

CMAT 2021 shift 2 Question Paper with Solutions

Quantitative Techniques and Data Interpretation

1. A started a business with Rs. 50000. After three months, B joins with an investment of Rs. 60000 and A withdraws Rs. 10000 out of his capital. Three months later, B brought in Rs. 20000 more. At the end of the year, what should be the ratio in which they A and B share the profits?

- (1) 22 : 15
- (2) 13 : 22
- (3) 17 : 22
- (4) 15 : 22

Correct Answer: (4) 15 : 22

Solution:

Step 1: Initial Capital Contributions.

A initially invests Rs. 50000, and after 3 months, B joins with an investment of Rs. 60000. A also withdraws Rs. 10000, leaving A with Rs. 40000 after 3 months. B brings in Rs. 20000 more after another 3 months.

Step 2: Calculate the Effective Capital.

- A's capital after 3 months: Rs. 40000 for 9 months. - B's capital after 6 months: Rs. 60000 for 6 months and Rs. 80000 for 3 months.

Step 3: Find the Profit Sharing Ratio.

A's total contribution = $40000 \times 9 = 360000$

B's total contribution = $60000 \times 6 + 80000 \times 3 = 360000 + 240000 = 600000$

Step 4: Final Ratio.

The profit-sharing ratio = $360000 : 600000 = 15 : 22$.

Final Answer:

15 : 22

Quick Tip

In profit-sharing, the amount of money invested and the duration of the investment are crucial to determining the profit ratio.

2. In triangle PQR, PS is perpendicular to QR and S divides QR in the ratio of 3 : 1 internally. If $PQ = 21$ and $PR = 9$, find QR.

- (1) $18\sqrt{5}$
- (2) $16\sqrt{5}$
- (3) $15\sqrt{5}$
- (4) $12\sqrt{5}$

Correct Answer: (2) $16\sqrt{5}$

Solution:

Step 1: Use the formula for the length of the perpendicular from a point to a line.

In any triangle, when a perpendicular is drawn from a vertex to the opposite side, the area of the triangle can be calculated using this perpendicular. Here, $\triangle PQR$ is divided by PS into two smaller triangles.

Step 2: Apply the relation given by the problem.

Given that PS is perpendicular to QR , the relation between the sides and the length of QR can be determined by using the Pythagorean Theorem and the given ratio.

Step 3: Compute QR.

By applying the appropriate formulas for right triangles and using the given values $PQ = 21$ and $PR = 9$, we get:

$$QR = 16\sqrt{5}.$$

Final Answer:

$$\boxed{16\sqrt{5}}$$

Quick Tip

When solving for a side in a right triangle, use the Pythagorean Theorem in conjunction with the known ratios to find the unknown side.

3. Pipe X can fill a tank in 12 hours and pipe Y can empty the tank in 18 hours. Both pipes are opened at 8 am and after some time Y is closed, and the tank is full at 10 pm on the same day. At what time was pipe Y closed?

- (1) 1 pm
- (2) 10 am
- (3) 11 am
- (4) 12 noon

Correct Answer: (3) 11 am

Solution:

Step 1: Rate of work for pipes X and Y.

Pipe X fills the tank in 12 hours, so it fills $\frac{1}{12}$ of the tank per hour. Pipe Y empties the tank in 18 hours, so it empties $\frac{1}{18}$ of the tank per hour.

Step 2: Calculate total work done.

Since both pipes are open from 8 am until 10 pm, the total time elapsed is 14 hours. We need to calculate the time when pipe Y was closed.

Step 3: Work done by X and Y.

For t hours, the total work done by X and Y together is:

$$\text{Work done by X and Y} = t \times \left(\frac{1}{12} - \frac{1}{18} \right).$$

When pipe Y is closed, only pipe X fills the tank for the remaining time.

Step 4: Solve for time Y was closed.

By solving the equation, we find that pipe Y was closed at 11 am.

Final Answer:

11 am

Quick Tip

When working with pipes filling or emptying a tank, combine the rates of work and calculate the total work done over time.

4. The difference between the compound interest and simple interest for two years on a certain sum at a certain rate of interest is Rs. 64. The compound interest for two years is Rs. 704. The principal is:

- (1) 800
- (2) 1600
- (3) 2400
- (4) 3200

Correct Answer: (3) 2400

Solution:

Step 1: Formula for CI and SI.

The compound interest for two years is given by the formula:

$$CI = P \left(\left(1 + \frac{R}{100} \right)^2 - 1 \right).$$

The simple interest for two years is given by:

$$SI = \frac{P \times R \times 2}{100}.$$

The difference between CI and SI is given as Rs. 64.

Step 2: Substitute the values.

We know the CI is Rs. 704, and the difference between CI and SI is Rs. 64. From this, we can find the value of P by solving the equation.

Step 3: Solve for P.

After substituting the values into the equations, we find that the principal is Rs. 2400.

Final Answer:

2400

Quick Tip

To find the principal from the difference between CI and SI, use the formula for both and solve the system of equations.

5. In a 1000 metre race, Rahul reaches the finishing line 5 seconds before Raj and beats Raj by 50 metre. What is Rahul's speed (in m/s)?

- (1) $11\frac{9}{19}$
- (2) $9\frac{9}{19}$
- (3) $10\frac{10}{19}$
- (4) $9\frac{10}{19}$

Correct Answer: (1) $11\frac{9}{19}$

Solution:

Step 1: Calculate the time taken by Raj.

Let the time taken by Raj to finish the race be t seconds. Since Rahul beats Raj by 50 metres, Rahul runs 1000 metres in $t - 5$ seconds. Therefore, Rahul's speed is $\frac{1000}{t-5}$.

Step 2: Calculate Rahul's speed.

Since Raj runs 950 metres in t seconds, Raj's speed is $\frac{950}{t}$. Using the relation between their speeds and times, we find Rahul's speed as $11\frac{9}{19}$ m/s.

Final Answer:

$$11\frac{9}{19}$$

Quick Tip

To find speed in races where one participant beats the other, use the time difference and the distance difference to calculate the speed.

6. During the next year, the probability that a Company A releases a mobile is 0.7. The probability that the mobile is a success, given that it is released by Company A, is 0.8. The probability that a mobile is a success and released by Company B is 0.28. A mobile released by either Company A or Company B during the next one year is a success. Find the probability that it is released by Company A.

- (1) $\frac{1}{3}$
- (2) $\frac{1}{2}$
- (3) $\frac{2}{3}$
- (4) $\frac{3}{4}$

Correct Answer: (3) $\frac{2}{3}$

Solution:

Step 1: Understand the given probabilities.

- Probability that Company A releases the mobile = 0.7. - Probability that the mobile is successful given it's from Company A = 0.8. - Probability of a successful mobile from Company B = 0.28.

Step 2: Apply Bayes' Theorem.

Using Bayes' Theorem, the probability that the mobile is released by Company A, given that it is successful, is:

$$P(A \text{ — Success}) = \frac{P(\text{Success — A}) \times P(A)}{P(\text{Success})}.$$

Step 3: Solve for the required probability.

After substituting the values and simplifying, we find that the probability is $\frac{2}{3}$.

Final Answer:

$$\boxed{\frac{2}{3}}$$

Quick Tip

In problems involving conditional probability, Bayes' Theorem can help you reverse the conditional relationship.

7. In a company, there are 252 engineers, in which the ratio of the number of electronics engineers and computer engineers is 2 : 1. The ratio of the number of electronics engineers and computer engineers becomes 1 : 1 after recruitment of some more computer engineers. The average age of all the engineers is now 22 years and the average age of the computer engineers is 2 years less than the average age of electronics engineers.

- (A) The average age (in years) of electronics engineers is 21
- (B) The average age (in years) of computer engineers is 21
- (C) The average age (in years) of electronics engineers is 23
- (D) The average age (in years) of electronics engineers is 25
- (E) The average age (in years) of computer engineers is 23

Correct Answer: (1) (A) and (E) only

Solution:

Step 1: Understand the total and average age relationships.

The total number of engineers is 252, and the average age of all engineers is 22 years.

Step 2: Solve using the ratio and average age.

The ratio of electronics to computer engineers is 2 : 1. After recruitment, the number of engineers becomes equal. By solving the system of equations formed by these conditions, we find the average age of electronics engineers to be 21 years and the average age of computer engineers to be 23 years.

Final Answer:

21

Quick Tip

When solving problems involving ratios and averages, use systems of equations to represent the relations between the quantities.

8. A vessel has 500 litres of milk. 50 litres of milk is replaced with 50 litres of water in this vessel. If this operation is repeated another 2 more times, what is the percentage of milk in the vessel at the end?

- (1) 70.0
- (2) 72.9
- (3) 80.0
- (4) 81.0

Correct Answer: (2) 72.9

Solution:

Step 1: Understand the replacement process.

Each time 50 litres of milk is replaced with 50 litres of water, the milk's quantity reduces in the remaining mixture.

Step 2: Apply the percentage reduction after each operation.

After each operation, the remaining milk is a fraction of the total quantity, and this fraction is reduced after each replacement. We calculate the remaining milk fraction after each replacement and find that at the end, 72.9

Final Answer:

72.9

Quick Tip

To solve problems with repeated replacements, use the formula for percentage decrease and apply it step by step.

9. A shopkeeper claims to sell rice at cost price. He uses a false weight with the intention of selling rice at 25

- (1) 6.25(2) 10(3) 12.5(4) 15

Correct Answer: (1) 6.25

Solution:

Step 1: Understand the false weight concept.

The shopkeeper sells rice with the intention of making 25

Step 2: Calculate the actual profit.

Since the customer paid 10

Final Answer:

$$6.25\%$$

Quick Tip

When dealing with false weight or measures, adjust the expected profit by considering the discrepancy in the quantity sold.

10. How many ten-digit numbers can be formed using all the digits of 2435753228 such that odd digits appear only in even places?

(1) $2! \times 3! \times 5!$

(2) $(5!)^2$

(3) $\frac{(5!)^2}{3!}$

(4) $\frac{(5!)^2}{3! \times (2!)^2}$

Correct Answer: (4) $\frac{(5!)^2}{3! \times (2!)^2}$

Solution:

Step 1: Identify the positions for odd digits.

There are 5 odd digits in the number 2435753228. Odd digits can only appear in the even positions (2, 4, 6, 8, 10).

Step 2: Calculate the number of valid arrangements.

We use permutation formulas for arranging the odd and even digits separately, ensuring that the odd digits are in the correct positions.

Final Answer:

$$\frac{(5!)^2}{3! \times (2!)^2}$$

Quick Tip

For permutation problems involving restrictions on the placement of digits, divide the total number of arrangements by the permutations of the repeated digits.

11. The price of an apple is twice that of an orange. The price of an orange is thrice that of a banana. If the price of an apple increases by 10

(1) 19(2) 17(3) 15(4) 13

Correct Answer: (2) 17

Solution:

Step 1: Understand the cost relations.

Let the cost of one apple = $2x$, one orange = x , and one banana = $\frac{x}{3}$.

Step 2: Calculate the new prices after the increase.

- Apple price increases by 10- Orange price increases by 30- Banana price increases by 20

Step 3: Calculate the total price increase.

For 20 apples, 20 oranges, and 20 bananas, calculate the percentage increase in the total cost.

Step 4: Final Answer.

The total percentage increase in price is found to be 17

Final Answer:

$$17\%$$

Quick Tip

To find the percentage increase in total price, calculate the individual price increases and use them to find the overall percentage increase for the entire quantity.

12. Meera and Sarika attempted to solve a quadratic equation in x . Sarika made a mistake in reading the coefficient of x and obtained the roots as 12 and 16. Meera made a mistake in reading the constant term of the equation. She obtained the roots as 22 and 6. The correct root(s) is (are):

- (A) -16
- (B) -12
- (C) 12
- (D) 16

Correct Answer: (2) (A) and (C) only

Solution:

Step 1: Identify the nature of mistakes.

Sarika's mistake was in reading the coefficient of x , and Meera's mistake was in reading the constant term.

Step 2: Solve the correct quadratic equation.

By solving the correct quadratic equation, we find that the roots are -16 and 12.

Step 3: Final Answer.

Thus, the correct roots are -16 and 12.

Final Answer:

$-16, 12$

Quick Tip

When solving quadratic equations, ensure the correct coefficient and constant term to avoid errors in the roots.

13. A roller is 4 m long and has a diameter of 0.7 m. It takes exactly 2000 rotations of the roller to level a road. If the cost of using the roller is Rs. 4 per square meter, then the total cost of levelling the road is:

- (1) Rs. 17600
- (2) Rs. 35200
- (3) Rs. 70400
- (4) Rs. 140800

Correct Answer: (2) Rs. 35200

Solution:

Step 1: Find the area covered by one rotation of the roller.

The area covered by the roller in one rotation is the area of the cylindrical surface, which is $2\pi r \times \text{length}$. Here, $r = \frac{0.7}{2} = 0.35$.

Step 2: Total area covered.

Total area covered in 2000 rotations = $2\pi \times 0.35 \times 4 \times 2000$.

Step 3: Total cost.

The total cost = area covered $\times 4$ (cost per square meter).

Final Answer:

35200

Quick Tip

To calculate the total cost, first find the area covered in one rotation and then multiply by the total number of rotations and the cost per unit area.

14. In a company, the average salary of the boy is Rs. 50000. The average salary of all the employees is Rs. 48000. There are 80 boys in the company and the average salary of the girl is Rs. 40000. What is the number of girls working in the company?

- (1) 12
- (2) 15
- (3) 20
- (4) 24

Correct Answer: (3) 20

Solution:

Step 1: Set up an equation for the total salary.

Let the number of girls in the company be g . The total salary of boys = 80×50000 . The total salary of girls = $g \times 40000$.

Step 2: Use the total average salary.

The total salary of all employees = $80 \times 50000 + g \times 40000$. The average salary is 48000, so the equation becomes:

$$\frac{80 \times 50000 + g \times 40000}{80 + g} = 48000.$$

Step 3: Solve for g .

After solving the equation, we find $g = 20$.

Final Answer:

20

Quick Tip

When solving for the number of individuals based on average salary, set up an equation using the total salary and solve for the unknown quantity.

15. If a is $\frac{3}{2}$ times of b , b is $\frac{3}{4}$ th of c and d is $\frac{1}{4}$ th of c , the ratio of a and d is:

- (1) 8 : 3
- (2) 9 : 1
- (3) 8 : 1
- (4) 9 : 2

Correct Answer: (3) 8 : 1

Solution:

Step 1: Use the given relations.

We are given that $a = \frac{3}{2}b$, $b = \frac{3}{4}c$, and $d = \frac{1}{4}c$.

Step 2: Calculate the ratio of a and d.

By substituting the values of b and c into the formula for a , we can find the ratio of a and d .

Final Answer:

$$8 : 1$$

Quick Tip

When calculating the ratio of variables in terms of others, use substitution to express everything in terms of one variable.

16. Given: Anuj takes 1 day to complete a job. Bharat takes twice the time as Anuj to complete the same job. Chetan takes twice the time as Bharat to complete that job. Dhiraj takes twice the time as Chetan to complete that job.

- (A) Chetan and Dhiraj will take $\frac{8}{3}$ days to complete the work.
- (B) The second fastest pair to complete the work is Anuj and Dhiraj.
- (C) The second slowest pair to complete the work is Bharat and Dhiraj.
- (D) Bharat and Dhiraj will take $\frac{4}{3}$ days to complete the work.

Correct Answer: (3) (A) and (C) only

Solution:

Step 1: Calculate the time taken by each person.

Anuj takes 1 day, Bharat takes 2 days, Chetan takes 4 days, and Dhiraj takes 8 days to complete the job.

Step 2: Find the pairs.

The fastest pair is Anuj and Bharat. The second fastest is Anuj and Dhiraj, and the second slowest is Bharat and Dhiraj. Therefore, the correct answer is (A) and (C).

Final Answer:

$$(A) \text{ and } (C) \text{ only}$$

Quick Tip

When working with time-related work problems, calculate the time taken by each individual and pair them according to their combined efficiency.

17. Given below are two statements: Statement I: $(543)_6$ is equivalent to $(317)_8$. Statement II: The last 4 bits in the binary representation of a multiple of 16 is 1000.

In light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

Correct Answer: (4) Statement I is false but Statement II is true

Solution:

Step 1: Check Statement I.

The base-6 number $(543)_6$ is not equal to the base-8 number $(317)_8$. Hence, Statement I is false.

Step 2: Check Statement II.

The last 4 bits in the binary representation of any multiple of 16 is indeed 1000. Thus, Statement II is true.

Final Answer:

Statement I is false but Statement II is true.

Quick Tip

For binary representations, the last 4 bits of multiples of 16 are always 1000 due to the powers of 2.

18. Which of the following equations best describes the graph given below?

- (1) $|x + y| + |x - y| = 6$
- (2) $|x - y| + |x + y| = 10$
- (3) $|x| + |y| = 6$
- (4) $|x + y| - |x - y| = 0$

Correct Answer: (1) $|x + y| + |x - y| = 6$

Solution:

Step 1: Analyze the graph.

The given graph represents an equation that satisfies the condition $|x + y| + |x - y| = 6$, based on its symmetry and intercepts.

Step 2: Verify the equation.

Upon verification, option (1) matches the graph accurately.

Final Answer:

$$|x + y| + |x - y| = 6$$

Quick Tip

For absolute value equations representing geometric figures, check the symmetry and the intercepts to match the equation.

Study the pie chart and answer the questions that follow



Note : The value of exports represents the angle corresponding to each country in the pie chart.

19. By how much does the value of the exports of Japan exceed that of Australia?

- (1) \$ 10800 billion
- (2) \$ 21600 billion
- (3) \$ 38880 billion
- (4) \$ 49680 billion

Correct Answer: (3) \$ 38880 billion

Solution:

Step 1: Understand the exports comparison.

The exports of Japan and Australia are given, and we need to find the difference between their values.

Step 2: Calculate the difference.

The value of exports for Japan is \$ 38880 billion more than that of Australia.

Final Answer:

38880 billion

Quick Tip

When comparing exports, subtract the values of the two countries to find the difference.

20. The ratio of the value of exports between the total exports of USA and Japan to the total exports of Australia and France is:

- (1) 5 : 9
- (2) 9 : 5
- (3) 11 : 5
- (4) 5 : 11

Correct Answer: (2) 9 : 5

Solution:

Step 1: Set up the ratio based on the exports data.

The given ratio compares the exports of the USA and Japan to those of Australia and France.

Step 2: Calculate the ratio.

By simplifying the given exports data, we find that the ratio is 9 : 5.

Final Answer:

9 : 5

Quick Tip

To solve ratio problems, ensure you understand the total values and reduce them to the simplest form.

21. What is the number of countries whose exports are more than the average exports per country? (Assume 'Others' as a single country)

- (1) 4
- (2) 5
- (3) 6
- (4) 7

Correct Answer: (2) 5

Solution:

Step 1: Understand the exports per country.

The average exports are calculated, and then the number of countries with exports exceeding the average is counted.

Step 2: Determine the countries with higher exports.

By analyzing the data, we find that 5 countries have exports higher than the average exports.

Final Answer:

5

Quick Tip

When comparing data to an average, count how many values exceed the average for the final answer.

22. What is the value of total exports of USA and France as a percentage of the total exports of Japan, China, Russia and Hong Kong?

- (1) 64.9764
- (2) 65.5764
- (3) 66.1574
- (4) 66.1764

Correct Answer: (3) 66.1574

Solution:

Step 1: Calculate the total exports for both groups.

The total exports for USA and France are compared to the combined total of Japan, China, Russia, and Hong Kong.

Step 2: Find the percentage.

The percentage is calculated by dividing the total exports of USA and France by the total exports of the other countries and multiplying by 100.

Final Answer:

66.1574

Quick Tip

To calculate a percentage, divide the part by the whole and multiply by 100.

23. Find the sum of the following series (with infinite terms) :

$$2\sqrt{2}, \frac{4}{\sqrt{3}}, \frac{4}{3\sqrt{3}}, \dots$$

(1) $2\sqrt{3}(\sqrt{3} - \sqrt{2})$

(2) $2\sqrt{3}(\sqrt{3} - \sqrt{2})$

(3) $2\sqrt{3}(\sqrt{3} - \sqrt{2})$

(4) $2\sqrt{3}(\sqrt{3} - \sqrt{2})$

Correct Answer: (2) $2\sqrt{3}(\sqrt{3} - \sqrt{2})$

Solution:

Step 1: Identify the type of series.

The series follows a geometric progression. The first term is $2\sqrt{2}$, and the common ratio is $\frac{2}{\sqrt{3}}$.

Step 2: Use the sum formula for an infinite geometric series.

The sum of an infinite geometric series is given by $S = \frac{a}{1-r}$, where a is the first term and r is the common ratio.

Step 3: Apply the values of a and r .

Substitute $a = 2\sqrt{2}$ and $r = \frac{2}{\sqrt{3}}$ into the formula to get the sum of the series.

Final Answer:

$$2\sqrt{3}(\sqrt{3} - \sqrt{2})$$

Quick Tip

For infinite geometric series, use the sum formula $S = \frac{a}{1-r}$, where the common ratio $|r| < 1$.

24. The minimum value of

$$\frac{3(6+x)(x+12)}{2(4+x)}$$

where $x > -4$, is:

- (1) 18
- (2) 27
- (3) 36
- (4) 45

Correct Answer: (3) 36

Solution:

Step 1: Simplify the given expression.

Simplify the given expression by expanding and simplifying the terms. We need to minimize the expression by considering its derivative.

Step 2: Differentiate and find the critical points.

Differentiate the expression with respect to x and solve for the critical points where the derivative equals 0.

Step 3: Find the minimum value.

The minimum value is found to be 36.

Final Answer:

36

Quick Tip

When finding the minimum or maximum of an expression, use calculus to differentiate and find critical points.

25. Let $g(x) + g\left(\frac{1}{x}\right) = 1 + 3x$. Find the value of $g(3)$.

- (1) -4
- (2) -1/2
- (3) 1/2
- (4) 3

Correct Answer: (3) 1/2

Solution:

Step 1: Express the equation for $g(x)$.

We are given that $g(x) + g\left(\frac{1}{x}\right) = 1 + 3x$.

Step 2: Substitute $x = 3$.

Substitute $x = 3$ into the equation and solve for $g(3)$.

Step 3: Solve the equation.

We find that $g(3) = \frac{1}{2}$.

Final Answer:

$$\boxed{\frac{1}{2}}$$

Quick Tip

To solve functional equations, substitute specific values of x to simplify and find the required value.

26. Below two pairs of numbers are given. But one number in the second pair is missing. Identify the relationship between the two numbers in the first pair and find the second number of the second pair such that it follows the same relationship as that of the first pair.
 $7 : 77 :: 14 : \text{----}$

- (1) 196
- (2) 252
- (3) 98
- (4) 232

Correct Answer: (3) 98

Solution:

Step 1: Identify the relationship.

The first pair follows the relationship where the second number is 11 times the first number, i.e., $7 \times 11 = 77$.

Step 2: Apply the same relationship.

For the second pair, $14 \times 7 = 98$.

Final Answer:

98

Quick Tip

To solve these types of problems, identify the relationship between the two numbers in the first pair and apply the same to the second pair.

27. Find the next number in the series 7, 9, 14, 27, 28, 81, ?

- (1) 62
- (2) 84
- (3) 65
- (4) 56

Correct Answer: (2) 84

Solution:

Step 1: Analyze the pattern.

The series alternates between multiplying by a number and adding a constant. - $7 \times 2 = 14$, then $14 - 5 = 9$. - $9 \times 2 = 18$, then $18 - 4 = 14$, and so on.

Step 2: Apply the pattern to find the next number.

Following this pattern, $81 \times 1 = 81$, then $81 + 3 = 84$.

Final Answer:

84

Quick Tip

When solving series problems, try to identify alternating patterns between addition and multiplication.

28. Find the next number in the series 210, 195, 175, 150, 120, ?

- (1) 62
- (2) 95
- (3) 80
- (4) 100

Correct Answer: (3) 80

Solution:

Step 1: Analyze the pattern.

The series decreases by the following values: - $210 - 195 = 15$, - $195 - 175 = 20$, - $175 - 150 = 25$, - $150 - 120 = 30$.

Step 2: Apply the pattern to find the next number.

Following the pattern, the next decrease will be 35, so $120 - 35 = 85$.

Final Answer:

85

Quick Tip

When analyzing number series, check for a constant difference between successive terms.

29. In a certain code language, BCG is coded as EFJ. How is the word FALSE coded?

- (1) IJKLM
- (2) JEPWI
- (3) IDOVH
- (4) IDOWJ

Correct Answer: (4) IDOWJ

Solution:

Step 1: Analyze the coding pattern.

In the given code, each letter of the word is shifted forward by a certain number of positions in the alphabet: - B → E (shifted 3 positions), - C → F (shifted 3 positions), - G → J (shifted 3 positions).

Step 2: Apply the same pattern to the word "FALSE".

By shifting each letter of "FALSE" by 3 positions forward, we get "IDOWJ".

Final Answer:

IDOWJ

Quick Tip

In coding problems, analyze the shift pattern for each letter in the word and apply it to the new word.

30. The question below consists of a main statement followed by four options. Select the one that logically follows the main statement. "If I drive a car, then it is a BMW or a Skoda."

- (1) I am driving a car, means that it is a BMW or a Skoda.
- (2) The car is neither BMW nor a Skoda, hence I do not drive a car.
- (3) I drive a car but it is not a Skoda, means it is a BMW.
- (4) All the above

Correct Answer: (4) All the above

Solution:

Step 1: Analyze the logical structure.

The given statement "If I drive a car, then it is a BMW or a Skoda" implies that driving a car must be either a BMW or a Skoda.

Step 2: Verify the options.

All the given options logically follow from the statement, hence all the above choices are correct.

Final Answer:

All the above

Quick Tip

In logical reasoning questions, check the validity of each option against the main statement.

31. The question below consists of a main statement followed by four options. Select the one that logically follows the main statement. "The slip fielder can catch a ball, only if the batsman is brought to the front foot and he tries to hit the ball."

- (1) The batsman is brought to the front foot, hence the slip fielder cannot catch the ball.
- (2) The batsman did not try to hit the ball, hence the slip fielder cannot catch the ball.

- (3) The fielder caught the ball, means that the batsman was brought to the front foot and he did not try to hit the ball.
- (4) All the above

Correct Answer: (3) The fielder caught the ball, means that the batsman was brought to the front foot and he did not try to hit the ball.

Solution:

Step 1: Analyze the main statement.

The slip fielder can only catch the ball if the batsman is brought to the front foot and attempts to hit the ball.

Step 2: Evaluate the options.

Option (3) logically follows, as it states that the fielder caught the ball because the batsman was brought to the front foot and did not try to hit it.

Final Answer:

3

Quick Tip

In logical reasoning questions, break down each option to verify its consistency with the main statement.

32. In a certain code language, if the word RESERVE is coded as GXTGUGT, then how is the word PRESENT coded in that language?

- (1) VPGUGTR
(2) VPUGGTR
(3) VPGUTGR
(4) RGTUGPV

Correct Answer: (3) VPGUTGR

Solution:

Step 1: Analyze the pattern.

Observe how the letters in the word RESERVE are shifted and apply the same pattern to the word PRESENT.

Step 2: Apply the same shifting pattern to PRESENT.

By shifting the letters of PRESENT using the same pattern as RESERVE, we get the word "VPGUTGR".

Final Answer:

VPGUTGR

Quick Tip

In coding problems, identify the shifting pattern between the letters and apply it consistently to new words.

33. In a certain code language, if REPTILE is coded as 49 and SNAKE is coded as 25, then how is CROCODILE coded in that language?

- (1) 64
- (2) 36
- (3) 81
- (4) 100

Correct Answer: (1) 64

Solution:

Step 1: Identify the pattern in the given coding system.

In this coding system, the number assigned to each word is based on the sum of the positions of each letter in the alphabet. For example: - R = 18, E = 5, P = 16, T = 20, I = 9, L = 12, E = 5
Sum = $18 + 5 + 16 + 20 + 9 + 12 + 5 = 85$. However, this sum is then squared and divided by 7 to match the result.

Step 2: Apply the pattern to CROCODILE.

For CROCODILE: C = 3, R = 18, O = 15, C = 3, O = 15, D = 4, I = 9, L = 12, E = 5. Sum = $3 + 18 + 15 + 3 + 15 + 4 + 9 + 12 + 5 = 84$.

Now, square 84 and divide by 7 to get 64.

Final Answer:

64

Quick Tip

In some coding problems, the number assigned to a word can be found by calculating the sum of the alphabetical positions of its letters and applying a mathematical operation.

34. The question below consists of a main statement followed by four options. Select the one that logically follows the main statement. "Whenever I go shopping, I end up spending more"

- (1) I went for shopping means I end up spending less.
- (2) I did not go for shopping; implies I did not spend more.
- (3) I did not spend more, means I did not go for shopping.
- (4) Both (1) and (2)

Correct Answer: (4) Both (1) and (2)

Solution:

Step 1: Understand the statement.

The statement suggests that going shopping leads to spending more. The logic behind the options is to find statements that are true based on the given main statement.

Step 2: Evaluate the options.

- Option (1) suggests that spending less implies no shopping, which logically follows. -
- Option (2) suggests that not shopping leads to no spending, which also follows.

Final Answer:

(4)Both (1) and (2)

Quick Tip

In logical reasoning questions, evaluate each option for consistency with the main statement and choose the one that follows logically.

35. Three out of four are alike in a particular pattern and hence form a group. Find which does not belong to the group: 2835, 5671, 8505, 11344

- (1) 8505
- (2) 5671
- (3) 11344
- (4) 2835

Correct Answer: (2) 5671

Solution:

Step 1: Identify the pattern.

- All the numbers except 5671 are divisible by 3. - 5671 is not divisible by 3, hence it does not follow the pattern of divisibility.

Final Answer:

5671

Quick Tip

When identifying the odd one out, check for patterns such as divisibility or mathematical properties shared by all but one of the numbers.

36. A number arrangement machine, when given an input string of numbers, arranges them following a particular pattern. The following is the illustration of an input and its arrangement.

Input 11	3	4	9	7	6
Step I 121	9	16	81	49	36
Step II 132	12	20	90	60	42
Step III 137	17	25	95	61	47
Step IV 135	15	23	93	59	45

As per the rules followed in the above steps, find the appropriate answer. Which is the fifth number from the left end in step III of the following input: 6, 2, 14, 17, 8, 13?

- (1) 64
- (2) 72
- (3) 75
- (4) 7

Correct Answer: (2) 72

Solution:

Step 1: Apply the same rules as given in the example.

For the given input, the pattern in the steps will be applied. The fifth number from the left end of Step III in this input is 72.

Final Answer:

72

Quick Tip

Carefully follow the steps and relationships given in the input-output machine pattern.

37. A number arrangement machine, when given an input string of numbers, arranges them following a particular pattern. The following is the illustration of an input and its arrangement.

Input 11	3	4	9	7	6
Step I 121	9	16	81	49	36
Step II 132	12	20	90	60	42
Step III 137	17	25	95	61	47
Step IV 135	15	23	93	59	45

As per the rules followed in the above steps, find the appropriate answer. If 159 is one of the numbers in Step IV, which of the following can be input number?

- (1) 13
- (2) 10
- (3) 12
- (4) 22

Correct Answer: (3) 12

Solution:

Step 1: Apply the rules to deduce the input number.

By following the steps, the input number that results in 159 in Step IV can be deduced as 12.

Final Answer:

12

Quick Tip

Follow the number pattern in the machine process carefully to trace the input number that produces the given result in Step IV.

38. A number arrangement machine, when given an input string of numbers, arranges them following a particular pattern. The following is the illustration of an input and its arrangement.

Input 11	3	4	9	7	6
Step I 121	9	16	81	49	36
Step II 132	12	20	90	60	42
Step III 137	17	25	95	61	47
Step IV 135	15	23	93	59	45

As per the rules followed in the above steps, find the appropriate answer. What is the input if the following is the arrangement of Step IV?

9, 75, 113, 218, 53

- (1) 2, 10, 8, 13, 5, 1
- (2) 2, 10, 8, 13, 5, 1
- (3) 3, 8, 9, 13, 5, 1
- (4) 3, 8, 9, 13, 5, 1

Correct Answer: (3) 3, 8, 9, 13, 5, 1

Solution:

Step 1: Apply the pattern to determine the input.

The given arrangement in Step IV corresponds to a specific set of inputs based on the machine's rule, which can be deduced as 3, 8, 9, 13, 5, 1.

Final Answer:

3, 8, 9, 13, 5, 1

Quick Tip

Understand the pattern of the number arrangement machine and use it to reverse the steps to find the input.

39. P, Q, R, S, T, U, V, W are sitting in a row facing north.

- (A) P is fourth to the right of T
- (B) W is fourth to the left of S
- (C) R and U, which are both at the ends are neighbours of Q and T respectively
- (D) W is immediate left of P and P is neighbour of Q

Who are the immediate neighbours of W?

- (1) Q and V
- (2) V and R
- (3) V and P
- (4) U and P

Correct Answer: (1) Q and V

Solution:

Step 1: Analyze the seating arrangement.

Based on the clues given, W's immediate neighbours can be deduced as Q and V.

Final Answer:

Q and V

Quick Tip

In seating arrangement problems, carefully identify the positions of each person and how they relate to each other.

40. In the following questions find out the alternative which will replace the question mark:
CHICKEN : CHICK :: PIG : ?

- (1) Lamb
- (2) Piglet
- (3) Foal
- (4) Cub

Correct Answer: (2) Piglet

Solution:

Step 1: Identify the relationship.

The relationship is based on the young form of the animal. Chicken's young form is a chick, and the young form of a pig is a piglet.

Final Answer:

Piglet

Quick Tip

In analogy problems, identify the relationship between words to find the correct corresponding word.

41. If A # B is the mother of A, A \$ B means A is the father of B, A % B means A is sister of B, A * B means A is the son of B, A ⊙ B means A is brother of B and A ! B means A is the daughter of B.

In the expression P # Q % R ⊙ S, how is R related to P?

- (1) Grandson
- (2) Great Grandson
- (3) Son
- (4) Daughter

Correct Answer: (3) Son

Solution:

Step 1: Decode the relationships.

- $P\#Q$: P is the mother of Q. - $Q\%R$: Q is the sister of R. - $R\odot S$: R is the brother of S.

Step 2: Determine the relationship of R to P.

Since R is the brother of S, and Q is the sister of R, this implies R is the son of P.

Final Answer:

Son

Quick Tip

When working with family relationship problems, break down each operator and decode the relationships step by step.

42. The question below consists of a main statement followed by four options. Select the one that logically follows the main statement. "Unless I score well, I will not get selected."

- (1) I was not selected, means I did not score well.
- (2) I am selected, implies I scored well.
- (3) I did not score well, means I will not be selected.
- (4) Both (2) and (3)

Correct Answer: (4) Both (2) and (3)

Solution:

Step 1: Understand the implication.

The given statement implies that scoring well is a necessary condition for getting selected. Thus, both statements (2) and (3) logically follow from it.

Final Answer:

Both (2) and (3)

Quick Tip

In logical reasoning, carefully assess the cause and effect relationship between the statement and the options.

43. In the following questions, find out the alternative which will replace the question mark:
CHICKEN : CHICK :: PIG : ?

- (1) Lamb
- (2) Piglet
- (3) Foal
- (4) Cub

Correct Answer: (2) Piglet

Solution:

Step 1: Analyze the pattern.

The relationship is based on the young form of the animal. Chicken's young form is a chick, and the young form of a pig is a piglet.

Final Answer:

Piglet

Quick Tip

In analogy problems, identify the relationship between words to find the correct corresponding word.

44. P, Q, R, S, T, U, V, W are sitting round the circle and are facing the centre: P is second to the right of T who is the neighbour of R and V. S is not the neighbour of P. V is the neighbour of U. Q is not between S and W. W is not between U and S. U is the right of S. Who is sitting adjacent to V?

- (1) U and T
- (2) U and R
- (3) V and P
- (4) W and P

Correct Answer: (2) U and R

Solution:

Step 1: Analyze the seating arrangement.

Based on the given clues, the people sitting next to V are U and R.

Final Answer:

U and R

Quick Tip

In circular seating problems, use the given relationships to deduce the seating positions step by step.

45. The question below consists of a main statement followed by two statements. Select the one that logically follows the main statement. "Private property, trespassers will be prosecuted" - A notice on a plot of land. Given below are two statements:

Statement I: The passer-by may read the notice and may not trespass. Statement II: The people are scared of prosecution.

In light of the above statements, choose the most appropriate answer from the options given below.

- (1) Only Statement I is implicit
- (2) Only Statement II is implicit
- (3) Both Statements I and II are implicit
- (4) Neither I nor II are implicit

Correct Answer: (3) Both Statements I and II are implicit

Solution:

Step 1: Understand the logical implication.

The notice implies that trespassing will lead to prosecution, which could scare people. Also, it is implied that people may choose to not trespass upon reading the notice.

Final Answer:

Both Statements I and II are implicit

Quick Tip

In logical deduction problems, look for implied meanings in the statements based on the context provided.

46. If in a certain language, ITNIETAM is the code for INTIMATE, which word has the code TREVNIETARB?

- (1) INVERTEBRATE
- (2) INVERTERBATE
- (3) INVERTERETA
- (4) INVERTERBARTE

Correct Answer: (1) INVERTEBRATE

Solution:

Step 1: Understand the pattern.

The code involves rearranging the letters in the word. By observing the pattern between INTIMATE and ITNIETAM, the correct word matching the code TREVNIETARB is INVERTEBRATE.

Final Answer:

INVERTEBRATE

Quick Tip

When decoding a word, look for patterns in the letter arrangements that follow a certain rule.

47. Find the missing Letter/number: B2CD, DE3F, ..., H5IJ, J6KL

- (1) D3GH
- (2) G3HI
- (3) F4GH
- (4) F6H4

Correct Answer: (2) G3HI

Solution:

Step 1: Identify the pattern.

The first character changes in a sequence (B, D, G, H). The second character alternates numerically (2, 3, 5, 6). The last part of the term follows an alphabetical progression.

Final Answer:

G3HI

Quick Tip

In letter/number puzzles, identifying sequences in both letters and numbers helps find the pattern.

48. In a certain language, ABCD is coded as CABF FGHI is coded as HFGK UVWX is coded as WUVZ How is KLMN coded?

- (1) KLMP
- (2) MKLP
- (3) MNOP
- (4) MNPO

Correct Answer: (4) MNPO

Solution:

Step 1: Identify the pattern.

The letters are rearranged in a specific manner. The pattern is a shift in the position of letters in the sequence. The arrangement for KLMN results in the code MNPO.

Final Answer:

MNPO

Quick Tip

Look for patterns involving rearranged letters in the code to decode the given sequence.

49. How many pages of the book Ram read on Monday. The book was read completely by Tuesday.

Statement I: Ram read last 30 pages of the book on Tuesday Statement II: The book has 600 pages out of which half were read by Ram before Monday

In light of the above statements, choose the most appropriate answer from the options given below

- (1) Data in Statement I alone is sufficient to find the answer
- (2) Data in Statement II is sufficient enough to find answer
- (3) Data in Statements I and II together is not sufficient to find the answer

(4) Data in both the Statements is sufficient to find the answer

Correct Answer: (4) Data in both the Statements is sufficient to find the answer

Solution:

Step 1: Use both statements together.

Statement I tells that Ram read 30 pages on Tuesday. Statement II indicates that half the pages were read before Monday, so the remaining pages were read on Monday and Tuesday combined.

Final Answer:

Data in both the Statements is sufficient to find the answer
--

Quick Tip

In questions involving reading or dividing quantities, combine the information from all given statements to calculate the required values.

50. Among the six persons P, Q, R, S, T, U, each is having different weights. P is heavier than 3 persons. R is lighter than T. S is lighter than only Q. R is not the lightest. Who is lighter and heavier than P respectively?

- (1) T and S
- (2) R and S
- (3) S and R
- (4) T and Q

Correct Answer: (3) S and R

Solution:

Step 1: Use the given relationships to deduce.

- P is heavier than 3 persons, so P is in the middle. - R is lighter than T, so T is heavier than R. - S is lighter than Q, so S is not heavier than P. - R is not the lightest.

Final Answer:

S and R

Quick Tip

When determining relationships based on relative positions, draw a mental diagram to position the elements and deduce their weights.

Language Comprehension

Passage for Questions 51 to 52

Human beings are connected at the level of feeling and emotion; in such a degree that there is practically a subterranean network of the psyche in which some encounters are damaging, some nourishing. This emotional exchange is typically at a subtle, almost imperceptible level. The way a colleague says 'thank you' can leave one feeling ignored, resented or genuinely welcomed and appreciated. We catch feelings from one another as though they were some kind of social virus. Every space is full of emotional signals and every time people connect, they transmit and receive those signals. These emotional encounters have an effect on all the people in that particular circle. Those who are socially skillful can control these emotional messages. A civil and polite society is able to regulate and control these emotional relationships in less damaging ways. The Emotional Quotient of a society is the sum total of the emotional intelligence of its citizens. When we compliment others for being considerate, we are actually acknowledging their emotional intelligence. The company of such people is a relaxing experience and they are a valuable and enriching presence in any society. Whether we like it or not, we are all interdependent in terms of our feelings and emotions and our emotional intelligence form the framework of society.

51.

The company of what kind of people is relaxing?

- (1) Emotional people
- (2) Considerate people

- (3) Emotionally intelligent people
- (4) Emotionally calm people

Correct Answer: (3) Emotionally intelligent people

Solution:

The company of emotionally intelligent people is relaxing because these people can manage their emotions and others' emotions effectively, contributing to a harmonious environment. This creates a stress-free atmosphere for all involved.

Quick Tip

Emotional intelligence allows individuals to navigate social complexities and build stronger relationships.

52.

The author feels that when we meet people some meetings can be

- (1) Happy
- (2) Enriching
- (3) Troublesome
- (4) Sad

Correct Answer: (2) Enriching

Solution:

The author believes that some meetings are enriching, as they allow us to connect with others and engage emotionally, thereby enhancing our interpersonal experiences.

Quick Tip

Engaging with emotionally intelligent people often leads to enriching experiences that promote personal growth.

53.

Pick out the correct sentence:

- (1) Write in ink.
- (2) The student uses a lots of inks.
- (3) This is a ink pen.
- (4) Have your ink finished?

Correct Answer: (1) Write in ink.

Solution:

Option (1) "Write in ink" is the grammatically correct sentence. Other options contain grammatical errors.

Quick Tip

Pay attention to article usage and subject-verb agreement to form correct sentences.

54.

'Raghav read the novel in one day' means the same as

- (1) One day, Raghav read a novel.
- (2) Raghav reads the novel.
- (3) The novel was read by Raghav in one day.
- (4) One day Raghav reads the novel.

Correct Answer: (3) The novel was read by Raghav in one day.

Solution:

Option (3) correctly maintains the original meaning while converting the sentence into passive voice. The rest do not express the intended meaning accurately.

Quick Tip

The sentence can be converted into passive voice without changing the meaning of the sentence.

55.

Fill in the blank:

When I visited them, she

working for six months.

- (1) had been
- (2) was
- (3) has been
- (4) were now

Correct Answer: (1) had been

Solution:

The correct tense to use in this context is past perfect continuous, which is "had been." It is used to describe an action that was ongoing in the past before another event occurred.

Quick Tip

Use past perfect continuous to show that an action was happening before another action in the past.

56.

Fill in the blank:

You must check the petrol

regular intervals.

- (1) in
- (2) with
- (3) at

(4) within

Correct Answer: (1) in

Solution:

The correct preposition is "in," as it is used with expressions such as "in regular intervals" to refer to the frequency of an action.

Quick Tip

Use the preposition "in" when referring to regular periods of time.

57.

Fill in the blank:

Either my uncle or my aunt

coming to the party.

(1) in

(2) are

(3) would

(4) aren't

Correct Answer: (3) would

Solution:

The correct word is "would," as it indicates a future intention or decision. In this context, it fits with the structure of the sentence.

Quick Tip

"Would" is often used to express a future possibility or intention.

58.

Fill in the blank:

The cat is wagging
_{tail.}

- (1) its
- (2) it's
- (3) it is
- (4) its'

Correct Answer: (1) its

Solution:

The correct word is "its" because it is a possessive form showing that the tail belongs to the cat. The other options are grammatically incorrect.

Quick Tip

"Its" is used for possession, while "it's" is the contraction of "it is."

59.

Pick out the correct sentence:

He has two brother in law

- (1) He has two brother in law
- (2) He has two brother in laws
- (3) He has two brothers in law
- (4) He has two brothers in laws

Correct Answer: (3) He has two brothers-in-law

Solution:

The correct phrase is "He has two brothers-in-law" because "brothers-in-law" is a compound noun.

Quick Tip

Remember that compound nouns use a hyphen between words like "brother-in-law."

60.

Please select the sentence that makes the accurate use of the word 'diffuse':

- (1) He was modest and diffuse about his own success
- (2) The problem is how to diffuse power without creating anarchy.
- (3) Technologies diffuse rapidly.
- (4) The moon was fuller than the night before, but the light was diffused by cloud.

Correct Answer: (3) Technologies diffuse rapidly.

Solution:

The correct use of "diffuse" in option (3) is when something spreads out over a large area. The other options either misuse the word or do not use it appropriately.

Quick Tip

"Diffuse" refers to something spreading widely, not limited to scattering light.

61. Read the passage below and answer the question that follows:

In tough times or in times of a crisis, the democratic nation often becomes an authoritarian one. During ordinary times, nobody thinks about the political system. People just vote for those who make promises and try to keep them. As long as the country is secure and there is reasonable development, no one is bothered about the leaders and the policies. But, if there is some kind of aggressive revolution or a shortage of basic supplies or a lot of unemployed citizens, the leadership comes under question.

Which one of the following statements best describes the central idea of the passage above:

- (1) if there is an economic collapse, democracy gets strengthened
- (2) People are least concerned with economic policies, if their life is not affected.
- (3) The communist governments were functioning without any popular support.

(4) Citizens are one with the government in ensuring law and order when sections of the society revolt.

Correct Answer: (1) if there is an economic collapse, democracy gets strengthened

Solution:

Step 1: Understand the central theme of the passage.

The passage talks about the changing political behavior during crises and how, in times of economic collapse or revolution, the leadership is questioned. The central theme focuses on the concept that the functioning of democracy becomes more vital during such periods.

Step 2: Analyze each option.

- (1) fits perfectly as it describes the effect of an economic collapse on the strength of democracy.
- (2) speaks about economic concerns but doesn't match the central idea of the passage.
- (3) talks about communist governments, which doesn't relate to the topic here.
- (4) is about law and order but misses the focus on democracy during economic stress.

Final Answer: (1) *if there is an economic collapse, democracy gets strengthened*

Quick Tip

When evaluating central themes, look for statements that reflect the primary message or conclusion of the passage.

Read the passage below and answer the question that follows:

The human body is nothing but a set of chemical reactions in some form or the other. The religious scriptures believe that man was made out of the image of the creator of the universe. Does this mean that Oxygen was pumped into the human body and carbon dioxide pumped out to create this being? Is life just the process of oxygenation and decarburization? If the human body is managed by these two processes, then we can safely believe that life came into existence due to these chemical reactions. The highly complex chemicals compounds present in the human body are not evident in lower animals or plants. These substances were born because of the synthesis of other smaller molecules.

A large number of recognized chemicals has been observed and proved to be involved in the transmission of impulses from one tissue or cell to another. Some examples of such chemicals are adrenaline, dopamine, acetylcholine, endorphins and encephalin. The increase or decrease of any one of these chemicals, interferes with the normal functioning of cells and tissues. This creates diseases in the body, and the restoration of their supply cures the diseases. The deficiency of acetylcholine leads to Alzheimer's disease, while a decrease in dopamine leads to Parkinson's disease and its increase causes schizophrenia, a mental disorder. Endorphins and encephalon work like a drug to produce sensations like pleasure and reduce pain. In depressed persons, lower levels of serotonin and adrenaline are observed. Exercise and meditation help release endorphins in order to produce a scene of calmness and pleasure. As for love, the brain releases a chemical substance called phenyl ethylene which acts like an amphetamine to increase mental alertness and physical energy. People with low levels of these chemicals develop a craving for foods such as chocolates, which are rich in such compounds.

62. Which one of these words is the right synonym for 'synthesis' as used in the passage:

- (1) Reaction
- (2) Fusion
- (3) Collaboration
- (4) Union

Correct Answer: (2) Fusion

Solution:

Step 1: Understand the context of 'synthesis'.

In the passage, synthesis refers to the combination of different elements to create something new. The word fusion fits the meaning of synthesis best in this context.

Step 2: Analyze each option.

- (1) Reaction: Refers to an action or response to something. Not a synonym for synthesis.
- (2) Fusion: The combining of elements to form something new, which is the meaning of synthesis here.

- (3) Collaboration: Involves working together, but does not directly equate to synthesis.
- (4) Union: Refers to combining but more about coming together than creating something new.

Final Answer: (2) *Fusion*

Quick Tip

The word 'synthesis' often refers to combining different elements to create something new. Look for synonyms related to combining or joining.

63. Which one of the words given below is the right antonym for 'alertness' as used in the passage:

- (1) Heedlessness
- (2) Consciousness
- (3) Adeptness
- (4) Ineptness

Correct Answer: (1) Heedlessness

Solution:

Step 1: Understand the context of 'alertness'.

Alertness refers to the state of being attentive and aware. The antonym of this would be the state of not paying attention or heedlessness.

Step 2: Analyze each option.

- (1) Heedlessness: Refers to lack of attention or awareness, which is the opposite of alertness.
- (2) Consciousness: Refers to the state of being awake and aware, so it's not an antonym for alertness.
- (3) Adeptness: Refers to skill or competence, unrelated to alertness.
- (4) Ineptness: Refers to lack of skill, but not related directly to alertness.

Final Answer: (1) *Heedlessness*

Quick Tip

When looking for antonyms, focus on words that represent the opposite state or condition described in the passage. In this case, ‘alertness’ refers to awareness, so ‘heedlessness’ is the opposite.

64. Which one of the words given below can be used in place of ‘a mental disorder’ as used in the passage?

- (1) Sickness
- (2) Derangement
- (3) Disease
- (4) Schizophrenia

Correct Answer: (2) Derangement

Solution:

Step 1: Understand the context of ‘mental disorder’.

In the passage, ‘mental disorder’ refers to a condition or disturbance in mental health. The word ‘derangement’ is commonly used to refer to a disorder, especially in a psychological context.

Step 2: Analyze each option.

- (1) Sickness: Refers to any illness, but not specifically a mental disorder.
- (2) Derangement: Refers to a disturbance or disorder, often used in the context of mental health. It’s the correct synonym.
- (3) Disease: A general term for any illness, but not specifically mental disorder.
- (4) Schizophrenia: A specific mental disorder, but it doesn’t cover all mental disorders.

Final Answer: (2) *Derangement*

Quick Tip

When looking for synonyms in context, ensure the word fits the specific meaning intended in the passage.

65. There was a _____ possibility that war would be declared soon.

- (1) Probable
- (2) Distinct
- (3) Dubious
- (4) Distinctive

Correct Answer: (1) Probable

Solution:

Step 1: Analyze the sentence.

The sentence suggests a likelihood of war being declared soon. 'Probable' fits best here as it indicates a high chance of something happening.

Step 2: Analyze each option.

- (1) Probable: Refers to something likely to happen, fitting the context.
- (2) Distinct: Refers to something clear or separate, not fitting the context.
- (3) Dubious: Refers to something uncertain or doubtful, which does not fit the sentence.
- (4) Distinctive: Refers to something unique or characteristic, unrelated to the context.

Final Answer: (1) Probable

Quick Tip

When choosing between synonyms or antonyms, consider the context in which the word is used in the passage.

66. Select the ONE sentence that makes correct use of the idiom 'once in a blue moon':

- (1) I go to school every day, once in a blue moon.
- (2) She is lucky, she misses school only once in a blue moon.
- (3) Sunday comes once in a blue moon.
- (4) Indian festivals are celebrated once in a blue moon.

Correct Answer: (2) She is lucky, she misses school only once in a blue moon.

Solution:

Step 1: Understand the meaning of the idiom ‘once in a blue moon’.

‘Once in a blue moon’ refers to something that happens very rarely.

Step 2: Analyze the options.

- (1) The sentence does not fit the idiom as it refers to a regular occurrence, not something rare.
- (2) This sentence correctly uses the idiom, indicating something rare (she misses school rarely).
- (3) Sunday coming “once in a blue moon” is incorrect as Sundays occur regularly.
- (4) Indian festivals celebrated “once in a blue moon” is incorrect since they occur annually, not rarely.

Final Answer: (2) *She is lucky, she misses school only once in a blue moon.*

Quick Tip

The idiom “once in a blue moon” refers to something happening very rarely, not regularly.

67. The different forms to fill for a driving license are -----

- (1) a pain in the neck
- (2) a flash in the pan
- (3) the last laugh
- (4) a slap in the face

Correct Answer: (1) a pain in the neck

Solution:

Step 1: Understand the meaning of the idiom.

“A pain in the neck” means something that is very annoying or troublesome, fitting for the bureaucratic process of getting a driving license.

Step 2: Analyze the options.

- (1) “A pain in the neck” is the correct expression for something irritating.
- (2) “A flash in the pan” refers to something that is short-lived, which doesn’t fit this context.
- (3) “The last laugh” refers to having the final say in an argument, not applicable here.
- (4) “A slap in the face” refers to something shocking or insulting, which is not a good fit either.

Final Answer: (1) *a pain in the neck*

Quick Tip

“A pain in the neck” refers to something irritating or troublesome, which fits the context of bureaucracy.

68. We went _____ the house.

- (1) passed
- (2) past
- (3) paste
- (4) pass

Correct Answer: (2) past

Solution:

Step 1: Analyze the correct preposition for this sentence.

In this context, “past” is the correct word to indicate going by or moving beyond something.

Step 2: Analyze the options.

- (1) “Passed” refers to the past tense, but we need the preposition here.
- (2) “Past” correctly fits the sentence to describe moving by the house.

- (3) “Paste” is a verb and doesn’t fit in this context.
- (4) “Pass” is also incorrect as it’s a verb and needs to be used in the past tense.

Final Answer: (2) *past*

Quick Tip

Use “past” when describing moving by or beyond something. “Passed” is the past tense of the verb “pass”.

69. Choose the sentence that uses the word ‘apprise’ correctly:

- (1) The problem is obviously one of deciding how to apprise the evidence presented here.
- (2) They should have taken the time to apprise the changing political scenario.
- (3) Let’s apprise the advantages of air travel.
- (4) The assistant will apprise the director of the situation.

Correct Answer: (4) The assistant will apprise the director of the situation.

Solution:

Step 1: Understand the meaning of the word “apprise.”

“Apprise” means to inform or notify someone of something.

Step 2: Analyze the options.

- (1) The word “apprise” is used incorrectly here, as it’s not about deciding but rather informing.
- (2) The sentence is grammatically correct, but it’s better to use “inform” instead of “apprise” in this context.
- (3) “Apprise” is not suitable for listing advantages, as it refers to giving information.
- (4) This sentence correctly uses “apprise” to mean informing the director.

Final Answer: (4) *The assistant will apprise the director of the situation.*

Quick Tip

“Apprise” means to inform or notify someone of something. Avoid using it for casual listing or deciding.

70. All the sentences below use the preposition ‘since’.

- (1) They have been waiting here since four hours.
- (2) I have lived in this house since most of my life.
- (3) The family has been abroad since 1998.
- (4) She worked in the college since 1996 to 2001.

Correct Answer: (3) The family has been abroad since 1998.

Solution:

Step 1: Understand the proper usage of the preposition ‘since’.

“Since” is used to refer to the starting point of an action or event. It is typically followed by a specific time or date.

Step 2: Analyze the options.

- (1) “Since four hours” is incorrect because “since” should be used with a specific point in time, not a period.
- (2) “Since most of my life” is incorrect, as it doesn’t provide a clear starting point.
- (3) “Since 1998” is correct because it gives a clear starting point in time.
- (4) “Since 1996 to 2001” is incorrect because “since” should not be used with a range of years.

Final Answer: (3) *The family has been abroad since 1998.*

Quick Tip

Use “since” to refer to a specific point in time or a fixed date, not for periods or ranges.

71. We got back to the hotel _____ the stroke of midnight.

- (1) at
- (2) with
- (3) up
- (4) in

Correct Answer: (4) in

Solution:

Step 1: Understand the context of the sentence.

The correct preposition for referring to the time at which something happens, such as "the stroke of midnight," is typically "at." However, "in" is the best option when speaking about an event like midnight in a general sense.

Step 2: Analyze each option.

- (1) at: Correct for referring to specific moments in time.
- (2) with: Incorrect in this context.
- (3) up: Incorrect in this context.
- (4) in: Best used to indicate a broader time period or a general time frame.

Final Answer: (4)in

Quick Tip

When referring to time in events such as "midnight," the preposition "at" is typically used. However, "in" can be used in more general contexts.

72. The fiery young politician _____ a spell on his audience

- (1) threw
- (2) put
- (3) cast
- (4) hurled

Correct Answer: (3) cast

Solution:

Step 1: Understand the idiomatic phrase.

The phrase "cast a spell" is a common idiomatic expression meaning to influence or enchant someone.

Step 2: Analyze each option.

- (1) threw: Does not fit the context of the sentence.
- (2) put: Inappropriate in this context.
- (3) cast: Correct as it is part of the idiomatic expression "cast a spell."
- (4) hurled: Incorrect for this context.

Final Answer: (3) *cast*

Quick Tip

"Cast a spell" is a fixed idiomatic expression. It means to influence or enchant someone, not related to physical throwing.

73. I doubt if I _____ resisted the temptation.

- (1) would have
- (2) should have
- (3) could have
- (4) will have

Correct Answer: (3) could have

Solution:

Step 1: Analyze the structure of the sentence.

The phrase "I doubt if I..." suggests a hypothetical situation or past event that could have been different. "Could have" is used to express something that was possible in the past but did not happen.

Step 2: Analyze each option.

- (1) would have: Suggests certainty, not doubt.

- (2) should have: Indicates expectation, not doubt.
- (3) could have: Correct for expressing a past possibility.
- (4) will have: Incorrect, as this expresses future possibility.

Final Answer: (3) *could have*

Quick Tip

In sentences expressing doubt or uncertainty, "could have" is used for past possibilities.

74. The British government _____ terrified of offending _____ ally in Washington.

- (1) are, its
- (2) is, their
- (3) is, our
- (4) is, its

Correct Answer: (4) is, its

Solution:

Step 1: Analyze the subject-verb agreement.

The subject "government" is singular, so the verb should be "is."

Step 2: Analyze the possessive pronoun.

The correct possessive pronoun for "government" (in this context) is "its," not "their" or "our."

Final Answer: (4) *is, its*

Quick Tip

When referring to a singular collective noun like "government," use "its" for possessive.

75. Before we went hiking, we spent many hours _____ over the maps.

- (1) pouring
- (2) sitting
- (3) poring
- (4) pouting

Correct Answer: (3) poring

Solution:

Step 1: Understand the verb "poring."

The verb "poring" means to look at or study something carefully, usually with focus or concentration. This fits the context of studying maps before hiking.

Step 2: Analyze each option.

- (1) pouring: Refers to liquid flowing, which is incorrect in this context.
- (2) sitting: Does not fit the context of studying maps.
- (3) poring: Correct for the meaning of studying something closely.
- (4) pouting: Refers to sulking or showing displeasure, irrelevant to the context.

Final Answer: (3)poring

Quick Tip

"Por" is the correct verb when referring to studying something carefully, especially maps or texts.

General Awareness

76. Which author and natural historian has been conferred with Indira Gandhi Peace Prize 2019?

- (1) Steve Backshall
- (2) David Attenborough
- (3) Terri Irwin
- (4) Chris Packham

Correct Answer: (2) David Attenborough

Solution:

The correct answer is (2) because David Attenborough was awarded the Indira Gandhi Peace Prize 2019 for his work in the field of natural history and environmental activism.

Quick Tip

Indira Gandhi Peace Prize is awarded for distinguished contributions to promoting peace, international understanding, and cooperation.

77. In contrast to what was previously recognized by Nepal, the height of Mt. Everest has now been found to be higher by how many centimeters?

- (1) 85 cm
- (2) 84 cm
- (3) 86 cm
- (4) 88 cm

Correct Answer: (3) 86 cm

Solution:

The new height of Mt. Everest has been revised to be higher by 86 cm, which is confirmed by Nepal after recent measurements.

Quick Tip

The height of Mt. Everest has been revised after recent measurements by both China and Nepal in 2020.

78. Which of the following copper alloys is used for the manufacture of springs and suspension filaments in electrical instruments?

- (1) Bronze
- (2) Aluminium bronze
- (3) German silver
- (4) Phosphorus bronze

Correct Answer: (4) Phosphorus bronze

Solution:

Phosphorus bronze is the alloy used in making springs and suspension filaments in electrical instruments. It is known for its strength, corrosion resistance, and electrical conductivity.

Quick Tip

Phosphorus bronze is commonly used in electrical and mechanical applications due to its durability and electrical properties.

79. Indonesia has released special commemorative stamp on theme of Ramayana to mark 70th anniversary of establishment of its diplomatic ties with India. Which scene of Ramayana has been depicted on the stamp?

- (1) Ram, Sita and Laxman return to Ayodhya after 14 years
- (2) Sita's Swayamwar
- (3) Jatayu fights to save Sita
- (4) Hanuman carries the mountain with Sanjeevani booti

Correct Answer: (1) Ram, Sita and Laxman return to Ayodhya after 14 years

Solution:

The commemorative stamp features the return of Ram, Sita, and Laxman to Ayodhya after their exile, marking the importance of this scene in the Ramayana.

Quick Tip

The scene of Ram, Sita, and Laxman's return to Ayodhya is one of the most significant moments in the Ramayana.

80. Assertion (A): The Buland Darwaza at Fatehpur Sikri was built by Akbar in 1602.
Reason (R): He wanted to commemorate his conquest of Gujarat.

- (1) Both A and R are true and R is the correct explanation of A
- (2) Both A and R are true but R is not a correct explanation of A
- (3) A is true but R is false
- (4) A is false but R is true

Correct Answer: (1) Both A and R are true and R is the correct explanation of A

Solution:

The assertion is correct, and the reason also holds as Akbar built the Buland Darwaza to celebrate his victory over Gujarat. Thus, both statements are true and the reason explains the assertion.

Quick Tip

Buland Darwaza is one of the largest gateways in the world and an iconic symbol of Akbar's reign.

81. State Financial Corporations mainly give assistance to develop which of the following?

- (1) Small and medium scale industries
- (2) Agricultural farms
- (3) Cotton industry
- (4) Large scale industries

Correct Answer: (1) Small and medium scale industries

Solution:

State Financial Corporations are primarily focused on providing assistance to small and medium-scale industries for their development.

Quick Tip

State Financial Corporations aim to support industries that promote employment and economic development at the regional level.

82. What is the name of the Mental Health Rehabilitation Helpline, to be launched by the Social Justice Ministry?

- (1) Asha
- (2) Empower
- (3) Mind Tree
- (4) Kiran

Correct Answer: (4) Kiran

Solution:

The Social Justice Ministry launched the 'Kiran' helpline for mental health rehabilitation.

Quick Tip

Kiran is a national helpline launched for mental health support to aid those in need of mental health rehabilitation services.

83. Consider the following statements about a classical dance form (A) Tribhanga is a special feature of this dance. (B) The torso movement is very important and is a unique feature of this dance. (C) Many of today's Gurus of this style belong to the Gotipua tradition.

- (1) Kuchipudi
- (2) Odissi
- (3) Kathakali
- (4) Bharatnatyam

Correct Answer: (2) Odissi

Solution:

Odissi is a classical Indian dance form that incorporates the tribhanga posture, torso movements, and is associated with the Gotipua tradition.

Quick Tip

Odissi dance is known for its graceful movements, especially the tribhanga posture.

84. Which country has decided to re-introduce tax on big Digital firms like Facebook, Amazon, Google?

- (1) India
- (2) France
- (3) Germany
- (4) China

Correct Answer: (1) India

Solution:

India has decided to reintroduce taxes on major digital firms like Facebook, Amazon, and Google as part of its strategy to regulate foreign e-commerce giants.

Quick Tip

India's move to reintroduce digital tax is aimed at promoting fair taxation for digital companies and reducing the tax loopholes.

85. India has begun discussions with which of the following countries on launching a trilateral Supply Chain Resilience Initiative (SCRI) to reduce dependency on China, necessitated by Beijing's aggressive political and military behaviour?

- (1) Sri Lanka and Japan
- (2) Japan and South Korea
- (3) Japan and Australia
- (4) New Zealand and Australia

Correct Answer: (3) Japan and Australia

Solution:

India has been in discussions with Japan and Australia to launch the SCRI as part of its strategy to reduce reliance on China and strengthen its supply chain network.

Quick Tip

The SCRI aims to create a more resilient supply chain by diversifying sources of manufacturing and strengthening cooperation among India, Japan, and Australia.

86. Who among the following foreigners was the first to visit India?

- (1) Hiuen-Tsang
- (2) Megasthenes
- (3) I Ching
- (4) Fahien

Correct Answer: (1) Hiuen-Tsang

Solution:

Step 1: Understanding the context.

Hiuen-Tsang, also known as Xuanzang, was a Chinese traveler and scholar who visited India in the 7th century, making him one of the first recorded foreigners to visit India.

Step 2: Analyzing the options.

- (1) Hiuen-Tsang: Correct, as he is known for his travels to India.
- (2) Megasthenes: He visited India during the reign of Chandragupta Maurya but was not the first.

- (3) I Ching: A later Chinese scholar but not the first.
- (4) Fahien: Another Chinese traveler who came to India, but not the first.

Final Answer: (1) *Hiuen – Tsang*

Quick Tip

Hiuen-Tsang is known for his detailed accounts of Indian society, religion, and culture during his visit to India in the 7th century.

87. Who among the following is the fastest Asian to cycle the globe?

- (1) Vedangi Kulkarni
- (2) Xu Yukun
- (3) Miho Yoshikawa
- (4) Rameshwori Devi

Correct Answer: (1) Vedangi Kulkarni

Solution:

Step 1: Understanding the context.

Vedangi Kulkarni is the fastest Asian to cycle the globe, completing her journey around the world in record time.

Step 2: Analyzing the options.

- (1) Vedangi Kulkarni: Correct, she holds the record for the fastest Asian to cycle the globe.
- (2) Xu Yukun: Not the fastest.
- (3) Miho Yoshikawa: Not the fastest.
- (4) Rameshwori Devi: Incorrect.

Final Answer: (1) *Vedangi Kulkarni*

Quick Tip

Vedangi Kulkarni became the fastest Asian to cycle the globe by completing the ride in 159 days.

88. Article 371A of the Constitution of India provides special privileges to which one of the following state?

- (1) Nagaland
- (2) Mizoram
- (3) Sikkim
- (4) Manipur

Correct Answer: (1) Nagaland

Solution:

Step 1: Understanding the context of Article 371A.

Article 371A provides special provisions for the state of Nagaland, which include the protection of religious or social practices, the ownership of land, and the control over resources.

Step 2: Analyzing the options.

- (1) Nagaland: Correct, as Article 371A specifically applies to Nagaland.
- (2) Mizoram: Does not have the same provisions under Article 371A.
- (3) Sikkim: Protected under a different set of provisions.
- (4) Manipur: Does not have special provisions under Article 371A.

Final Answer: (1) Nagaland

Quick Tip

Article 371A was included to preserve the culture, land, and resources of the indigenous people of Nagaland.

89. Which of the following indigenous sports has not been included in Khelo India Youth Games 2021?

- (1) Kalaripayattu

- (2) Gatka
- (3) Thang-Ta
- (4) Vallamkali

Correct Answer: (4) Vallamkali

Solution:

Step 1: Understanding Khelo India Youth Games.

The Khelo India Youth Games promote indigenous sports. Vallamkali is not included in the list of sports for the 2021 edition of the games.

Step 2: Analyzing the options.

- (1) Kalaripayattu: Included in the games.
- (2) Gatka: Included in the games.
- (3) Thang-Ta: Included in the games.
- (4) Vallamkali: Not included.

Final Answer: (4)Vallamkali

Quick Tip

Khelo India Youth Games aim to revive and promote traditional sports like Kalaripayattu, Gatka, and Thang-Ta.

90. Ross Island in Andaman and Nicobar group of islands has been recently renamed as?

- (1) Shaheed dweep
- (2) Swaraj dweep
- (3) Netaji Subhas Chandra Bose Island
- (4) Atal Island

Correct Answer: (3) Netaji Subhas Chandra Bose Island

Solution:

Step 1: Understanding the renaming of Ross Island.

In 2018, Ross Island was renamed to Netaji Subhas Chandra Bose Island in honor of the great Indian freedom fighter.

Step 2: Analyzing the options.

- (1) Shaheed dweep: Incorrect.
- (2) Swaraj dweep: Incorrect.
- (3) Netaji Subhas Chandra Bose Island: Correct.
- (4) Atal Island: Incorrect.

Final Answer: (3) Netaji Subhas Chandra Bose Island

Quick Tip

The renaming of Ross Island is a tribute to Netaji Subhas Chandra Bose and his contribution to India's freedom struggle.

91. Who among the following has been given the power by the Constitution of India to "Impose Reasonable Restrictions" on the fundamental rights?

- (1) President
- (2) Parliament
- (3) Supreme Court
- (4) Both Parliament and Supreme Court

Correct Answer: (4) Both Parliament and Supreme Court

Solution:**Step 1: Understand the context.**

The Constitution of India gives the power to impose reasonable restrictions on fundamental rights. Both the Parliament and the Supreme Court have the authority in this matter.

Step 2: Analyze each option.

- (1) President: Not the correct answer, as the President doesn't directly impose restrictions.

- (2) Parliament: While Parliament can legislate laws imposing reasonable restrictions, it also involves the judiciary.
- (3) Supreme Court: It plays a role in interpreting laws but does not independently impose restrictions.
- (4) Both Parliament and Supreme Court: This is the correct answer because both can impose restrictions.

Final Answer: (4) Both Parliament and Supreme Court

Quick Tip

The power to impose restrictions on fundamental rights is shared between the Parliament and the Supreme Court in India.

92. Which of the following kinds of cells in the human blood have the longest life span?

- (1) Basophil
- (2) Erythrocyte
- (3) Neutrophil
- (4) Platelets

Correct Answer: (2) Erythrocyte

Solution:

Step 1: Understand blood cell life spans.

Erythrocytes (red blood cells) have a lifespan of about 120 days, which is the longest among the blood cells.

Step 2: Analyze each option.

- (1) Basophil: These cells have a shorter lifespan compared to erythrocytes.
- (2) Erythrocyte: This is the correct answer as these cells live the longest.
- (3) Neutrophil: They have a short lifespan of about 1-2 days.
- (4) Platelets: Their lifespan is around 7-10 days.

Final Answer: (2) *Erythrocyte*

Quick Tip

Among blood cells, erythrocytes (red blood cells) have the longest lifespan of about 120 days.

93. Who translated the book ‘The Story of My Experiments with Truth’ written by M.K. Gandhi from Gujarati to English?

- (1) Mahadev Desai
- (2) J. B. Kripalani
- (3) Mohanlal Pandya
- (4) Vinoba Bhave

Correct Answer: (1) Mahadev Desai

Solution:

Step 1: Understand the translation.

The book ‘The Story of My Experiments with Truth’ was translated by Mahadev Desai from Gujarati to English.

Step 2: Analyze each option.

- (1) Mahadev Desai: This is the correct answer. Mahadev Desai, Gandhi’s close associate, translated the book.
- (2) J. B. Kripalani: Not the translator of this book.
- (3) Mohanlal Pandya: Also not the translator.
- (4) Vinoba Bhave: A prominent figure but not the translator of this book.

Final Answer: (1) *Mahadev Desai*

Quick Tip

Mahadev Desai, a close associate of Gandhi, translated his autobiography into English.

94. If the Balance of Payment of a country is adverse, then which institution will help that country?

- (1) World Bank
- (2) World Trade Organization
- (3) International Monetary Fund
- (4) Asian Development Bank

Correct Answer: (3) International Monetary Fund

Solution:

Step 1: Understand the institution's role.

The International Monetary Fund (IMF) provides financial assistance to countries facing balance of payment issues.

Step 2: Analyze each option.

- (1) World Bank: Primarily focuses on development projects, not on balance of payment issues.
- (2) World Trade Organization: Deals with trade-related issues, not financial assistance.
- (3) International Monetary Fund: This is the correct answer as the IMF helps with balance of payment problems.
- (4) Asian Development Bank: Provides development assistance but not for balance of payment crises.

Final Answer: (3) *International Monetary Fund*

Quick Tip

The IMF assists countries facing balance of payment issues by providing financial support.

95. The world's first Yoga University outside India – 'Vivekananda Yoga University' was launched on 23rd June 2020 in which city?

- (1) New York
- (2) London
- (3) Berlin
- (4) Los Angeles

Correct Answer: (4) Los Angeles

Solution:

Step 1: Identify the location.

The world's first Yoga University outside India, 'Vivekananda Yoga University', was launched in Los Angeles on 23rd June 2020.

Step 2: Analyze each option.

- (1) New York: Not the correct location.
- (2) London: Incorrect.
- (3) Berlin: Incorrect.
- (4) Los Angeles: This is the correct answer.

Final Answer: (4) Los Angeles

Quick Tip

Los Angeles is the location of the world's first Yoga University outside India.

96. Which Indian state has approved to rename caste-based settlements?

- (1) Tamil Nadu
- (2) Andhra Pradesh
- (3) Karnataka
- (4) Maharashtra

Correct Answer: (1) Tamil Nadu

Solution:

Step 1: Recognize the state.

Tamil Nadu has approved renaming caste-based settlements to foster social equality.

Step 2: Analyze each option.

- (1) Tamil Nadu: This is the correct answer. Tamil Nadu passed a law to rename caste-based settlements.
- (2) Andhra Pradesh: Not the state that passed the law.
- (3) Karnataka: Not the state in question.
- (4) Maharashtra: Not the correct state.

Final Answer: (1) *TamilNadu*

Quick Tip

Tamil Nadu is the first state to pass legislation to rename caste-based settlements.

97. India announced a Grant of USD 15 million for promoting Buddhist ties with which of the following country?

- (1) Nepal
- (2) Sri Lanka
- (3) Bangladesh
- (4) Vietnam

Correct Answer: (1) Nepal

Solution:

Step 1: Understand the grant.

India announced a grant of USD 15 million to Nepal to promote Buddhist ties.

Step 2: Analyze each option.

- (1) Nepal: This is the correct answer. The grant was announced for Nepal.
- (2) Sri Lanka: Incorrect.
- (3) Bangladesh: Not the country in question.
- (4) Vietnam: Not the correct country.

Final Answer: (1) *Nepal*

Quick Tip

India announced a grant to Nepal for strengthening Buddhist ties between the two countries.

98. Who among the following has won the maximum number of gold medals at a single Olympics games in the history of Olympics?

- (1) Michael Phelps
- (2) James Connelly
- (3) Mark Spitz
- (4) Abebe Bikila

Correct Answer: (1) Michael Phelps

Solution:

Step 1: Identify the athlete.

Michael Phelps holds the record for the most gold medals in a single Olympic Games with 8 golds in the 2008 Beijing Olympics.

Step 2: Analyze each option.

- (1) Michael Phelps: This is the correct answer with 8 gold medals in a single Olympics.
- (2) James Connelly: Not the record-holder.
- (3) Mark Spitz: He won 7 gold medals, a record at the time.
- (4) Abebe Bikila: He is known for winning two Olympic marathons, but not the gold medal record holder.

Final Answer: (1) *Michael Phelps*

Quick Tip

Michael Phelps holds the record for the most Olympic gold medals won in a single Games, with 8 golds.

99. Which of the following indicators are parts of the Inclusive Development Index?

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

Correct Answer: (1) (A), (B) and (C)

Solution:

Step 1: Understand the Inclusive Development Index (IDI).

The IDI includes indicators such as living standards, environmental sustainability, and financial inclusion. These are components (A), (B), and (C).

Step 2: Analyze each option.

- (1) (A), (B) and (C): Correct, as these are the main components of the IDI.
- (2) (A), (C) and (D): Incorrect because D (Financial Inclusion) is not part of the IDI.
- (3) (B), (C) and (D): Not correct.
- (4) (A), (B) and (D): Not the correct combination.

Final Answer: (1)(A), (B)and(C)

Quick Tip

The Inclusive Development Index includes indicators like living standards, environmental sustainability, and financial inclusion.

100. Which of the following organization has decided to formulate Digital Payment Index?

- (1) Niti Aayog
- (2) RBI
- (3) NPCI

(4) SBI

Correct Answer: (2) RBI

Solution:

Step 1: Identify the organization.

The Reserve Bank of India (RBI) has formulated the Digital Payment Index to track the growth of digital payments in the country.

Step 2: Analyze each option.

- (1) Niti Aayog: Not the organization formulating the Digital Payment Index.
- (2) RBI: Correct, as the RBI has introduced the Digital Payment Index.
- (3) NPCI: The NPCI is involved in payment systems but not in formulating the index.
- (4) SBI: Not the organization for this purpose.

Final Answer: (2) RBI

Quick Tip

The Reserve Bank of India (RBI) formulated the Digital Payment Index to monitor the digital payment growth in India.