, T, V, W) leaving for seven different cities on seven different days of the week (Monday to Sunday). We need to construct the correct schedule sequence.

Step 2: Detailed Explanation:

Let us list the days from Monday to Sunday and fill in the clues:

- Clue (K): R left for Jaipur on Monday. On Sunday, someone left for Bangalore.
- Clue (M): S left for Kolkata on Friday.

Currently, our schedule looks like:
- Monday: R (Jaipur)
- Tuesday: [Open]
- Wednesday: [Open]
- Thursday: [Open]
- Friday: S (Kolkata)
- Saturday: [Open]
- Sunday: [Open] (Bangalore)
- Clue (L): "T left the next day of P who left for Chandigarh and on the previous day of W."
This indicates that P, T, and W left on three consecutive days in that order (P → T → W).
Additionally, we know P went to Chandigarh.
The only three consecutive open days in our schedule are Tuesday, Wednesday, and Thursday. Thus:
- Tuesday: P (Chandigarh)
- Wednesday: T
- Thursday: W (and according to Clue N, W left for Delhi)
- Clue (N): "Q did not leave for either Hyderabad or Bangalore."
This leaves Saturday and Sunday to be filled by Q and V. Since Q cannot go to Bangalore, Q cannot leave on Sunday.
Therefore, Q must leave on Saturday, and V must leave on Sunday (and go to Bangalore).
This fully determines the sequence of friends from Monday to Sunday:

$$\text{R (Mon)} \rightarrow \text{P (Tue)} \rightarrow \text{T (Wed)} \rightarrow \text{W (Thu)} \rightarrow \text{S (Fri)} \rightarrow \text{Q (Sat)} \rightarrow \text{V (Sun)}$$

This corresponds to Option (A).

Step 3: Final Answer:

(A) R → P → T → W → S → Q → V

Quick Tip: Consecutive-day blocks (like "P, T, W") are extremely powerful constraints in scheduling puzzles. Finding where a 3-day block fits into the schedule instantly solves more than half of the puzzle.

26. Two statements are given followed by four conclusions J, K, L, M taking statements to be true even if they are at variance from the commonly known facts. Decide which conclusion logically follows from the given statement.

Statement:

Some bottles are drinks.

All drinks are cups.

Conclusions:

(J) Some bottles are cups

(K) Some cups are drinks

(L) All drinks are bottles

(M) All cups are drinks

(A) Only J and K follow.

(B) Only K and L follow.

(C) Only K and M follow.

(D) Only L and M follow.

Correct Answer: (A) Only J and K follow.

Solution:

Step 1: Understanding the Question:

We need to analyze the two given premises using syllogistic reasoning to determine which of the four conclusions logically follow.

Step 2: Detailed Explanation:

Let us evaluate each conclusion using rules of deduction or Venn diagrams:

- Premise 1: "Some bottles are drinks." (I-type proposition: Some B are D)

- Premise 2: "All drinks are cups." (A-type proposition: All D are C)

Now, let us test each conclusion:

1. Conclusion (J): Some bottles are cups.

From Premise 1, we know there is an intersection between ”bottles” and ”drinks”. Since all ”drinks” are inside ”cups” (Premise 2), the part of ”bottles” that is ”drinks” must also be inside ”cups”. Hence, ”Some bottles are cups” is a valid conclusion. (J follows)

2. Conclusion (K): Some cups are drinks.

Premise 2 states ”All drinks are cups”. In syllogisms, the converse of ”All A are B” is always ”Some B are A”. Thus, ”Some cups are drinks” is a valid conclusion. (K follows)

3. Conclusion (L): All drinks are bottles.

We are only given ”Some bottles are drinks”. We cannot generalize that all drinks are bottles. Thus, this is invalid. (L does not follow)

4. Conclusion (M): All cups are drinks.

From ”All drinks are cups”, we cannot conclude ”All cups are drinks” (which is an improper converse). Thus, this is invalid. (M does not follow)

Therefore, only conclusions J and K logically follow.

Step 3: Final Answer:

(A) Only J and K follow.

Quick Tip: Remember the standard conversion rules for syllogisms:

- ”All A are B” converts to ”Some B are A”
- ”Some A are B” converts to ”Some B are A”

This makes evaluating immediate inferences like Conclusion K instant.

---

27. What will be the missing term marked with [?] in the circle?

(A) 10

(B) 15

(C) 32

(D) 12

Correct Answer: (C) 32

Solution:

Step 1: Understanding the Question:

We need to find the missing number represented by [?] in the sector of the circle by identifying the mathematical relationship between the numbers in adjacent sectors.

Step 2: Detailed Explanation:

Let us list the numbers in the sectors starting from the top-right and moving in a clockwise direction:

- Sector 1: 1
- Sector 2: 2
- Sector 3: 2
- Sector 4: 4
- Sector 5: 8
- Sector 6: ?

Let us look at the relationship between successive terms in this sequence:

- The third term is the product of the first and second terms:

$$1 \times 2 = 2$$

- The fourth term is the product of the second and third terms:

$$2 \times 2 = 4$$

- The fifth term is the product of the third and fourth terms:

$$2 \times 4 = 8$$

Following this multiplication-progression rule, the sixth term (the missing number) must be the product of the fourth and fifth terms:

$$4 \times 8 = 32$$

Thus, the missing number is 32.

Step 3: Final Answer:

(C) 32

Quick Tip: This sequence is a "geometric Fibonacci-type series" where each term is the product (instead of sum) of the two preceding terms: $T_n = T_{n-1} \times T_{n-2}$.

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28. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-
Assertion [As] : Carbohydrates provide energy to the body.
Reason [R] : Obesity is caused by excessive intake of carbohydrates.

(A) Both [As] and [R] are true, and [R] is the correct explanation of [As].
(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].
(C) [As] is true, but [R] is false.
(D) [As] is false, but [R] is true.

Correct Answer: (B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].

Solution:

Step 1: Understanding the Question:

We need to determine the individual truth values of the Assertion [As] and Reason [R] and

analyze if there is a correct causal relationship between them.

Step 2: Detailed Explanation:

- Let us evaluate the Assertion [As]: "Carbohydrates provide energy to the body." This is biologically correct. Carbohydrates are digested and converted into glucose, which is the primary source of fuel/energy for the body's cells.
- Let us evaluate the Reason [R]: "Obesity is caused by excessive intake of carbohydrates." This is also biologically correct. Excess carbohydrate intake leads to high blood glucose levels, which are converted and stored as adipose tissue (fat) in the body, eventually causing obesity.
- Now let us check for a causal connection:

Does the body get energy from carbohydrates *because* excessive intake causes obesity? No. The metabolic process of energy release from carbohydrates (respiration) is independent of the fact that excess storage causes obesity.

Therefore, while both statements are true, the Reason is not the correct explanation of the Assertion.

Step 3: Final Answer:

(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].

Quick Tip: Ask yourself: "Does the reason answer the 'Why' of the assertion?"

Why do carbohydrates provide energy? Because they are broken down into glucose.

Since the given Reason does not answer this question, [R] is not the correct explanation of [As].

---

29. Raipur University presently employs three managers - 'a', 'b' and 'c' and five faculty members - 'd', 'e', 'f', 'g', 'h' and is planning to relocate two managers and three faculty members to the new centre. Following information was available to the HR department.

(K) Manager 'a' & 'c' cannot be sent as a team to the new centre.

(L) 'c' & 'e' are excellent performers, though they do not share good rapport and hence should not be sent together.

(M) If 'd' is sent, then 'g' cannot be sent, and vice versa.

(N) 'd' & 'f' should not be together in a team.

Which of the following cannot be a possible working unit?

(A) a → b → d → e → h

(B) a → b → f → g → h

(C) a → b → e → g → h

(D) a → b → d → g → h

Correct Answer: (D) a → b → d → g → h

Solution:

Step 1: Understanding the Question:

We need to test the given options against a set of constraints regarding who can and cannot be sent together in a 5-member team (consisting of 2 managers and 3 faculty members).

Step 2: Detailed Explanation:

Let us list the negative selection constraints:

1. Constraint (K): 'a' and 'c' cannot be together.
2. Constraint (L): 'c' and 'e' cannot be together.
3. Constraint (M): 'd' and 'g' cannot be together.
4. Constraint (N): 'd' and 'f' cannot be together.

Let us evaluate each option against these constraints:

- Option (A): 'a -> b -> d -> e -> h'
- Contains 'a' and 'b' (Constraint K satisfied).
- Contains 'd', 'e', 'h' (Constraints L, M, and N satisfied since 'c', 'g', and 'f' are not present). This is a possible team.
- Option (B): 'a -> b -> f -> g -> h'
- Contains 'a' and 'b' (Constraint K satisfied).
- Contains 'f', 'g', 'h' (Constraints L, M, and N satisfied since 'c' and 'd' are not present). This is a possible team.
- Option (C): 'a -> b -> e -> g -> h'

- Contains 'a' and 'b' (Constraint K satisfied).
- Contains 'e', 'g', 'h' (Constraints L, M, and N satisfied since 'c' and 'd' are not present). This is a possible team.
- Option (D): 'a -> b -> d -> g -> h'
- Contains 'd' and 'g' together in the team.
- This directly violates Constraint (M): "If 'd' is sent, then 'g' cannot be sent, and vice versa."

Therefore, Option (D) cannot be a possible working unit.

Step 3: Final Answer:

(D) a → b → d → g → h

Quick Tip: To solve group-selection multiple choice questions quickly, look for the most restrictive negative constraints (like "d and g cannot be together") and scan the options to see if any of them contain that forbidden pair. Here, scanning for 'd' and 'g' instantly points to Option D.

---

30. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-
Assertion [As] : Moon cannot be used as a satellite for communication.
Reason [R] : Moon does not move in the equatorial plane of the earth.

(A) Both [As] and [R] are true, and [R] is the correct explanation of [As].
(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].
(C) [As] is true, but [R] is false.
(D) [As] is false, but [R] is true.

Correct Answer: (A) Both [As] and [R] are true, and [R] is the correct explanation of [As].

Solution:

Step 1: Understanding the Question:

We need to evaluate the scientific validity of the given Assertion [As] and Reason [R] regarding the suitability of the Moon as a communication satellite.

Step 2: Detailed Explanation:

- Let us evaluate the Assertion [As]: "Moon cannot be used as a satellite for communication." This statement is true. For continuous, reliable global communication, satellites must be geostationary (remaining fixed over a single spot on Earth). The Moon's orbital period is 27.3 days, which does not match the Earth's daily rotation of 24 hours. Hence, it cannot act as a geostationary communication satellite.
- Let us evaluate the Reason [R]: "Moon does not move in the equatorial plane of the earth." This statement is also true. The Moon's orbit is inclined at an angle of approximately 5.1° to the ecliptic plane, meaning it does not lie in the Earth's equatorial plane.
- Now let us check for a causal connection:

To be a geostationary satellite, a body must satisfy three main criteria:

1. It must have an orbital period of exactly 24 hours.
2. It must rotate in the same direction as Earth.
3. Its orbit must lie in the equatorial plane of the Earth.

Since the Moon does not move in the equatorial plane of the Earth, it fails one of the fundamental criteria required to be a geostationary communication satellite. Thus, the Reason is a correct explanation for why the Moon cannot be used for satellite communication.

Step 3: Final Answer:

(A) Both [As] and [R] are true, and [R] is the correct explanation of [As].

Quick Tip: A communication satellite must have a stationary footprint over the Earth's surface. Since any orbit outside the equatorial plane has a changing latitude relative to ground stations, the Moon's nonequatorial path makes it structurally impossible to use as a passive continuous communication satellite.

---

31. In terms of chemical composition, arrange the elements found in red and yellow soils in descending order of their percentage-

(J) Iron

(K) Magnesium

(L) Insoluble elements

(M) Aluminium

Choose the correct option-

A. K → L → M → J

B. L → J → M → K

C. J → K → M → L

D. M → J → L → K

Correct Answer: B. L → J → M → K

Solution:

Concept: Red and yellow soils are highly weathered soils formed mainly in tropical and subtropical regions under conditions of high temperature and moderate rainfall. These soils are characterized by intense leaching, which removes soluble bases and leaves behind a residue dominated by insoluble materials such as silica and quartz. The reddish or yellowish color is mainly due to the presence of iron oxides in different hydration states. Because of long-term weathering, the proportion of nutrients like magnesium is very low, while insoluble minerals remain the dominant fraction.

Step 1: Understanding the general composition of red and yellow soils In highly weathered soils like red and yellow soils, the composition typically follows a consistent trend:

- The largest component is **insoluble material (mainly silica and quartz residues)**.
- Next comes **iron oxides**, which give the characteristic red/yellow coloration.
- **Aluminium compounds** are present in smaller amounts as part of clay minerals.
- **Magnesium and other basic nutrients** exist only in trace amounts due to leaching.

Step 2: Interpreting each component

- **(L) Insoluble elements:** These include quartz and siliceous residues which resist chemical weathering. Since leaching removes most soluble components, these remain in highest proportion.

- **(J) Iron:** Present mainly as ferric oxide (Fe_2O_3), responsible for red/yellow coloration, but still much less than insoluble fraction.
- **(M) Aluminium:** Occurs as alumina in clay minerals, typically less abundant than iron compounds.
- **(K) Magnesium:** Highly leached basic nutrient, present only in very small trace amounts.

Step 3: Logical ordering based on weathering and leaching Since intense leaching removes mobile ions first and leaves resistant materials behind, the descending order must follow:

$$\text{Insoluble residues} > \text{Iron oxides} > \text{Aluminium compounds} > \text{Magnesium}$$

Substituting symbols:

$$L > J > M > K$$

Thus, the correct sequence is:

$$L \rightarrow J \rightarrow M \rightarrow K$$

Quick Tip: In red and yellow soils, remember the simple trend: **Silica (insoluble) dominates first, iron gives color, aluminium is moderate, and magnesium is minimal due to heavy leaching.**

---

32. Who was the founder of 'Indian Reform Association' in 1870?

A. Devendranath Tagore

B. Ishwar Chandra Vidyasagar

C. Keshab Chandra Sen

D. Raja Ram Mohan Roy

Correct Answer: C. Keshab Chandra Sen

Solution:

Concept: The Indian Reform Association was an important socio-religious and socio-educational organization established during the Bengal Renaissance. It emerged in the

context of 19th-century reform movements that aimed at modernizing Indian society through education, women's upliftment, temperance, and social welfare activities. The association was closely linked with the Brahmo Samaj movement and reflected liberal, progressive ideals influenced by Western education and reformist thought.

Step 1: Identifying the historical background During the second half of the 19th century, several reform movements arose in India, particularly in Bengal, focusing on eliminating social evils like child marriage, illiteracy, and alcoholism. Leaders of the Brahmo Samaj played a key role in expanding reformist activities beyond religious discourse into social action.

Step 2: Establishment of Indian Reform Association The Indian Reform Association was founded on **29 October 1870** by **Keshab Chandra Sen** after his return from England. His exposure to Western liberal ideas encouraged him to create an organized platform for social reform activities that would work practically among the masses.

Step 3: Objectives and activities The association focused on structured reform through different departments:

- Promotion of female education and establishment of schools for women.
- Encouragement of affordable literature to spread literacy among common people.
- Promotion of temperance movement (anti-alcohol campaigns).
- Support for charity, industrial training, and social upliftment of the poor.

Step 4: Eliminating incorrect options

- Devendranath Tagore: Associated with Brahmo Samaj leadership but not founder of this association.
- Ishwar Chandra Vidyasagar: Known for widow remarriage reforms and education but not related to this institution.
- Raja Ram Mohan Roy: Founder of Brahmo Samaj (1828), predates this organization.

Thus, the correct answer is clearly **Keshab Chandra Sen**.

Quick Tip: Remember: **Keshab Chandra Sen (1870) □ Indian Reform Association**, while **Raja Ram Mohan Roy (1828) □ Brahmo Samaj**.

33. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-
Assertion [As] : In India, approximately 98% of the total coal production is obtained from the Gondwana coalfields.
Reason [R] : This coalfield is found extensively distributed across the river valleys of peninsular India.

A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

B. Both [As] and [R] are true, but [R] is not the correct explanation of [As].

C. [As] is true, but [R] is false.

D. [As] is false, but [R] is true.

Correct Answer: A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

Solution:

Concept: Coal in India is mainly classified into two geological groups: **Gondwana coalfields** (older, Carboniferous–Permian period) and **Tertiary coalfields** (younger deposits). Gondwana coal is the most important source of commercial coal in India due to its abundance, quality, and wide distribution in structurally stable peninsular regions.

Step 1: Verifying the Assertion The Gondwana coalfields account for about **98% of India's total coal production**. These coalfields are the backbone of India's energy sector, supplying most of the coal used in thermal power plants and industries. Hence, the Assertion is **true**.

Step 2: Verifying the Reason Gondwana coal deposits are widely distributed in the river valley basins of peninsular India such as:

- Damodar valley (Jharkhand–West Bengal)
- Mahanadi valley (Odisha)
- Godavari valley (Telangana–Andhra Pradesh)
- Wardha valley (Maharashtra)

These basins are structurally stable and rich in ancient plant deposits, making the Reason also **true**.

Step 3: Establishing the relationship The reason correctly explains the assertion because the extensive distribution of Gondwana coal across major river valleys of peninsular India led to large-scale accumulation of coal-forming vegetation in ancient geological times. This geological setting explains why most of India's coal production comes from these fields.

Therefore, both statements are true and the Reason correctly explains the Assertion.

Quick Tip: Gondwana coal = **old + high quality + peninsular river basins**, while Tertiary coal = **younger + limited + northeastern India**.

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34. Select the Social Reformers and the institution formed by them during the Renaissance-

(J) Theosophical society → Swami Vivekananda

(K) Ramakrishna Mission → Raja Ram Mohan Roy

(L) Arya Samaj → Swami Dayanand Saraswati

(M) Aligarh Movement → Sir Syed Ahmad Khan

Choose the correct option-

A. J and K only

B. L and M only

C. J, K and M

D. J, K and L

Correct Answer: B. L and M only

Solution:

Concept: The Indian Renaissance refers to the 19th-century socio-religious reform movement aimed at modernizing Indian society through education, rational thinking, and religious reform. Various leaders established institutions to promote different aspects of reform such as education, religious purification, and social upliftment.

Step 1: Evaluating statement (J) The Theosophical Society was founded by Helena Blavatsky and Colonel Olcott in 1875 in the USA and later shifted to India. Swami Vivekananda was associated with the Ramakrishna Mission, not the Theosophical Society. Hence, (J) is incorrect.

Step 2: Evaluating statement (K) The Ramakrishna Mission was founded by Swami Vivekananda in 1897 to propagate the teachings of Ramakrishna Paramahamsa. Raja Ram Mohan Roy founded the Brahmo Samaj, not this mission. Hence, (K) is incorrect.

Step 3: Evaluating statement (L) Arya Samaj was founded by Swami Dayanand Saraswati

in 1875 with the motto "Back to the Vedas," promoting Vedic purity and social reform. Hence, (L) is correct.

Step 4: Evaluating statement (M) The Aligarh Movement was led by Sir Syed Ahmad Khan to promote modern education among Muslims through institutions like MAO College. Hence, (M) is correct.

Final Evaluation: Only (L) and (M) are correctly matched, so option **B** is correct.

Quick Tip: Quick memory trick:

- Arya Samaj → Dayanand Saraswati
- Aligarh Movement → Sir Syed Ahmad Khan
- Ramakrishna Mission → Swami Vivekananda

---

35. Who translated the 'Vande Mataram' into English?

A. Mahatma Gandhi

B. B. C. Chatterjee

C. Sri Aurobindo Ghosh

D. S. C. Bose

Correct Answer: C. Sri Aurobindo Ghosh

Solution:

Concept: "Vande Mataram" is a patriotic song originally composed by **Bankim Chandra Chatterjee** in his novel *Anandamath* (1882). It became one of the most powerful nationalist symbols during the Indian freedom struggle, especially during the Swadeshi Movement. Because the song was originally written in a mix of Sanskritized Bengali, it was later translated into English by nationalist leaders to make its meaning accessible to a wider audience, both in India and abroad.

Step 1: Identifying the original composer The original composition of "Vande Mataram" was done by **Bankim Chandra Chatterjee**. Therefore, option B (B. C. Chatterjee) refers to the composer, not the translator.

Step 2: Identifying the English translation The widely accepted English translation of "Vande Mataram" was done by **Sri Aurobindo Ghosh** in 1909. He translated it in a deeply

spiritual and lyrical form under the title:

- "Mother, I bow to thee"

This translation preserved the emotional intensity and nationalistic spirit of the original Sanskritized Bengali text while making it understandable for English readers.

Step 3: Historical significance of the translation Sri Aurobindo's translation appeared in nationalist publications and became widely circulated during the revolutionary phase of the freedom struggle. It played an important role in spreading the ideological message of nationalism beyond linguistic barriers.

Step 4: Eliminating incorrect options

- Mahatma Gandhi: Associated with freedom movements but not with translation of the song.
- B. C. Chatterjee: Original composer, not translator.
- S. C. Bose: Leader of INA, not related to translation work.

Thus, Sri Aurobindo Ghosh is the correct answer.

Quick Tip: Always remember: **Bankim Chandra Chatterjee = Composer (Anandamath)** and **Sri Aurobindo = English translator of Vande Mataram**.

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36. Dolly the sheep, the first mammal cloned created by scientists-

A. Team Wilmut and Campbell

B. Team Campbell and Watson

C. Team Watson and Crick

D. Team Wilmut and Watson

Correct Answer: A. Team Wilmut and Campbell

Solution:

Concept: Cloning is a biotechnological process of producing genetically identical organisms. The most significant breakthrough in cloning history was the successful creation of **Dolly the sheep**, the first mammal cloned from an adult somatic cell using the technique known

as **Somatic Cell Nuclear Transfer (SCNT)**.

Step 1: Identifying the experiment Dolly the sheep was born on **5 July 1996** at the **Roslin Institute, Scotland**. The experiment demonstrated that a fully differentiated adult cell nucleus can be reprogrammed to develop into a complete organism.

Step 2: Scientists involved The research was led by:

- **Sir Ian Wilmut**
- **Keith Campbell**

These scientists successfully cloned Dolly, proving that adult somatic cells retain full genetic potential.

Step 3: Eliminating incorrect options

- Watson and Crick: Discovered DNA structure (1953), unrelated to cloning.
- Watson (in other options): Not involved in Dolly's cloning experiment.

Hence, only Wilmut and Campbell are correct.

Quick Tip: Dolly the sheep = **Roslin Institute (1996) + Ian Wilmut and Keith Campbell + SCNT technique**.

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37. At present which of the following are conducted in Chhattisgarh State for primary education?

(J) FLN – Foundational Literacy and Numeracy

(K) RTE – Right to Education Act

(L) OB – Operation Blackboard

(M) DPEP – District-Primary Education Programme

Choose the correct option-

A. J and M only

B. K and M only

C. J and K only

D. J, K and L

Correct Answer: C. J and K only

Solution:

Concept: Primary education in India is governed by a combination of constitutional provisions and contemporary educational missions. Some programs are currently active, while others have been phased out or merged into broader schemes like Samagra Shiksha and NEP-aligned initiatives.

Step 1: Evaluating FLN (J) FLN (Foundational Literacy and Numeracy) is part of the **NIPUN Bharat Mission** under NEP 2020. It is actively implemented in all states including Chhattisgarh to ensure that children achieve basic reading and arithmetic skills by Grade 3. Hence, it is currently conducted.

Step 2: Evaluating RTE (K) The **Right to Education Act, 2009** is a constitutional legal framework ensuring free and compulsory education for children aged 6–14 years. It is continuously enforced and remains active.

Step 3: Evaluating Operation Blackboard (L) Operation Blackboard was launched in 1987 to improve primary school infrastructure. However, it has been discontinued as a standalone scheme and absorbed into later programs. Hence, it is not currently conducted.

Step 4: Evaluating DPEP (M) The District Primary Education Programme (DPEP) was launched in 1994 with World Bank assistance. It was phased out after Sarva Shiksha Abhiyan and is no longer active.

Final Decision: Only (J) FLN and (K) RTE are currently active.

Quick Tip: Modern education policy keywords: **FLN (NIPUN Bharat)** + **RTE Act** are active; older schemes like **DPEP and Operation Blackboard** are discontinued.

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38. Arrange the order of cities that hosted Asian Games in chronological order-

(K) Jakarta

(L) Doha

(M) Beijing

(N) Seoul

Choose the correct option-

A. N → M → L → K

B. L → K → M → N

C. M → N → L → K

D. K → L → M → N

Correct Answer: A. N → M → L → K

Solution:

Concept: The Asian Games is a continental multi-sport event held every four years. Correct chronological ordering requires identifying the exact years when each city hosted the Games.

Step 1: Identifying hosting years

- **Seoul (N):** Hosted in **1986**
- **Beijing (M):** Hosted in **1990**
- **Doha (L):** Hosted in **2006**
- **Jakarta (K):** Hosted in **2018**

Step 2: Arranging chronologically

$$1986 \rightarrow 1990 \rightarrow 2006 \rightarrow 2018$$

Thus:

$$N \rightarrow M \rightarrow L \rightarrow K$$

Quick Tip: Asian Games timeline shortcut: **Seoul (1986) □ Beijing (1990) □ Doha (2006) □ Jakarta (2018)**.

---

39. Correct sequential steps of Malaria spread-

(K) Infected female Anopheles bites a healthy human.

(L) Parasite invades the liver.

(M) Fever, Shivering and feeling cold.

(N) Parasite invades the red blood cells.

(O) New mosquito gets infected by blood of patient.

Choose the correct option-

A. K → M → L → N → O

B. K → N → M → L → O

C. K → L → N → M → O

D. K → L → M → N → O

Correct Answer: C. K → L → N → M → O

Solution:

Concept: Malaria is caused by the protozoan parasite *Plasmodium* and is transmitted through the bite of an infected female *Anopheles* mosquito. Its life cycle includes stages in both the human liver and red blood cells, followed by transmission back to mosquitoes.

Step 1: Infection begins

- (K) The cycle starts when an infected female *Anopheles* mosquito bites a healthy human and injects sporozoites.

Step 2: Liver stage

- (L) Sporozoites travel to the liver and multiply inside hepatocytes.

Step 3: Blood stage

- (N) Merozoites are released and invade red blood cells.

Step 4: Symptom stage

- (M) Rupture of RBCs releases toxins causing fever, chills, and shivering.

Step 5: Transmission stage

- (O) A new mosquito bites the infected person and becomes infected.

Final sequence:

$$K \rightarrow L \rightarrow N \rightarrow M \rightarrow O$$

Quick Tip: Malaria flow: **Mosquito bite □ Liver □ RBC □ Symptoms □ New mosquito**.

40. The famous slogan 'Do or Die' was given by which movement?

A. Khilafat Movement

B. Non-Cooperation Movement

C. Civil Disobedience Movement

D. Quit India Movement

Correct Answer: D. Quit India Movement

Solution:

Concept: Slogans played a crucial role in mobilizing mass participation during India's freedom struggle. One of the most powerful slogans was "Do or Die," which symbolized the final and decisive phase of resistance against British rule.

Step 1: Identifying the origin The slogan "Do or Die" (Hindi: *Karo ya Maro*) was given by **Mahatma Gandhi** during his speech at the **Gowalia Tank Maidan, Bombay** on **8 August 1942**.

Step 2: Linking to the movement This speech marked the launch of the **Quit India Movement**, which demanded immediate British withdrawal from India.

Step 3: Significance The slogan represented a call for uncompromising struggle:

- Either achieve complete independence
- Or sacrifice life in the struggle

Thus, it is directly associated with the Quit India Movement.

Quick Tip: "Do or Die" = **1942 + Quit India Movement + Gandhi's final mass call for independence**.

41. Match the following-

Column-I (Commission)		Column-II (Chairman)
(a) Secondary Education Commission	(I)	Dr. S. Radhakrishnan
(b) University Education Commission	(II)	Dr. A. Lakshmanaswami Mudaliar
(c) Kothari Commission	(III)	Dr. M. E. Sadler
(d) Calcutta University Commission	(IV)	Daulat Singh Kothari

Choose the correct answer from the options given below-

A. a-I, b-II, c-III, d-IV

B. a-II, b-I, c-IV, d-III

C. a-I, b-II, c-IV, d-III

D. a-IV, b-I, c-III, d-II

Correct Answer: B. a-II, b-I, c-IV, d-III

Solution:

Concept: Educational commissions in India were constituted at different historical stages to reform school and higher education systems. Each commission is identified with its chairman, and correct matching requires recalling both historical chronology and institutional roles.

Step 1: Secondary Education Commission (a) The Secondary Education Commission was established in **1952** after independence to evaluate secondary school structure in India. It was chaired by **Dr. A. Lakshmanaswami Mudaliar**. Therefore:

$$(a) \rightarrow (II)$$

Step 2: University Education Commission (b) The University Education Commission was set up in **1948** to reform higher education in independent India. It was chaired by **Dr. S.**

Radhakrishnan, who later became the President of India. Therefore:

$$(b) \rightarrow (I)$$

Step 3: Kothari Commission (c) The Kothari Commission (1964–1966) was a major national education commission chaired by **Daulat Singh Kothari**. It recommended the famous 10+2+3 education structure. Therefore:

$$(c) \rightarrow (IV)$$

Step 4: Calcutta University Commission (d) The Calcutta University Commission (1917), also known as the Sadler Commission, was chaired by **Dr. M. E. Sadler**. It examined the functioning of Calcutta University and proposed structural reforms. Therefore:

$$(d) \rightarrow (III)$$

Step 5: Final matching Combining all correct pairs:

$$a - II, \quad b - I, \quad c - IV, \quad d - III$$

Thus, Option **B** is correct.

Quick Tip: Remember the four key education commissions: **Radhakrishnan (1948)** – University Education Commission, **Mudaliar (1952)** – Secondary Education Commission, **Kothari (1964)** – National Education Policy base, **Sadler (1917)** – Calcutta University Commission.

---

42. Who is called the "Grand Old Man of India"?

A. Dadabhai Naoroji

B. Gopal Krishna Gokhale

C. A. O. Hume

D. M. G. Ranade

Correct Answer: A. Dadabhai Naoroji

Solution:

Concept: Honorific titles in Indian nationalism were given to leaders who made long-standing intellectual, political, and organizational contributions to the freedom movement. One such leader was Dadabhai Naoroji, whose work spanned both economic critique and political leadership.

Step 1: Identifying Dadabhai Naoroji

- Dadabhai Naoroji (1825–1917) was one of the earliest Indian political leaders and co-founder of the Indian National Congress (1885).
- He served as President of INC three times.
- He was the first Indian member of the British Parliament.

Step 2: Why he is called "Grand Old Man of India" He earned this title due to:

- His long and continuous political service to India.
- His pioneering economic critique of British colonial rule.
- His famous "Drain of Wealth" theory explaining economic exploitation.

Step 3: Eliminating incorrect options

- Gokhale: Known as political mentor of Gandhi, not this title.
- A. O. Hume: Founder of INC but British administrator.
- M. G. Ranade: Social reformer and judge, not associated with this title.

Thus, Dadabhai Naoroji is the correct answer.

Quick Tip: Dadabhai Naoroji = **Grand Old Man of India** + **Drain of Wealth Theory** + **First Indian MP (British Parliament)**.

---

43. Which city will host the 2026 Commonwealth Games?

A. London

B. Glasgow

C. Birmingham

D. Edinburgh

Correct Answer: B. Glasgow

Solution:

Concept: International sporting events such as the Commonwealth Games are awarded through a bidding process. Sometimes, host cities withdraw due to financial or logistical constraints, leading to reassignment of hosting rights.

Step 1: Original host selection The 2026 Commonwealth Games were initially awarded to **Victoria, Australia**.

Step 2: Withdrawal of original host Victoria withdrew due to high projected costs and budget constraints in 2023, leaving the event without a host.

Step 3: New host selection The Commonwealth Games Federation selected **Glasgow, Scotland**, as the replacement host due to:

- Existing sports infrastructure from 2014 Games
- Lower financial burden
- Experience in hosting large-scale events

Thus, Glasgow was confirmed as the host city for 2026.

Quick Tip: 2026 CWG = originally Victoria (Australia) → shifted to **Glasgow (Scotland)** due to financial withdrawal.

---

44. Which Article contains clear directives related to primary education?

"The State shall endeavour to provide within a period of ten years from the commencement of the Constitution for free and compulsory education for all children till the age of fourteen years."

A. Article 41

B. Article 42

C. Article 46

D. Article 45

Correct Answer: D. Article 45

Solution:

Concept: The Directive Principles of State Policy (Part IV of the Indian Constitution) guide the state in social and economic policymaking. Article 45 originally focused on universal elementary education.

Step 1: Original constitutional provision Article 45 originally stated that the State shall provide free and compulsory education for children up to **14 years within 10 years of the Constitution's commencement**.

Step 2: Constitutional amendment After the **86th Constitutional Amendment Act (2002)**:

- Education for ages 6–14 became a Fundamental Right under Article 21A.
- Article 45 was modified to focus on early childhood care (0–6 years).

Step 3: Evaluating options

- Article 41: Employment, education, assistance
- Article 42: Working conditions and maternity relief
- Article 46: Welfare of SC/ST and weaker sections
- Article 45: Primary education (original provision)

Thus, Article 45 is correct.

Quick Tip: Article 45 (old) → primary education (6–14 years) Article 21A (new) → Fundamental Right to education after 86th Amendment (2002)

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45. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-

Assertion [As] : A large share of the Chhattisgarh State Budget is allocated to the social sector.

Reason [R] : The state government gives priority to welfare schemes.

A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

B. Both [As] and [R] are true, but [R] is not the correct explanation of [As].

C. [As] is true, but [R] is false.

D. [As] is false, but [R] is true.

Correct Answer: A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

Solution:

Concept: State budgets reflect policy priorities. In developing states like Chhattisgarh, a significant portion of expenditure is directed toward social sectors such as health, education, nutrition, and rural welfare.

Step 1: Verifying Assertion Chhattisgarh consistently allocates a large share of its budget to:

- Education
- Health
- Food security
- Tribal welfare

Hence, the Assertion is true.

Step 2: Verifying Reason The state government prioritizes welfare schemes aimed at poverty reduction and inclusive development. Hence, the Reason is also true.

Step 3: Causal relationship Since prioritization of welfare schemes directly leads to higher allocation in social sectors, the Reason correctly explains the Assertion.

Thus, Option A is correct.

Quick Tip: In public finance questions: **Welfare priority □ Higher social sector allocation**.

---

46. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-

Assertion [As] : The National Council for Teacher Education (NCTE) is a statutory body of the Government of India.

Reason [R] : It was established on 17th August 1995 under the provisions of NCTE Act, 1993.

A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

B. Both [As] and [R] are true, but [R] is not the correct explanation of [As].

C. [As] is true, but [R] is false.

D. [As] is false, but [R] is true.

Correct Answer: A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

Solution:

Concept: A statutory body is an institution created by an Act of Parliament or State Legislature. Its powers, functions, structure, and authority are legally defined by that Act, making it different from advisory or executive bodies that do not have a direct legislative foundation.

Step 1: Verifying the Assertion The **National Council for Teacher Education (NCTE)** is the apex regulatory body in India responsible for:

- Maintaining standards in teacher education
- Granting recognition to teacher training institutions
- Regulating curriculum frameworks for teacher education

Since it derives its authority directly from a parliamentary Act, it is correctly classified as a **statutory body**. Hence, the Assertion is **true**.

Step 2: Verifying the Reason The NCTE was originally set up as an advisory body under NCERT in 1973. Later, it was given statutory status through the **National Council for Teacher Education Act, 1993**. In accordance with this Act, it became fully functional as a statutory body on **17 August 1995**. Hence, the Reason is also **true**.

Step 3: Relationship between Assertion and Reason The Reason correctly explains the Assertion because a body becomes "statutory" only when it is established under a specific Act passed by Parliament. Since the NCTE derives its existence, authority, and functions from the NCTE Act, 1993, it is legally a statutory body. Therefore, [R] directly explains why [As] is true.

Quick Tip: A body is **statutory only when created by a Parliament Act**. NCTE = NCTE Act, 1993 → hence statutory body.

---

47. Match the following-

Column-I (Lok Sabha)		Column-II (Speaker)
(a) XIth	(I)	Sumitra Mahajan
(b) XIVth	(II)	Meera Kumar
(c) XVth	(III)	Somnath Chatterjee
(d) XVIth	(IV)	P. A. Sangma

Choose the correct answer from the options given below-

A. a-IV, b-II, c-I, d-III

B. a-IV, b-III, c-II, d-I

C. a-III, b-II, c-IV, d-I

D. a-II, b-I, c-III, d-IV

Correct Answer: B. a-IV, b-III, c-II, d-I

Solution:

Concept: The Speaker of the Lok Sabha is the presiding officer of the lower house of Parliament of India. Each Lok Sabha term corresponds to a specific Speaker elected by the members of the house. Correct matching requires knowledge of parliamentary chronology.

Step 1: XIth Lok Sabha (1996–1997) The XI Lok Sabha saw a fragmented coalition era. **P. A. Sangma** was elected as Speaker, becoming one of the prominent leaders from the North-East to hold this constitutional post.

$$(a) \rightarrow (IV)$$

Step 2: XIVth Lok Sabha (2004–2009) During the UPA-1 government, **Somnath Chatterjee** served as the Speaker and presided over parliamentary proceedings.

$$(b) \rightarrow (III)$$

Step 3: XVth Lok Sabha (2009–2014) Meira Kumar became the first woman Speaker of

the Lok Sabha, marking a historic milestone in Indian parliamentary history.

$$(c) \rightarrow (II)$$

Step 4: XVIth Lok Sabha (2014–2019) Sumitra Mahajan served as Speaker, becoming the second woman to hold this position.

$$(d) \rightarrow (I)$$

Step 5: Final Matching

$$a - IV, \quad b - III, \quad c - II, \quad d - I$$

Thus, Option B is correct.

Quick Tip: Key memory trick: **Sangma (XI)** → first NE Speaker, **Somnath (XIV)**, **Meira Kumar (XV)** → first woman Speaker, **Sumitra Mahajan (XVI)** → second woman Speaker.

---

48. Match the items given in Column-I with the correct pair given in Column-II-

Column-I	Column-II
(a) Economic growth	(I) Increase in GDP
(b) Economic development	(II) Improvement in standard of living
(c) Human capital	(III) Investment in education and health
(d) Poverty	(IV) Lack of minimum consumption
(e) Inequality	(V) Imbalanced income distribution

Choose the correct answer from the options given below-

A. a-I, b-II, c-III, d-IV, e-V

B. a-II, b-III, c-IV, d-V, e-I

C. a-III, b-IV, c-V, d-I, e-II

D. a-IV, b-V, c-I, d-II, e-III

Correct Answer: A. a-I, b-II, c-III, d-IV, e-V

Solution:

Concept: Economics distinguishes between quantitative indicators like growth and qualitative indicators like development, along with foundational concepts such as human capital, poverty, and inequality which describe structural conditions of an economy.

Step 1: Economic growth (a) Economic growth refers to the **quantitative increase in**

output of an economy over time, most commonly measured through GDP.

$$(a) \rightarrow (I)$$

Step 2: Economic development (b) Economic development refers to **qualitative improvement in living standards**, including health, education, and income distribution.

$$(b) \rightarrow (II)$$

Step 3: Human capital (c) Human capital refers to the stock of skills and knowledge in a population, built through **investment in education and health**.

$$(c) \rightarrow (III)$$

Step 4: Poverty (d) Poverty is defined as a condition of **lack of minimum consumption requirements** such as food, shelter, and basic services.

$$(d) \rightarrow (IV)$$

Step 5: Inequality (e) Inequality refers to the **uneven distribution of income and wealth** among individuals in a society.

$$(e) \rightarrow (V)$$

Final Matching

$$a - I, \quad b - II, \quad c - III, \quad d - IV, \quad e - V$$

Thus, Option A is correct.

Quick Tip: Quick distinction: **Growth = GDP**, **Development = quality of life**, **Human capital = education + health investment**.

---

49. Arrange the following Bharat Ratna recipients in chronological order of receiving the award.

(K) Sachin Tendulkar

(L) Amartya Sen

(M) Lata Mangeshkar

(N) Nanaji Deshmukh

(O) Atal Bihari Vajpayee

Choose the correct option-

A. K → L → M → O → N

B. L → K → M → N → O

C. K → M → O → L → N

D. L → M → K → O → N

Correct Answer: D. L → M → K → O → N

Solution:

Concept: The Bharat Ratna is the highest civilian award of India, instituted in 1954. To arrange recipients chronologically, we must identify the exact year in which each personality was conferred the award and then order them in ascending sequence of time.

Step 1: Identify the award year of each recipient

- **(L) Amartya Sen:** Awarded in **1999** for his contributions to welfare economics and development studies.
- **(M) Lata Mangeshkar:** Awarded in **2001** for her unparalleled contribution to Indian music and playback singing.
- **(K) Sachin Tendulkar:** Awarded in **2014** as the first sportsperson and youngest recipient of the Bharat Ratna.
- **(O) Atal Bihari Vajpayee:** Awarded in **2015** for his statesmanship and lifelong political service as former Prime Minister.
- **(N) Nanaji Deshmukh:** Awarded posthumously in **2019** for his rural development and social service contributions.

Step 2: Arrange in chronological order Now arranging the award years in ascending order:

$$1999\ (L) \rightarrow 2001\ (M) \rightarrow 2014\ (K) \rightarrow 2015\ (O) \rightarrow 2019\ (N)$$

Step 3: Final sequence Thus, the correct chronological order is:

$$L \rightarrow M \rightarrow K \rightarrow O \rightarrow N$$

Hence, Option D is correct.

Quick Tip: Memorize recent Bharat Ratna sequence: **1999 (Amartya Sen) → 2001 (Lata Mangeshkar) → 2014 (Sachin Tendulkar) → 2015 (Vajpayee) → 2019 (Nanaji Deshmukh).**

---

50. Who calculates the Gross Domestic Product (GDP) in India?

A. Reserve Bank of India (RBI)

B. Finance Ministry

C. National Statistical Office (NSO)

D. NITI Aayog

Correct Answer: C. National Statistical Office (NSO)

Solution:

Concept: Gross Domestic Product (GDP) is the total monetary value of all final goods and services produced within a country during a specific period. In India, GDP estimation is carried out by the official national statistical agency under the Government of India.

Step 1: Identify the responsible agency The **National Statistical Office (NSO)** is the official body responsible for compiling and estimating India's national income statistics, including GDP, GVA, and related macroeconomic indicators. It functions under the **Ministry of Statistics and Programme Implementation (MoSPI)**.

Step 2: Institutional background The NSO was formed after the merger of:

- Central Statistical Office (CSO)
- National Sample Survey Office (NSSO)

This merger created a unified structure for efficient and standardized data collection and computation of macroeconomic indicators like GDP.

Step 3: Role of other institutions

- **RBI:** Uses GDP data for monetary policy but does not compute GDP.
- **Finance Ministry:** Uses GDP for budget formulation and fiscal planning.

- **NITI Aayog:** Provides policy guidance but does not calculate national income.

Thus, the correct answer is NSO.

Quick Tip: **NSO calculates GDP**, while **RBI uses GDP** for monetary policy decisions like repo rate changes.

---

51. When a teacher shows positive thinking and supportive behaviour towards children, it reflects which type of attitude?

A. Neutral attitude

B. Inconsistent attitude

C. Negative attitude

D. Positive attitude

Correct Answer: D. Positive attitude

Solution:

Concept: Attitude in educational psychology refers to a learned tendency to evaluate and respond to people or situations in a consistent manner. A teacher's attitude strongly influences classroom environment, student motivation, and learning outcomes.

Step 1: Analyze the given behaviour The teacher exhibits:

- **Positive thinking:** Optimistic expectations, constructive interpretation of student performance, and encouragement.
- **Supportive behaviour:** Guidance, empathy, assistance in learning difficulties, and emotional encouragement.

Step 2: Match with attitude types

- **Neutral attitude:** Lack of emotional involvement → not applicable.
- **Inconsistent attitude:** Unpredictable behaviour → not applicable.
- **Negative attitude:** Criticism and discouragement → opposite of given behavior.
- **Positive attitude:** Encouragement, optimism, and support → exact match.

Step 3: Conclusion Therefore, the described behaviour reflects a **positive attitude**.

Quick Tip: In teaching aptitude questions, **support + encouragement + optimism = positive attitude**.

---

52. The term 'kindergarten' means-

A. Children's Garden

B. Children's home

C. Children's school

D. Children's playground

Correct Answer: A. Children's Garden

Solution:

Concept: The term "kindergarten" originates from the German language and represents an early childhood education philosophy developed by Friedrich Fröbel, emphasizing learning through play and natural development.

Step 1: Etymology The word is derived from two German words:

- **Kinder** = children
- **Garten** = garden

Step 2: Meaning Literally, "kindergarten" means **Children's Garden**.

Step 3: Educational philosophy Fröbel used the term to represent his belief that children grow best in a nurturing environment, similar to plants in a garden, where teachers act as gardeners guiding natural growth through play, creativity, and activity-based learning.

Quick Tip: Kindergarten = **Kinder (children) + Garten (garden)** → concept introduced by Friedrich Fröbel.

---

53. On what basis does vocational guidance guide an individual toward a specific vocation?

(J) Capacities

(K) Attitudes

(L) Available opportunities

(M) Personal resources

Choose the correct option-

A. J and K only

B. J, K and L only

C. J, K, L and M

D. K and M only

Correct Answer: C. J, K, L and M

Solution:

Concept: Vocational guidance is a systematic process that helps individuals choose, prepare for, and adjust to a suitable occupation. It is based on the principle of matching internal traits with external environmental conditions.

Step 1: Analyze Capacities (J): Capacities refer to an individual's innate abilities, intelligence, physical strength, and acquired skills. These determine whether a person can successfully perform tasks required in a specific occupation.

Step 2: Analyze Attitudes (K): Attitudes include interests, motivations, values, and psychological orientation. They influence job satisfaction and long-term commitment to a profession.

Step 3: Analyze Available Opportunities (L): Career decisions must align with labor market demand, employment trends, and societal needs. Without opportunity analysis, career choice becomes unrealistic.

Step 4: Analyze Personal Resources (M): Personal resources include financial capacity, educational access, family support, and training availability. These factors determine feasibility of career pathways.

Step 5: Conclusion: Since vocational guidance integrates internal factors (capacities and attitudes) and external factors (opportunities and resources), all four factors are essential. Hence, option C is correct.

Quick Tip: Always remember: vocational guidance = self factors + environmental factors.

---

54. Children are given the opportunity to discover and acquire new knowledge on their own without any special guidance.

A. Project Method

B. Dalton Method

C. Heuristic Method

D. Play way teaching Method

Correct Answer: C. Heuristic Method

Solution:

Concept: The heuristic method is a discovery-based learning approach where learners independently explore and construct knowledge with minimal teacher intervention.

Step 1: Meaning of Heuristic Method: The term ”heuristic” comes from the Greek word *heuriskein*, meaning ”to discover.” It encourages learners to act as independent discoverers.

Step 2: Compare with other methods: Project method involves structured group work, Dalton method involves contract learning, and play-way method involves learning through play. None emphasize complete independent discovery like heuristic method.

Step 3: Conclusion: Since the question emphasizes self-discovery without special guidance, heuristic method is correct.

Quick Tip: Heuristic = discovery learning with minimum teacher guidance.

---

55. Match the following-

Column-I	Column-II
(a) Placement Assessment	(I) Taking a unit test at the end
(b) Formative Assessment	(II) Taking a pre-test before class
(c) Diagnostic Assessment	(III) Asking questions in between the classroom teaching
(d) Summative Assessment	(IV) Identifying issues with a particular skill

Choose the correct answer from the options given below-

A. a-I, b-III, c-II, d-IV

B. a-II, b-III, c-IV, d-I

C. a-III, b-II, c-I, d-IV

D. a-IV, b-II, c-III, d-I

Correct Answer: B. a-II, b-III, c-IV, d-I

Solution:

Concept: Assessment types differ based on timing and purpose in the teaching-learning process.

Step 1: Placement Assessment: It is conducted before instruction to determine readiness; hence pre-test before class.

Step 2: Formative Assessment: It occurs during instruction; asking questions helps monitor learning.

Step 3: Diagnostic Assessment: It identifies learning difficulties in specific skills.

Step 4: Summative Assessment: It evaluates learning at the end through unit tests.

Step 5: Conclusion: Thus correct matching is a-II, b-III, c-IV, d-I.

Quick Tip: Placement = before, Formative = during, Summative = after.

---

56. Match the following-

Column-I (Strategy)	Column-II (Purpose)
(a) Tactile	(I) Understanding concepts
(b) Verbal description	(II) Alternative to visual material
(c) Group activities	(III) Peer cooperation
(d) Use of real objects	(IV) Experiential learning

Choose the correct answer from the options given below-

A. a-I, b-II, c-III, d-IV

B. a-I, b-III, c-II, d-IV

C. a-IV, b-II, c-III, d-I

D. a-II, b-I, c-IV, d-III

Correct Answer: A. a-I, b-II, c-III, d-IV

Solution:

Concept: Teaching strategies are aligned with sensory and collaborative learning principles.

Step 1: Tactile: Touch-based learning improves conceptual understanding.

Step 2: Verbal description: Acts as substitute for visual content.

Step 3: Group activities: Promote peer cooperation.

Step 4: Real objects: Enable experiential learning.

Conclusion: Thus a-I, b-II, c-III, d-IV.

Quick Tip: Hands-on learning improves retention and understanding.

---

57. Which of the following statements about teaching aids are correct?

(J) They help in retaining concepts for a longer duration.

(K) They help students learn better.

(L) They make teaching-learning process interesting.

(M) They enhance rote learning.

Choose the correct option-

A. J, K and L only

B. K, L and M only

C. J, K and M only

D. J, K, L and M

Correct Answer: A. J, K and L only

Solution:

Concept: Teaching aids improve learning by making concepts concrete and engaging.

Step 1: J is correct: They improve retention through visual-auditory learning.

Step 2: K is correct: They enhance understanding.

Step 3: L is correct: They make learning interesting.

Step 4: M is incorrect: Teaching aids discourage rote learning.

Conclusion: Thus correct answer is A.

Quick Tip: Teaching aids promote understanding, not memorization.

---

58. The process of Developing a Teacher's Positive Attitude Towards Children-

(K) Developing Trust in Children.

(L) Gaining Positive Experiences.

(M) Formation of Values and Beliefs.

(N) Building Enduring Attitudes.

(O) Expression in Behavior.

Choose the correct option- A. M → O → L → N → K B. L → N → O → K → M C. K → L → M → N → O D. O → M → N → K → L

Correct Answer: C. K → L → M → N → O

Solution:

Concept: The development of attitude in psychology follows a structured progression from initial interpersonal interaction to stable internal belief systems and finally outward behavioral expression. In educational settings, a teacher's positive attitude is formed through sequential cognitive and emotional layering.

Step 1: Developing Trust in Children (K): The foundation of any positive teacher–student relationship begins with trust. A teacher must first consciously establish emotional safety and confidence in students. Without trust, no meaningful interaction or learning environment can be built.

Step 2: Gaining Positive Experiences (L): Once trust is established, classroom interactions become more cooperative and productive. This leads to repeated positive experiences such as successful communication, student participation, and effective teaching-learning outcomes. These experiences reinforce emotional bonding.

Step 3: Formation of Values and Beliefs (M): Accumulated positive experiences gradually shape internal cognitive frameworks. The teacher begins to develop stable values and beliefs regarding student potential, discipline, empathy, and learning capacity. This represents deep internalization.

Step 4: Building Enduring Attitudes (N): Over time, these beliefs consolidate into long-lasting psychological dispositions. These enduring attitudes are stable, resistant to situational fluctuations, and guide the teacher's general approach toward students across different contexts.

Step 5: Expression in Behavior (O): Finally, internal attitudes manifest externally through observable behavior such as tone of communication, teaching style, classroom management, patience, encouragement, and supportive actions toward learners.

Conclusion: Thus, the correct psychological progression is:

$$\text{Trust} \rightarrow \text{Experience} \rightarrow \text{Beliefs} \rightarrow \text{Attitude} \rightarrow \text{Behavior}$$

which corresponds to:

$$K \rightarrow L \rightarrow M \rightarrow N \rightarrow O$$

Quick Tip: Attitude formation always moves from interaction → experience → belief → stable attitude → behavior.

---

59. A teacher's positive attitude towards children helps in developing-

(J) Self-confidence

(K) Motivation to learn

(L) Classroom participation

(M) Fear

Choose the correct option- A. J, K and L only B. L and M only C. K and L only D. J, K, L and M

Correct Answer: A. J, K and L only

Solution:

Concept: A teacher's positive attitude creates a supportive and psychologically safe classroom environment. Such an environment directly influences cognitive, emotional, and behavioral development of learners.

Step 1: Self-confidence (J): Positive reinforcement, encouragement, and acceptance from teachers help students overcome fear of failure. This builds confidence in their abilities and strengthens self-esteem.

Step 2: Motivation to learn (K): A supportive teacher increases intrinsic motivation by making learning enjoyable, meaningful, and emotionally rewarding. Students feel encouraged to engage in learning activities.

Step 3: Classroom participation (L): When students feel safe and respected, they actively participate in discussions, ask questions, and contribute ideas without fear of criticism.

Step 4: Fear (M): Fear is associated with punishment-based or negative reinforcement

environments. A positive attitude eliminates fear rather than producing it.

Conclusion: Therefore, J, K, and L are correct outcomes, while M is incorrect.

Quick Tip: Positive teacher attitude reduces fear and increases confidence, motivation, and participation.

---

60. How should a teacher behave with students? A. General B. Like a Father C. Like a Friend D. Like a Leader

Correct Answer: C. Like a Friend

Solution:

Concept: Modern educational philosophy emphasizes learner-centered pedagogy where the teacher acts as a facilitator rather than an authoritarian figure.

Step 1: Understanding the role: A teacher should create an open, democratic, and supportive learning environment where students feel comfortable expressing ideas and doubts.

Step 2: Evaluating options: A father-like or leader-like approach may create hierarchy and distance, whereas a friendly approach promotes communication and trust.

Step 3: Why "Like a Friend" is correct: Being like a friend means being approachable, empathetic, and respectful while still maintaining professional boundaries. It encourages active participation and emotional security.

Conclusion: Thus, the most appropriate pedagogical role is "Like a Friend".

Quick Tip: Best teaching style = Friendly + Professional + Supportive.

---

61. Which of the following are essential for successful classroom communication?

(K) Define the purpose.

(L) Opt for presentations.

(M) Use un-risky humour.

(N) Avoid rehearsals.

(O) Repeat speech-tags.

Choose the correct option- A. K, M and O B. L, M and N C. M, N and O D. K, L and N

Correct Answer: A. K, M and O

Solution:

Concept: Effective classroom communication depends on clarity of purpose, engagement techniques, and reinforcement strategies.

Step 1: Define the purpose (K): Clear objectives ensure that communication is structured, meaningful, and goal-oriented.

Step 2: Use un-risky humour (M): Appropriate humour reduces anxiety, increases attention, and improves engagement without harming classroom discipline.

Step 3: Repeat speech-tags (O): Repetition reinforces key ideas, improves retention, and ensures clarity for all learners.

Step 4: Eliminate incorrect options: Avoiding rehearsal (N) is incorrect because preparation improves communication quality, and presentations alone (L) are not sufficient without clarity and engagement.

Conclusion: Thus, K, M, and O are essential.

Quick Tip: Good communication = Purpose + Engagement + Reinforcement.

---

62. Match the following-

Column-I		Column-II
(a)	Small size class of 2-3 students	(I) Flip chart or whiteboard
(b)	Medium size class of 10-15 students	(II) PowerPoint slides
(c)	Large size class of 20-25 students	(III) Presentation with display screen
(d)	Extra-large size class of more than 30 students	(IV) Writing on paper

Choose the correct answer from the options given below- A. a-IV, b-I, c-II, d-III B. a-I, b-II, c-III, d-IV C. a-II, b-I, c-III, d-IV D. a-III, b-IV, c-II, d-I

Correct Answer: A. a-IV, b-I, c-II, d-III

Solution:

Concept: Selection of teaching media depends on visibility, interaction level, and scalability with class size.

Step 1: Small class (2–3 students): Personalized instruction is best done using writing on paper for direct explanation.

Step 2: Medium class (10–15 students): A flip chart or whiteboard ensures visibility and interaction.

Step 3: Large class (20–25 students): PowerPoint slides provide structured visual clarity.
Step 4: Extra-large class (>30 students): A display screen ensures visibility for large audiences.
Conclusion: Thus correct matching is a-IV, b-I, c-II, d-III.

Quick Tip: Match media with class size: small = personal, medium = board, large = slides, very large = screen.

---

63. Arrange the steps for adapting the teaching-learning process in an inclusive classroom in the correct order-

(K) Using simple and clear explanations.

(L) Providing examples from real life situations.

(M) Using visual aids/flash cards.

(N) Demonstration and activity participation.

(O) Asking short answer or MCQ questions for assessment.

A. O → L → N → K → M
B. L → N → K → M → O
C. M → O → L → N → K
D. K → L → M → N → O

Correct Answer: D. K → L → M → N → O

Solution:
Concept: Inclusive education follows a structured progression from conceptual clarity to contextual understanding, then multimodal reinforcement, followed by experiential learning and finally evaluation. This ensures accessibility for diverse learners.
Step 1: Foundational clarity (K) Teaching begins with simple and clear explanations to ensure that all learners, regardless of cognitive or linguistic differences, can grasp the basic idea.
Step 2: Contextual grounding (L) Real-life examples connect abstract knowledge with familiar experiences, making learning meaningful and relatable.

Step 3: Multisensory reinforcement (M) Visual aids and flashcards support dual coding and improve retention, especially for visual learners and learners with special needs.

Step 4: Experiential learning (N) Demonstration and participation allow students to actively construct knowledge through doing, observation, and interaction.

Step 5: Evaluation (O) Short-answer and MCQ-based assessments measure understanding and provide feedback on learning outcomes.

Thus, the correct logical sequence is:

$$K \rightarrow L \rightarrow M \rightarrow N \rightarrow O$$

Quick Tip: In inclusive pedagogy, always move from simple explanation → real-life connection → visual support → activity-based learning → assessment.

---

64. What is the main purpose of vocational information?

A. To prepare students only for examinations

B. To provide information about different occupations

C. To promote sports activities

D. To provide financial assistance

Correct Answer: B. To provide information about different occupations

Solution:

Concept: Vocational information is an essential component of career guidance which focuses on making learners aware of different occupational fields, job roles, and employment opportunities.

Step 1: Understanding vocational information Vocational information provides structured and factual knowledge about various careers such as required skills, qualifications, working conditions, and growth opportunities.

Step 2: Evaluating options Option A is limited to academic exams and does not relate to career awareness. Option C is unrelated as it refers to sports activities. Option D refers to financial support systems, not informational guidance. Option B correctly aligns with the objective of vocational awareness.

Step 3: Final reasoning Since vocational guidance aims at helping individuals make

informed career choices, providing occupational information is its core function.

Quick Tip: Vocational always relates to jobs, careers, and occupational awareness.

---

65. Classroom interaction is called:

A. Beating or punishing by making them stand or sit in a painful posture.

B. Children learn by doing their own gathering evidence.

C. To improve the teaching and learning processes and materials.

D. Learning through work and interaction with teachers and classmates in the classroom.

Correct Answer: D. Learning through work and interaction with teachers and classmates in the classroom.

Solution:

Concept: Classroom interaction refers to reciprocal communication and shared learning experiences between teachers and students.

Step 1: Meaning of interaction Interaction is a two-way or multi-way communication process involving exchange of ideas, questions, responses, and feedback.

Step 2: Option evaluation Option A represents punishment, not interaction. Option B describes independent discovery learning, not interaction. Option C describes an objective, not a definition. Option D correctly defines interaction as collaborative learning.

Step 3: Final interpretation Classroom interaction is best defined as active engagement between teacher and learners.

Quick Tip: Interaction always involves communication between teacher and students or among peers.

---

66. The major objective of education is-

A. Reforming the society.

B. Making students disciplined.

C. Developing inherent abilities/powers of students.

D. Making students followers of teachers.

Correct Answer: C. Developing inherent abilities/powers of students.

Solution:

Concept: Education is derived from Latin "educere," meaning to draw out innate potential.

Step 1: Understanding educational aim Modern education focuses on holistic development of learner potential rather than external control.

Step 2: Option comparison Option A is a social outcome, not the primary aim. Option B is a disciplinary method, not the objective. Option D promotes dependency, contradicting modern education. Option C reflects the true child-centric philosophy.

Step 3: Final reasoning Education primarily develops internal abilities of learners.

Quick Tip: Education = drawing out inner potential, not imposing discipline.

---

67. Select the alternative which consists of positive factors contributing to the effectiveness of teaching:

(J) Teacher's knowledge of the subject.

(K) Teacher's socio-economic background.

(L) Communication skill of the teacher.

(M) Teacher's competence in managing the classroom transactions.

A. J and K only

B. J, K and M

C. K, L and M

D. J, L and M

Correct Answer: D. J, L and M

Solution:

Concept: Teaching effectiveness depends on professional competencies that directly impact classroom learning.

Step 1: Evaluation of each factor J: Subject knowledge ensures conceptual clarity and accuracy. K: Socio-economic background does not influence teaching quality. L: Communication skills ensure effective knowledge transfer. M: Classroom management ensures

organized learning environment.

Step 2: Elimination logic K is irrelevant; J, L, and M are essential teaching competencies.

Step 3: Final conclusion Thus, effective teaching depends on J, L, and M.

Quick Tip: Teaching effectiveness depends on skills, not personal background.

---

68. Match the following-

Column-I	Column-II
(a) Cognitive component	(I) Thoughts or beliefs about an object
(b) Affective component	(II) Feelings or emotions
(c) Behavioural component	(III) Tendency to act in a particular way
(d) Social influence	(IV) Attitude formed due to influence of others

A. a-I, b-II, c-III, d-IV

B. a-I, b-III, c-II, d-IV

C. a-IV, b-II, c-III, d-I

D. a-II, b-I, c-IV, d-III

Correct Answer: A. a-I, b-II, c-III, d-IV

Solution:

Concept: Attitude consists of three components: cognitive, affective, and behavioural, along with social influence factors.

Step 1: Mapping components Cognitive relates to thoughts and beliefs. Affective relates to emotions and feelings. Behavioural relates to actions and tendencies. Social influence reflects external impact on attitude formation.

Step 2: Matching logic Each component directly corresponds to its psychological definition.

Step 3: Final answer Thus, correct matching is a-I, b-II, c-III, d-IV.

Quick Tip: ABC of attitude: Cognitive = thoughts, Affective = feelings, Behavioural = actions.

---

69. The main aim of education is to develop a person's-

A. Knowledge

B. Body

C. Personality

D. Intelligence

Correct Answer: C. Personality

Solution:

Concept: Education aims at holistic personality development of an individual.

Step 1: Analysis of options Knowledge, body, and intelligence represent partial aspects of development.

Step 2: Integration concept Personality integrates cognitive, emotional, social, and physical development.

Step 3: Final conclusion Thus, personality is the most comprehensive aim of education.

Quick Tip: Always select the most holistic and integrative option in education objectives.

---

70. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-

Assertion [As] : A teacher's positive attitude toward children improves the classroom learning environment. Reason [R] : Attitude influences a person's behaviour and responses.

A. Both [As] and [R] are true, and [R] is the correct explanation of [As].

B. Both [As] and [R] are true, but [R] is not the correct explanation of [As].

C. [As] is true, but [R] is false.

D. [As] is false, but [R] is true.

Correct Answer: (A) Both [As] and [R] are true, and [R] is the correct explanation of [As].

Solution: **Concept:** In educational psychology, attitude is a core determinant of behavior. A teacher's positive attitude directly shapes classroom climate through supportive actions and interactions.

Step 1: Evaluate Assertion [As]

A positive teacher attitude promotes encouragement, emotional safety, and active participation. This improves classroom learning environment. Hence, true.

Step 2: Evaluate Reason [R]

Attitude is a psychological predisposition that directly influences behavior, responses, and interaction patterns. Hence, true.

Step 3: Link [As] and [R]

Since behavior shaped by attitude is what creates classroom climate, Reason correctly explains Assertion.

Quick Tip: Read Assertion + Reason with "because". If it forms a logical explanation, both are true and correct explanation is given.

---

71. What does adaptation mean in inclusive education?

A. Changing only the textbook

B. Teaching only in special schools

C. Modifying assessment, materials, curriculum, or classroom environment

D. Seating students separately in the classroom

Correct Answer: (C) Modifying assessment, materials, curriculum, or classroom environment

Solution: **Concept:** Adaptation in inclusive education refers to systematic modifications in teaching-learning processes to meet diverse learner needs.

Step 1: Analyze Option A

Too narrow; adaptation is not limited to textbooks.

Step 2: Analyze Option B

Opposes inclusion; promotes segregation.

Step 3: Analyze Option C

Includes curriculum, assessment, materials, and environment. Fully inclusive approach.

Step 4: Analyze Option D

Leads to isolation, not inclusion.

Final Conclusion:

Option C is correct because it reflects holistic adaptation.

Quick Tip: Inclusive education always focuses on modification of systems, not segregation of learners.

---

72. If a teacher has prejudice towards children, what is the likely outcome?

A. Children's confidence will increase.

B. Learning speed will increase.

C. Children's development will be negatively affected.

D. Classroom discipline will improve.

Correct Answer: (C) Children's development will be negatively affected.

Solution: **Concept:** Prejudice creates bias, discrimination, and negative expectations in classrooms.

Step 1: Impact on confidence

Students feel undervalued → confidence decreases.

Step 2: Impact on learning

Stress and bias reduce cognitive performance.

Step 3: Impact on development

Emotional, social, and academic growth is harmed.

Step 4: Conclusion

Only Option C reflects realistic outcome.

Quick Tip: Prejudice always leads to negative educational and emotional consequences.

---

73. What qualities should a teacher have to be a good facilitator?

(J) Ability to create activities (K) Discriminatory behavior towards the child (L) Recognizing a child's mental ability (M) Adequate knowledge of subject matter

A. J and L only

B. K and L only

C. J, L and M

D. J, K and L

Correct Answer: (C) J, L and M

Solution: **Concept:** A facilitator supports learning by designing activities and guiding students.

Step 1: Analyze J

Essential for active learning.

Step 2: Analyze K

Incorrect; discrimination is harmful.

Step 3: Analyze L

Important for understanding learner level.

Step 4: Analyze M

Subject knowledge is necessary for guidance.

Conclusion:

J + L + M = correct set.

Quick Tip: Eliminate negative traits like discrimination immediately in MCQs.

---

74. The most important challenge before a teacher is-

A. To maintain discipline in the classroom.

B. To make students do their homework.

C. To prepare question papers.

D. To make teaching-learning process enjoyable.

Correct Answer: (D) To make teaching-learning process enjoyable.

Solution: **Concept:** Engagement is the core challenge in modern teaching.

Step 1: Routine tasks

A, B, C are administrative or control-based.

Step 2: Core teaching challenge

Motivating learners is the real difficulty.

Step 3: Why D is correct

Enjoyable learning increases motivation and participation.

Quick Tip: Engagement is more important than discipline in modern pedagogy.

---

75. Which of the following is an example of a Cognitive Skill?

A. Emotional control

B. Problem-solving ability

C. Time management

D. Physical health

Correct Answer: (B) Problem-solving ability

Solution: **Concept:** Cognitive skills involve thinking, reasoning, and problem-solving.

Step 1: A

Emotional → affective domain.

Step 2: B

Problem-solving → cognitive domain.

Step 3: C

Time management → executive skill.

Step 4: D

Physical health → psychomotor domain.

Conclusion:

Only B matches cognitive skills.

Quick Tip: Cognitive = thinking + reasoning + analysis.

---

76. Arrange the steps of the process of developing an interest in business in the correct order-

(K) Self-awareness of interests and abilities. (L) Exploration of career opportunities. (M) Matching skills with careers. (N) Planning for education/training. (O) Career decision making.

A. O → L → N → K → M

B. L → N → K → M → O

C. M → O → L → N → K

D. K → L → M → N → O

Correct Answer: (D) K → L → M → N → O

Solution: **Concept:** Career development is a sequential psychological and informational process in which an individual first understands the self, then explores external opportunities, evaluates compatibility, makes a decision, and finally prepares for execution. This aligns with major vocational theories such as Holland's theory of career choice and Super's self-concept theory.

Step 1: Establishing self-awareness (Foundation stage)

(K) Self-awareness of interests and abilities is the starting point of any career development process. A person must first identify: - What they are interested in - What skills they possess - What strengths and limitations define their profile

Without this internal clarity, external career choices become random and unstructured.

Step 2: Exploring career opportunities (Environmental scanning)

Once self-awareness is achieved, the next logical step is (L) Exploration of career opportunities. At this stage: - The learner studies different business fields - Investigates entrepreneurial options - Understands market demands and job roles

This step connects the individual to the external vocational world.

Step 3: Matching skills with careers (Compatibility analysis)

(M) Matching skills with careers is the evaluation phase. Here: - Personal abilities are compared with career requirements - Strength–demand alignment is analyzed - Suitability of business or job roles is assessed

This ensures realistic and achievable career planning.

Step 4: Planning for education/training (Preparation phase)

(N) Planning for education/training involves: - Selecting courses, certifications, or skill development programs - Structuring learning pathways - Preparing for entry into the chosen field

This step converts a career idea into an actionable roadmap.

Step 5: Career decision making (Final commitment)

(O) Career decision making is the final stage where: - The individual selects one specific path - Alternatives are evaluated and rejected - A commitment to a business or profession is made

This completes the decision-making cycle.

Final Sequence:

$$K \rightarrow L \rightarrow M \rightarrow N \rightarrow O$$

Quick Tip: Career development always moves from self-understanding → exploration → matching → planning → final decision.

---

77. SWAYAM is initiated by Govt. of India with an objective to-

(K) Ensure best quality content produced and delivered. (L) Provide quality materials with nominal cost. (M) Assess students continuously and grant degrees. (N) Teach all classes from class IX to PG. (O) Accessed by anyone, anywhere at any time.

A. K, N and O

B. K, L and O

C. K, M and N

D. M, N and O

Correct Answer: (A) K, N and O

Solution: **Concept:** SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) is a Government of India digital learning platform designed to provide high-quality education through MOOCs (Massive Open Online Courses). Its core principles are accessibility, equity, and quality.

Step 1: Evaluating statement (K)

K is correct because SWAYAM courses are developed by national coordinators such as NPTEL, UGC, CEC, IGNOU, ensuring high-quality academic content.

Step 2: Evaluating statement (L)

L is incorrect because: - Learning content is free - Only certification exams may have a fee Hence "nominal cost" is misleading.

Step 3: Evaluating statement (M)

M is incorrect because SWAYAM: - Does not directly grant degrees - Only provides certificates

and credit transfer support

Step 4: Evaluating statement (N)

N is correct because courses range from school level (Class IX) to postgraduate education.

Step 5: Evaluating statement (O)

O is correct because SWAYAM is: - Open access - Time-independent - Location-independent

Final Conclusion:

$$\{K, N, O\}$$

Quick Tip: SWAYAM = Study anytime, anywhere, by anyone with high-quality national-level content.

---

78. Vocational interest mainly develops during which stage?

A. Childhood

B. Adolescence

C. Old age

D. Infancy

Correct Answer: (B) Adolescence

Solution: **Concept:** Vocational interest develops when individuals acquire abstract thinking, identity formation ability, and future-oriented decision-making capacity. According to Erikson's psychosocial theory, this occurs most prominently during adolescence.

Step 1: Infancy and Childhood

- Interest is based on imitation and play - No stable vocational preference exists

Step 2: Adolescence (Correct stage)

- Identity vs Role Confusion stage (Erikson) - Development of abstract reasoning (Piaget) - Exploration of career identity begins - Students begin evaluating real-world occupations

Step 3: Old age

- Focus shifts to reflection and retirement - No new vocational formation occurs

Final Conclusion:

Adolescence is the key stage for vocational interest formation.

Quick Tip: Vocational interest emerges when identity formation begins — mainly during adolescence.

---

79. Why is adaptation necessary in inclusive classrooms?

(J) To consider different learning styles. (K) To ensure participation of all students. (L) To provide equal learning opportunities. (M) To improve only examination results.

A. J and K only

B. J, L and M

C. K and M only

D. J, K and L

Correct Answer: (D) J, K and L

Concept: Inclusive education focuses on equity, participation, and accessibility. Adaptation ensures that every learner receives appropriate support based on their individual needs.

Step 1: Evaluating (J)

Different learners have different learning styles; adaptation supports multimodal learning.

Step 2: Evaluating (K)

Adaptation ensures that all students actively participate in classroom learning.

Step 3: Evaluating (L)

Equity in education requires equal opportunity through necessary support and adjustments.

Step 4: Evaluating (M)

Incorrect because inclusive education is holistic, not limited to examination results.

Final Answer:

$$\{J, K, L\}$$

Quick Tip: Inclusive education is about participation and equity, not exam scores alone.

---

80. Which of the following should a teacher focus on in the classroom?

(K) One-way communication. (L) Intercultural harmony. (M) Feedback from students. (N) Creating a flexible atmosphere. (O) Avoiding giving advice.

A. K, L and M

B. L, M and N

C. K, N and O

D. M, N and O

Correct Answer: (B) L, M and N

Concept: Modern classrooms emphasize interaction, inclusivity, and learner-centered pedagogy.

Step 1: Evaluating (K)

One-way communication is outdated and ineffective.

Step 2: Evaluating (L)

Intercultural harmony promotes inclusive and respectful learning environments.

Step 3: Evaluating (M)

Feedback improves teaching effectiveness and student understanding.

Step 4: Evaluating (N)

A flexible atmosphere supports diverse learning needs.

Step 5: Evaluating (O)

Avoiding advice is incorrect because teachers also guide learners.

Final Conclusion:

$$\{L, M, N\}$$

Quick Tip: Modern teaching is two-way, flexible, and inclusive — not rigid or one-way.

---

81. कारक विश्लेषण तालिका के अनुसार निम्नलिखित कारकों को उनके सही व्याकरणिक क्रम में व्यवस्थित करें:

(K) अधिकरण

(L) करण

(M) संप्रदान

(N) अपादान

(O) संबंध

(A) $L \rightarrow O \rightarrow M \rightarrow N \rightarrow K$

(B) $L \rightarrow M \rightarrow N \rightarrow O \rightarrow K$

(C) $L \rightarrow O \rightarrow N \rightarrow M \rightarrow K$

(D) $L \rightarrow N \rightarrow O \rightarrow M \rightarrow K$

Correct Answer: (B) $L \rightarrow M \rightarrow N \rightarrow O \rightarrow K$

Solution:

Concept: In Hindi grammar (व्याकरण), cases (कारक) represent the grammatical relationship between nouns/pronouns and other words in a sentence.

The standard sequence of cases is:

1. कर्ता
2. कर्म
3. करण (L)
4. संप्रदान (M)
5. अपादान (N)
6. संबंध (O)
7. अधिकरण (K)

Step 1: Mapping:

- L = 3
- M = 4
- N = 5
- O = 6
- K = 7

Step 2: Increasing order:

$$3 \rightarrow 4 \rightarrow 5 \rightarrow 6 \rightarrow 7$$

So:

$$L \rightarrow M \rightarrow N \rightarrow O \rightarrow K$$

Quick Tip: Learn the fixed order of कारक to solve all such questions quickly.

---

82. प्रयोग के आधार पर एवं अर्थ की दृष्टि से सर्वनाम (Pronoun) के कितने भेद होते हैं?

(A) छह
(B) पाँच
(C) सात
(D) आठ

Correct Answer: (A) छह

Solution:

Concept: In Hindi grammar, a सर्वनाम (Pronoun) is a word that replaces a noun to avoid repetition and make sentences more concise and meaningful. When classified on the basis of **usage (प्रयोग)** and **meaning (अर्थ)**, pronouns are grouped into specific functional categories depending on how and where they are used in communication.
The classification is not arbitrary but follows semantic roles such as reference to speaker, listener, unknown object, questioning entity, or relational dependency.
Step 1: Identifying functional categories
Hindi grammar recognizes the following six major types of pronouns:

- **पुरुषवाचक सर्वनाम (Personal Pronoun):** These pronouns refer to the speaker, listener, or a third person. For example: मैं, तुम, वह, हम. They are used to indicate person-based identity in communication.
- **निश्चयवाचक सर्वनाम (Demonstrative Pronoun):** These are used to point out specific persons or objects clearly. Example: यह, वह. They help in indicating proximity or definiteness.
- **अनिश्चयवाचक सर्वनाम (Indefinite Pronoun):** These refer to objects or persons in an indefinite or unknown manner. Example: कोई, कुछ. They do not specify exact identity.
- **संबंधवाचक सर्वनाम (Relative Pronoun):** These establish a relationship between two

clauses or ideas. Example: जो, सो. They connect dependent and independent clauses.

- **प्रश्नवाचक सर्वनाम (Interrogative Pronoun):** These are used to ask questions about persons or things. Example: कौन, क्या. They introduce interrogative sentences.
- **निजवाचक सर्वनाम (Reflexive Pronoun):** These refer back to the subject itself and emphasize self-action. Example: स्वयं, खुद, आप.

Step 2: Analytical reasoning of classification

The classification is based on functional and semantic behavior, not on the total number of pronoun words. Each category represents a distinct grammatical usage pattern in sentence formation.

When all six functional categories are counted, the total number of pronoun types becomes:

$$\text{Total types} = 6$$

Step 3: Final conclusion

Since exactly six functional categories exist in standard Hindi grammar under usage and meaning-based classification, the correct answer is Option (A).

Quick Tip: Always remember: pronoun "types" are categories, not individual pronoun words. Many students confuse the number of pronouns with classification groups.

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83. प्लुत स्वर के संबंध में सही कथन चुनिए:

(J) इसका कोई चिह्न नहीं होता।

(K) हिन्दी में सामान्यतः इसका प्रयोग नहीं होता।

(L) वैदिक भाषा में इसका प्रयोग अधिक हुआ है।

(M) इसे 'एकमात्रिक' स्वर भी कहते हैं।

(A) J और K
(B) J और L
(C) J, K और M

(D) J, K और L

Correct Answer: (B) J और L

Solution:

Concept: In Sanskrit and Vedic phonetics, vowels are classified on the basis of pronunciation duration (उच्चारण काल). This duration is measured in matras (मात्रा), and vowels are divided into three main categories:

- ह्रस्व स्वर (1 matra)
- दीर्घ स्वर (2 matras)
- प्लुत स्वर (3 or more matras)

Pluta vowels are special elongated vowels used primarily in Vedic chanting, dramatic expression, or calling out from a distance.

Step 1: Analysis of Statement J

Statement J says that pluta vowels do not have a standard independent alphabetic representation in modern Devanagari script like other vowels. Instead, they are often indicated using a numerical symbol (३) or special notation.

This makes J generally correct in the context of modern standard writing systems.

Step 2: Analysis of Statement K

Statement K claims that pluta vowels are not used in Hindi. This is partially incorrect because although they are rare in modern usage, they still appear in Vedic chanting traditions and certain formal phonetic contexts such as "ओ३म्".

Hence, it cannot be considered absolutely correct.

Step 3: Analysis of Statement L

Statement L states that pluta vowels are widely used in Vedic language. This is historically and grammatically correct because Vedic chanting relies on elongated pronunciation for meter and rhythmic accuracy.

Thus, L is correct.

Step 4: Analysis of Statement M

Statement M incorrectly defines pluta vowels as one-matra vowels. However, pluta vowels are three-matra (त्रिमात्रिक), making this statement incorrect.

Step 5: Final evaluation

Only statements J and L are correct, while K is partially incorrect and M is wrong.

$$\text{Correct set} = J + L$$

Thus, Option (B) is correct.

Quick Tip: Pluta vowels are always longer than both short and long vowels and are mainly associated with Vedic pronunciation traditions.

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84. 'घोड़ा' शब्द के लिए सही तत्सम शब्द चुनिए:

(A) अश्व

(B) घोटक

(C) बाजि

(D) सैंधव

Correct Answer: (B) घोटक

Solution:

Concept: In Hindi linguistics, words are classified into **तत्सम** and **तद्भव** categories. Tatsama words are those that are directly borrowed from Sanskrit without any phonetic or structural modification, whereas tadbhava words are modified forms that evolved naturally over time due to pronunciation simplification.

Step 1: Understanding the base word

The modern Hindi word **घोड़ा** is a tadbhava word. It has evolved from its Sanskrit root through gradual phonetic transformation. The original Sanskrit form associated with this word is **घोटक**.

Step 2: Etymological transformation process

The linguistic evolution can be represented as:

घोटक (Sanskrit) → प्राकृत रूप → घोड़ा (Hindi)

During this transformation, consonant softening and vowel modification occurred to simplify pronunciation for everyday spoken usage.

Step 3: Evaluation of options

- **अश्व:** A classical Sanskrit synonym for horse, but not the direct root of "घोड़ा".
- **बाजि:** Literary Sanskrit term used in poetic contexts.
- **सैंधव:** Refers to a horse from the Sindh region, not a linguistic root form.
- **घोटक:** The direct Sanskrit base form that evolved into "घोड़ा".

Step 4: Final conclusion

Since **घोटक** is the direct Sanskrit equivalent form from which the tadbhava word "घोड़ा" evolved, it is the correct answer.

Quick Tip: Tatsam words preserve Sanskrit structure exactly, while tadbhav words evolve naturally in pronunciation over time.

---

85. सुमेल कीजिए:

(a) प्रत्येक (I) तत्पुरुष
(b) हथकड़ी (II) द्वंद्व
(c) मुनिवर (III) अव्ययीभाव
(d) हरिहर (IV) कर्मधारय

(A) a-I, b-II, c-III, d-IV
(B) a-III, b-II, c-I, d-IV
(C) a-III, b-I, c-IV, d-II
(D) a-IV, b-III, c-II, d-I

Correct Answer: (C) a-III, b-I, c-IV, d-II

Solution:

Concept: In Hindi grammar, **समास (compound words)** are formed when two or more words combine to form a single meaningful unit. The meaning of the compound depends on the relationship between the constituent words. Different types of समास are classified based on grammatical dependency such as prefix dominance, case relationship, coordination, and adjective–noun relation.

Step 1: Analysis of (a) प्रत्येक

The word **प्रत्येक** is formed as:

$$+ =$$

Here, the prefix **"प्रति"** acts as an indeclinable (अव्यय), and the meaning of the compound is dominated by the prefix itself ("each" or "every"). Such compounds are classified as **अव्ययीभाव समास**.

So,

$$(a) \rightarrow (III)$$

Step 2: Analysis of (b) हथकड़ी

The word **हथकड़ी** is derived from:

Here, the relationship between words is expressed through a hidden case marker "के लिए" (dative relation), which is omitted during compounding. Such compounds, where a case relationship is implied, are known as **तत्पुरुष समास**.

So,

$$(b) \rightarrow (I)$$

Step 3: Analysis of (c) मुनिवर

The compound **मुनिवर** is formed from:

$$+$$

Here, "वर" (श्रेष्ठ) acts as an adjective describing the noun "मुनि". This adjective–noun relationship is the defining feature of **कर्मधारय समास**, where one word qualifies the other.

So,

$$(c) \rightarrow (IV)$$

Step 4: Analysis of (d) हरिहर

The word **हरिहर** consists of:

+

Both components are equally important and neither word dominates the meaning of the other. The compound expresses coordination ("Hari and Hara"), which is the defining feature of **द्वंद्व समास**.

So,

$$(d) \rightarrow (II)$$

Final Answer:

$$a - III,\ b - I,\ c - IV,\ d - II$$

Thus, Option (C) is correct.

Quick Tip: Identify Avyayibhav quickly by spotting prefixes like प्रति, अनु, यथा. They usually dominate meaning.

---

86. Assertion Reason question:

Assertion (As): द्विगुण व्यंजन शब्द की शुरुआत में नहीं आते।
Reason (R): ये केवल शब्द के मध्य या अंत में प्रयुक्त होते हैं।

(A) दोनों सही और R सही व्याख्या है
(B) दोनों सही लेकिन R व्याख्या नहीं है
(C) केवल As सही
(D) केवल R सही

Correct Answer: (A)

Solution:

Concept: In Hindi phonetics, **द्विगुण व्यंजन (flap consonants)** such as **ड़** and **ढ़** are modified forms of ड and ढ. These sounds are produced by a quick flap of the tongue and have specific

positional constraints in word formation.

Step 1: Verification of Assertion (As)

The assertion states that these consonants do not appear at the beginning of words. This is correct because Hindi phonotactic rules do not allow flap consonants like **ड़** or **ढ़** to initiate a word. Words always begin with their base forms like ड or ढ.

Thus, Assertion (As) is true.

Step 2: Verification of Reason (R)

The reason states that these consonants appear only in the middle or at the end of words. This is also correct. Examples include:

सड़क, लड़का, पढ़ना, गढ़

Thus, Reason (R) is also true.

Step 3: Logical relationship

The reason correctly explains the assertion because the phonetic nature of flap consonants restricts them from occurring at word-initial positions and confines them to medial or final positions.

Therefore, both statements are correct and R is the correct explanation of As.

Quick Tip: Flap consonants (ड़, ढ़) are always derived forms and never appear at the start of native Hindi words.

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87. निम्नलिखित में से कौन-सा शब्द 'अनु' उपसर्ग से नहीं बना है?

(A) अन्वेषण

(B) अनुपम

(C) अनुचर

(D) अनुराग

Correct Answer: (B) अनुपम

Solution:

Concept: In Sanskrit and Hindi morphology, a **उपसर्ग (prefix)** is a meaningful element added before a root word to modify its meaning. The prefix "अनु" generally conveys meanings such as following, after, or along.

To solve this question, each word must be broken down morphologically.

Step 1: Analysis of (A) अन्वेषण

+ =

Here, the prefix **अनु** is clearly present.

Step 2: Analysis of (B) अनुपम

+ =

Here, the prefix is not "अनु" but **"अन्"**, which is a negative prefix meaning "without" or "not".

Hence, this word does NOT contain the prefix अनु.

Step 3: Analysis of (C) अनुचर

+ =

Clearly formed using the prefix "अनु".

Step 4: Analysis of (D) अनुराग

+ =

Also formed using the prefix "अनु".

Final conclusion: Only **अनुपम** is formed using the prefix "अन्", not "अनु".

Therefore, Option (B) is correct.

Quick Tip: Words beginning with "अनु" are not always true prefixes—always verify root splitting before concluding.

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88. लोकोक्ति अर्थ चुनें

(A) शर्म

(B) उपाय नहीं

(C) फैशन

(D) बनावटी बड़प्पन

Correct Answer: (D)

Solution:

Concept: A **लोकोक्ति (proverb)** is a fixed traditional expression that conveys a deeper moral or social meaning beyond its literal wording. Proverbs are often based on real-life social behavior and highlight human tendencies such as hypocrisy, pride, honesty, or irony.
The given proverb reflects a situation where appearance and reality are completely contradictory.

Step 1: Literal interpretation

The expression "शेखी सेठ की, धोती भाड़े की" can be broken as:

- **शेखी सेठ की:** Showing pride or arrogance like a wealthy landlord or merchant.
- **धोती भाड़े की:** Even basic clothing (dhoti) is rented, indicating lack of actual wealth.

Step 2: Logical interpretation

This contrast clearly highlights a person who pretends to be wealthy, powerful, or socially superior, while in reality they lack even basic resources. The proverb criticizes false display and hypocrisy in social behavior.

Step 3: Final meaning

The correct implied meaning is: **"बिना वास्तविक क्षमता के केवल दिखावटी बड़ा बनना"**.
Thus, the correct option is (D) बनावटी बड़प्पन.

Quick Tip: Proverbs often rely on irony: what is said is opposite to what is meant.

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89. 'चिन्मय' में संधि कौन-सी है?

(A) स्वर संधि

(B) व्यंजन संधि

(C) विसर्ग संधि

(D) कोई नहीं

Correct Answer: (B)

Solution:

Concept: संधि (Sandhi) is the phonetic fusion of two sounds occurring at word boundaries or within compound words. When consonants merge or transform due to phonetic rules, it is classified as **व्यंजन संधि (consonant sandhi)**.

Step 1: Word decomposition

The word **चिन्मय** is derived as:

+

Step 2: Sandhi transformation

Here the final consonant of the first word is:

त्

and it comes in contact with:

म्

According to consonant sandhi rules, when a dental consonant (त्) is followed by a nasal consonant (म्), it changes into its corresponding nasal sound from the same class:

→

Thus the transformation becomes:

+ →

Step 3: Classification

Since this transformation occurs due to interaction between consonants, it is clearly an example of **व्यंजन संधि**.

Final Answer: Option (B)

Quick Tip: In consonant sandhi, dental consonants often convert into nasal sounds before "म".

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90. 'जलज' शब्द के लिए सही अनेकार्थी शब्द समूह चुनिए

(A) J और K
(B) J और L
(C) J, K और M
(D) J, K और L

Correct Answer: (C) J, K और M

Solution:

Concept: An **अनेकार्थी शब्द (polysemous word)** is a word that carries multiple related meanings depending on context. The word "जलज" is formed from:

$$+ =$$

It refers to anything that originates or is born in water.

Step 1: Meaning analysis of each option

- **(J) कमल (Lotus):** Grows and blooms in water, hence correctly called जलज.
- **(K) मछली (Fish):** Lives and reproduces in water, also correctly called जलज.
- **(L) बादल (Cloud):** Not born in water; instead it contains water vapor. It is correctly called जलद (giver of water), not जलज.
- **(M) मोती (Pearl):** Forms inside oysters underwater, hence also considered जलज.

Step 2: Final selection

Since J, K, and M satisfy the condition of "born in water", they correctly represent the meanings of जलज.

$$\text{Correct set} = J + K + M$$

Thus, Option (C) is correct.

Quick Tip: "ज" means born from — जलज = born in water, जलद = gives water.

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91. Direction - For the below Assertion [As] and Reason [R], choose the correct alternative-

Assertion [As] : It was not possible to "linger on the expedition".

Reason [R] : Once the tide turned, it came in rapidly and could cut off the return path.

(A) Both [As] and [R] are true, and [R] is the correct explanation of [As].

(B) Both [As] and [R] are true, but [R] is not the correct explanation of [As].

(C) [As] is true, but [R] is false.

(D) [As] is false, but [R] is true.

Correct Answer: (A) Both [As] and [R] are true, and [R] is the correct explanation of [As].

Solution:

Concept: This question tests reading comprehension, logical deduction, and cause-and-effect relationships. To determine the correct answer, we must first assess whether the statements are factually true on their own, and then determine if there is a direct logical connection linking the cause (Reason) to the effect (Assertion).

Step 1: Evaluate the validity of Assertion [As].

The assertion states that it was impossible to delay or "linger on the expedition." This describes an explicit constraint or limitation on time during a journey, implying that lingering would introduce danger. This statement functions as a true situational premise in coastal expeditions.

Step 2: Evaluate the validity of Reason [R].

The reason mentions that when a tide changes direction, it rushes in with immense speed, which can completely submerge low-lying areas and trap travelers by blocking their escape route back to safety. This is a well-documented physical hazard of coastal geography, making the statement factually true.

Step 3: Analyze the logical link between [As] and [R].

Let us link the two statements using the explanatory conjunction 'because':

"It was not possible to linger on the expedition **because** once the tide turned,

it came in rapidly and could cut off the return path."

The sentence flows logically. The high risk of being cut off by a fast-moving tide perfectly explains why travelers could not afford to waste time or linger. Therefore, both statements are true, and the reason serves as a clear, valid explanation for the assertion. This corresponds to option (A).

Quick Tip: To verify assertion-reason questions smoothly, read the assertion, add the word "because" at the end, and then read the reason. If the resulting combined sentence makes logical sense as a cause-and-effect scenario, select the option stating it is the correct explanation.

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92. Choose the correct answer from the options given below the sentence:
When the principal entered the class, a student _____ on the blackboard.

(A) wrote
(B) was writing
(C) writes
(D) is writing

Correct Answer: (B) was writing

Quick Tip: Remember this classic sentence pattern:

When + Subject + Simple Past (V_2), Subject + Past Continuous (was/were + V-ing)

Example: *When the bell rang, we were having lunch.*

---

93. Fill in the blanks with suitable preposition:
"The dog is lying _____ the floor."

(A) at

(B) above

(C) on

(D) upon

Correct Answer: (C) on

Solution:

Concept: Prepositions indicate spatial relationships between objects. To select the correct option, let us evaluate the positional rules for resting on a flat horizontal plane:

- on: Used when an object is resting on and physically touching a flat surface.
- at: Focuses on a specific point or location in space rather than physical contact with a flat plane.
- above: Indicates something is higher than a surface without direct physical contact.
- upon: Typically used to describe an object moving toward and landing on a surface, rather than an object already resting in a static state.

Step 1: Examine the state of the subject in the sentence.

The sentence states: "The dog is lying _____ the floor." The verb 'is lying' indicates that the dog is in a static, resting position. The floor acts as a flat physical boundary supporting the dog's weight. Because the dog is in direct physical contact with this flat horizontal surface, the standard preposition required is 'on'.

Step 2: Verify why other options do not fit.

Let us check why the alternatives are less suitable:

- *at the floor* would incorrectly imply a general proximity point rather than resting on top of the surface.
- *above the floor* would mean the dog is floating in mid-air above the ground, which violates gravity and common sense.
- *upon the floor* implies active movement or a dynamic shift onto the floor (e.g., *The dog jumped upon the table*), which contradicts the static verb 'lying'.

Thus, 'on' is the most accurate choice, matching option (C).

Quick Tip: Use on for static contact with a flat surface (e.g., *on the floor*, *on the table*). Use upon when there is active physical movement or a jump directed onto that surface.

---

94. Choose the correct answer from the options given below the sentence:

He always _____ to prove that the earth revolves around the sun.

(A) tried

(B) tries

(C) was trying

(D) is trying

Correct Answer: (B) tries

Solution:

Concept: The choice of verb tense depends on frequency modifiers and structural clues within a sentence. The adverb 'always' signifies an ongoing habit, consistent trait, or regular recurring routine. Habitual actions, timeless characteristics, or repetitive personal behaviors are structured using the Simple Present Tense ($S + V_1/V_{s/es}$).

Step 1: Analyze the subject and the frequency modifier.

The sentence contains the adverb 'always', which means the action is a regular habit rather than a temporary single event. The subject of the sentence is the third-person singular pronoun 'He'. In the Simple Present tense, a singular subject requires a verb ending with an '-s' or '-es' suffix modifier ($V_{s/es}$).

Step 2: Evaluate the options against simple present tense rules.

Let us filter the choices based on our tense criteria:

- (A) tried: Simple Past form. This contradicts the habitual continuity implied by 'always'.
- (B) tries: Present tense third-person singular form. This fits the subject 'He' and matches the frequency modifier 'always'.
- (C) was trying: Past Continuous form. This describes a temporary background event in the past, which does not fit here.
- (D) is trying: Present Continuous form. This describes a temporary action happening right at this moment, which conflicts with the permanent habit implied by 'always'.

This leaves 'tries' as the correct grammatical fit, matching option (B).

Quick Tip: Signal keywords like always, usually, often, everyday, daily point directly to habitual routines. Pair them with the Simple Present Tense to ensure correct sentence structure.

---

95. Below is given sentence in active/passive voice. Out of the four alternative suggested, select one which best expresses the same sentence in passive/active voice:
"The waiter filled the glasses with water."

(A) The glasses filled with water by the waiter.

(B) The glasses were filled with water by the waiter.

(C) The waiter was filled the glasses with water.

(D) The water were filled in the glasses by waiter.

Correct Answer: (B) The glasses were filled with water by the waiter.

Solution:

Concept: To convert a sentence from Active Voice to Passive Voice, we follow a reliable set of structural transformations:

1. Identify the core components of the active sentence: Subject (S), Verb (V), and Direct Object (O).
2. Shift the Direct Object (O) so it becomes the new grammatical subject of the passive sentence.
3. Adjust the auxiliary helping verb to match the original tense of the active verb. For the Simple Past Tense (V_2), the passive auxiliary pattern is:

$$\textbf{was / were} + \textbf{Past Participle}\ (V_3)$$

4. Move the original subject to the end of the clause, preceded by the preposition 'by'.

Step 1: Analyze the components of the active sentence.
Let us break down the provided sentence: "The waiter filled the glasses with water."

- Subject (S): The waiter

- Verb (V): filled (Simple Past Tense, V_2 form)
- Object (O): the glasses
- Adjunct Phrase: with water

Step 2: Apply the passive transformation rules.

Let us reassemble the components step-by-step into a passive structure:

- The object 'The glasses' becomes our new leading plural subject.
- Since 'The glasses' is plural and the original tense is Simple Past, we choose the auxiliary verb 'were'.
- The past participle (V_3) form of 'filled' remains 'filled'.
- Combine these parts with the remaining descriptive details: *were filled with water*.
- Append the agent clause at the end: 'by the waiter'.

Putting it all together gives: "The glasses were filled with water by the waiter." This matches option (B).

Quick Tip: Always track the singular or plural status of your new passive subject. Here, glasses is strictly plural, which means it requires were, not was. This helps you quickly rule out incorrect choices.

$$\text{Active } V_2 \rightarrow \text{Passive (was/were} + V_3)$$

---

96. Change the following sentence from the active voice to the passive voice-

"The peon opened the gate."

(A) The gate is opened by the peon.

(B) The gate were opened by the peon.

(C) The gate has opened by the peon.

(D) The gate was opened by the peon.

Correct Answer: (D) The gate was opened by the peon.

Solution:

Concept: This question focuses on converting a sentence from active to passive voice in the Simple Past tense. The core conversion formula for structural mapping is:

$$\text{Active: Subject} + V_2 + \text{Object}$$

$$\text{Passive: Object} + (\text{was / were}) + V_3 + \text{by} + \text{Subject}$$

Step 1: Deconstruct the active sentence components.

Let us analyze the components of the phrase: "The peon opened the gate."

- Subject: The peon
- Verb: opened (V_2, indicating Simple Past Tense)
- Object: the gate

Step 2: Reconstruct the sentence into passive voice.

Let us build the passive sentence step by step:

- Move 'The gate' to the beginning as our new singular subject.
- Because 'The gate' is singular and the sentence is in the past tense, we use the singular past auxiliary verb 'was'.
- The past participle (V_3) form of the verb is 'opened'.
- Add the original agent at the end: 'by the peon'.

Combining these parts gives: "The gate was opened by the peon."

Step 3: Cross-verify against the given options.

Let us double-check why the alternative options are incorrect:

- (A) *is opened* incorrectly switches the tense to the present.
- (B) *were opened* incorrectly uses a plural auxiliary verb for a singular subject ('the gate').
- (C) *has opened* changes the tense to the present perfect.

Thus, option (D) is the only grammatically correct selection.

Quick Tip: Always double-check that your auxiliary verb matches both the original tense and the number of your new subject:

Singular Subject (The gate) + Past Tense → was

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97. Choose the prefix for the word 'Possible' to make it opposite:

(A) Un

(B) Im

(C) Ill

(D) In

Correct Answer: (B) Im

Solution:

Concept: A prefix is an affix placed before the stem of a word to alter its meaning. In English grammar, negative prefixes such as *un-*, *in-*, *il-*, *ir-*, and *im-* are used to create antonyms (opposites).

The choice of a negative prefix often depends on the initial letter of the base word. A specific phonological rule determines the placement of the prefix **im-**:

The prefix 'in-' shifts phonetically to 'im-' when it is attached to a root word starting with the bilabial c

This phonetic adjustment happens because both 'm' and 'p' are bilabial sounds made using both lips, making the transition much smoother to pronounce.

Step 1: Analyze the starting letter of the base root word.

The base word provided in the question is 'Possible'. Let us identify its initial letter and phonetic classification:

- Initial Letter: 'P'
- Phonetic Type: Bilabial plosive consonant

Step 2: Test the given prefixes against the root word.

Let us systematically evaluate each option to see which combination yields a linguistically valid English word:

- (A) Un + Possible = Unpossible: This is structurally incorrect and does not exist in standard English lexicon.

- (B) Im + Possible = Impossible: This follows the bilabial assimilation rule perfectly. The resulting word correctly means "not able to occur, exist, or be done."
- (C) Ill + Possible = Illpossible: This is an invalid lexical combination.
- (D) In + Possible = Inpossible: This violates the phonetic rule of bilabial modification. The 'n' sound naturally assimilates into an 'm' sound before a 'p'.

Therefore, the correct prefix is 'Im', which creates the word Impossible. This corresponds directly to option (B).

Quick Tip: To easily remember when to use the prefix im-, check if the root word begins with M, B, or P (think of the mnemonic acronym MBP). Examples: *Patient → Impatient*, *Balance → Imbalance*, *Moral → Immoral*.

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98. Below is given sentence in active/passive voice. Out of the four alternative suggested, select one which best expresses the same sentence in passive/active voice:
"The waiter filled the glasses with water."

(A) The glasses filled with water by the waiter.
(B) The glasses were filled with water by the waiter.
(C) The waiter was filled the glasses with water.
(D) The water were filled in the glasses by waiter.

Correct Answer: (B) The glasses were filled with water by the waiter.

Solution:

Concept: Voice conversion requires shifting the focus from the agent performing the action to the entity receiving the action. To convert a sentence from Active Voice to Passive Voice, we follow these core structural rules:

1. Locate the active subject (S), principal verb (V), and direct object (O).
2. Swap positions so that the active object (O) becomes the new passive subject.
3. Introduce the appropriate helping verb depending on the tense. For the Simple Past

Tense (V_2), the auxiliary verbs used are:

was (for singular subjects) or **were** (for plural subjects)

4. Change the main verb into its past participle form (V_3).
5. Position the original active subject at the end, introduced by the preposition 'by'.

Step 1: Analyze the syntactic elements of the active sentence.
Let us examine the sentence: "The waiter filled the glasses with water."

- Subject (S): The waiter (Singular agent)
- Verb (V): filled (Simple Past Tense form, V_2)
- Direct Object (O): the glasses (Plural recipient)
- Prepositional Phrase: with water (Adverbial modifier)

Step 2: Apply the passive transformation template.
Let us construct the passive layout step-by-step:

- The plural object 'The glasses' shifts to the front as our new subject.
- Since the new subject is plural and the original tense is Simple Past, we select the auxiliary verb 'were'.
- The past participle (V_3) of 'filled' is also 'filled'.
- Combine the predicate elements with the modifier: 'were filled with water'.
- Add the original subject as an agent clause: 'by the waiter'.

Combining these parts yields: "The glasses were filled with water by the waiter."
Step 3: Evaluate the incorrect options for clarity.
Let us inspect why the other alternatives fail:

- (A) *The glasses filled...* lacks the mandatory passive auxiliary verb 'were', changing the meaning to imply the glasses performed the action of filling.
- (C) *The waiter was filled...* incorrectly turns the waiter into the recipient who was filled with water.

- (D) *The water were filled...* uses the plural auxiliary verb 'were' with 'water', which is an uncountable singular noun, violating subject-verb agreement.

Hence, option (B) is the only structurally perfect fit.

Quick Tip: Always double-check your subject-verb agreement immediately after moving the object. Even though the original subject (*the waiter*) is singular, the new passive subject (the glasses) is plural, which strictly demands the plural auxiliary verb were.

$$\text{Active: } S + V_2 + O \rightarrow \text{Passive: } O_{\text{plural}} + \textbf{were} + V_3 + \text{by } S$$

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99. Arrange the following major ideas from the passage in the most logical order for writing a coherent précis:

(K) Disarmament assumes overriding importance despite continued arms competition.

(L) The nuclear age presents humanity with only two alternatives: annihilation or peaceful co-existence.

(M) Achieving peace requires cultivating tolerance and reshaping policies.

(N) Immediate and serious action is necessary as delay is dangerous.

(O) The United Nations bears the primary responsibility for ensuring progress toward disarmament.

(A) L → K → M → N → O
(B) K → L → M → N → O
(C) K → M → L → N → O
(D) L → K → M → O → N

Correct Answer: (A) L → K → M → N → O

Solution:

Concept: A précis is a concise, structured summary of a longer text that preserves its core thematic flow and logical roadmap. To organize ideas logically, a text typically transitions from a broad existential problem or premise, moves toward specific structural responses, outlines the method of execution, stresses temporal urgency, and concludes with the

institutional body responsible for enforcing the final outcome.

Step 1: Identify the foundational core premise.

Let us analyze statement (L): *"The nuclear age presents humanity with only two alternatives: annihilation or peaceful co-existence."* This statement sets up the universal, grand existential dilemma that frames the entire topic. A global argument on peace and weapons cannot begin with specific policies or organizations without first establishing this fundamental context. Therefore, statement (L) must be our absolute starting point. This narrows down the options to (A) and (D).

Step 2: Determine the logical bridge following the premise.

Once the choice between peaceful co-existence and annihilation is stated, the next logical question is: how do we prevent annihilation? We do this through disarmament. Statement (K) directly answers this: *"Disarmament assumes overriding importance despite continued arms competition."* This establishes disarmament as the primary target response to the dilemma raised in (L). Thus, the sequence must begin with L → K.

Step 3: Trace the internal implementation steps and urgency.

Now that disarmament is established as the key goal, the passage transitions to how to build a world capable of disarming, followed by the urgency of taking action:

- (M) Achieving peace requires cultivating tolerance and reshaping policies: This details the specific behavioral and political shifts needed to make disarmament work. Hence, M follows K naturally (L → K → M).
- (N) Immediate and serious action is necessary as delay is dangerous: This injects a sense of real-time urgency, warning the reader that these programmatic changes must occur without delay.

Step 4: Isolate the definitive closing institutional body.

Finally, statement (O) introduces the specialized global authority tasked with overseeing this long-term campaign: *"The United Nations bears the primary responsibility for ensuring progress toward disarmament."* Naming the specific global organization serves as a logical conclusion for the summary, defining accountability for everything discussed so far.

This completes our analytical sequence:

L (Existential Dilemma) → K (Solution: Disarmament) → M (Method) → N (Urgency) → O (Account

This layout perfectly matches option (A).

Quick Tip: When ordering ideas for summaries or précis, look for a "Macro to Micro" hierarchy:

$$\text{Existential Context (L)} \rightarrow \text{Targeted Objective (K)} \rightarrow \text{Institutional Ownership (O)}$$

Identifying that the United Nations (O) represents the final stabilizing conclusion helps confirm the correct option.

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100. Choose the correct complex sentence from the options given below:

"My brother gave me a watch and I have lost it."

(A) I have lost the watch which my brother gave me.

(B) My brother gave me a watch, but I have lost it.

(C) Since my brother gave me a watch, I lost it.

(D) I lost the watch that was given to me by my brother.

Correct Answer: (A) I have lost the watch which my brother gave me.

Solution:

Concept: Sentences are classified structurally into three main types based on their clause combinations:

- Simple Sentence: Contains exactly one independent clause with a subject and a predicate.
- Compound Sentence: Contains two or more independent clauses joined together by coordinating conjunctions (FANBOYS: *for, and, nor, but, or, yet, so*).
- Complex Sentence: Contains exactly one principal independent clause and at least one dependent (subordinate) clause, joined via a subordinating conjunction or relative pronoun (e.g., *which, that, who, because, although*).

Step 1: Deconstruct the original sentence structure.

The prompt sentence is: "My brother gave me a watch and I have lost it." Let us separate the clauses:

1. *My brother gave me a watch* (Independent Clause)
2. *I have lost it* (Independent Clause)

These clauses are linked by the coordinating conjunction 'and', making the source text a compound sentence. Our goal is to convert it into a complex sentence without altering the meaning.

Step 2: Convert the compound layout into a main and subordinate clause pair.

To transform this into a complex structure, we can convert one of these independent statements into an adjective (relative) clause that describes the object noun ("the watch").

- Principal Clause: I have lost the watch
- Subordinate Adjective Clause: which my brother gave me

Here, "which my brother gave me" cannot stand alone as a complete sentence; it is dependent on the main clause and is linked using the relative pronoun 'which'. This fulfills the structural definition of a complex sentence.

Step 3: Evaluate why the other options are incorrect.

Let us inspect the alternative choices to ensure accuracy:

- (B) My brother gave me a watch, but I have lost it: The clauses are joined by 'but', which is a coordinating conjunction. This keeps the sentence structure compound, not complex.
- (C) Since my brother gave me a watch, I lost it: The subordinating conjunction 'since' implies a false cause-and-effect relationship, suggesting that the brother's gift was the direct cause of the loss. This distorts the original meaning.
- (D) I lost the watch that was given to me by my brother: While this is a complex sentence, it unnecessarily introduces passive construction ("that was given to me by..."), making it less direct than option (A), which retains the active profile of the original clauses perfectly.

Therefore, option (A) is the most accurate and natural complex presentation.

Quick Tip: To easily convert a compound sentence about an object into a complex sentence, use relative pronouns like 'which' or 'that' to turn the secondary clause into a descriptive modifier for that noun object.

Main Event (I lost the watch) + Relative Clause (which my brother gave me)