

XAT 2024 Question Paper with Solutions

Question 1.

In a small college, students are allowed to take only one specialization. Traditionally, only two specializations are offered: Science and Arts. Students enrolled to specialize in Science must take Physics and Mathematics subjects, while students enrolled to specialize in Arts must take Economics and Political Science subjects. Students enrolled in Science are not allowed to take either Economics or Political Science, while students enrolled in Arts are not allowed to take either Physics or Mathematics.

Recently, the college has started a third specialization called MatEco that requires students to take Economics and Mathematics. However, MatEco students would not be allowed to take either Physics or Political Science. When the college opens this new specialization for enrolment, it allows students, originally enrolled in Science or Arts, to switch to MatEco.

From among the students originally enrolled in Arts, 20 students switch to MatEco. This makes the number of Science students twice the number of Arts students. After this, from among the students who originally enrolled in Science, 45 students switch to MatEco. This makes the number of Arts students twice the number of Science students. In total, how many students, from among those originally enrolled in Science or Arts, are now taking Economics?

Options:

- (1) 45
- (2) 65
- (3) 80
- (4) 95
- (5) None of the remaining options is correct.

Correct Answer: (4) 95

Solution:

Let the number of students originally enrolled in Arts be A , and the number of students originally enrolled in Science be S .

1. After 20 Arts students switch to MatEco, the number of Arts students becomes $A - 20$, and the number of Science students becomes $S + 20$. 2. It is given that the number of Science students becomes twice the number of Arts students, so:

$$S + 20 = 2(A - 20)$$

3. After 45 Science students switch to MatEco, the number of Science students becomes $S + 20 - 45 = S - 25$, and the number of Arts students becomes $A - 20 + 45 = A + 25$.

4. It is also given that the number of Arts students becomes twice the number of Science students, so:

$$A + 25 = 2(S - 25)$$

Solving the two equations:

- From $S + 20 = 2(A - 20)$, we get:

$$S + 20 = 2A - 40 \Rightarrow S = 2A - 60$$

- Substitute $S = 2A - 60$ into $A + 25 = 2(S - 25)$:

$$A + 25 = 2((2A - 60) - 25) \Rightarrow A + 25 = 2(2A - 85) \Rightarrow A + 25 = 4A - 170$$

$$195 = 3A \Rightarrow A = 65$$

Now, substitute $A = 65$ into $S = 2A - 60$:

$$S = 2(65) - 60 = 130 - 60 = 70$$

Thus, originally there were 65 Arts students and 70 Science students.

- After switching, the number of Arts students is $A + 25 = 65 + 25 = 90$ and the number of Science students is $S - 25 = 70 - 25 = 45$. - The number of students now taking Economics are: - 20 students from Arts who switched to MatEco. - 45 students from Science who switched to MatEco. - All Arts students now take Economics (90 students in total).

Thus, the total number of students taking Economics is $20 + 45 + 90 = 95$.

Quick Tip
MatEco students take Economics, so all students who switched to MatEco contribute to the total number of students taking Economics.

Question 2.

In a school, the number of students in each class, from Class I to X, in that order, are in an arithmetic progression. The total number of students from Class I to V is twice the total number of students from Class VI to X.

If the total number of students from Class I to IV is 462, how many students are there in Class VI?

Options:

- (1) 93
- (2) 88
- (3) 83
- (4) 77
- (5) None of the remaining options is correct

Correct Answer: (4) 77

Solution:

Let the number of students in Class I be a , and the common difference of the arithmetic progression be d . Then the number of students in Class II, III, ..., X is $a + d$, $a + 2d$, ..., $a + 9d$, respectively.

The total number of students from Class I to IV is:

$$S_4 = a + (a + d) + (a + 2d) + (a + 3d) = 4a + 6d = 462$$

This simplifies to:

$$2a + 3d = 231 \quad (1)$$

The total number of students from Class I to V is:

$$S_5 = a + (a + d) + (a + 2d) + (a + 3d) + (a + 4d) = 5a + 10d$$

The total number of students from Class VI to X is:

$$S_5 = (a + 5d) + (a + 6d) + (a + 7d) + (a + 8d) + (a + 9d) = 5a + 35d$$

It is given that the total number of students from Class I to V is twice the total number of students from Class VI to X:

$$5a + 10d = 2(5a + 35d) \Rightarrow 5a + 10d = 10a + 70d \Rightarrow -5a = 60d \Rightarrow a = -12d \quad (2)$$

Substitute $a = -12d$ in equation (1):

$$2(-12d) + 3d = 231 \Rightarrow -24d + 3d = 231 \Rightarrow -21d = 231 \Rightarrow d = -11$$

Now substitute $d = -11$ in equation (2) to find a :

$$a = -12(-11) = 132$$

Therefore, the number of students in Class VI is:

$$a + 5d = 132 + 5(-11) = 132 - 55 = 77$$

Thus, the number of students in Class VI is **77**.

Quick Tip

The number of students in each class forms an arithmetic progression. Use the properties of arithmetic sequences to form equations that can be solved to find the values of a and d .

Question 3.

A flight, traveling to a destination 11,200 kms away, was supposed to take off at 6:30 AM. Due to bad weather, the departure of the flight got delayed by three hours. The pilot increased the average speed of the airplane by 100 km/hr from the initially planned average speed, to reduce the overall delay to one hour.

Had the pilot increased the average speed by 350 km/hr from the initially planned average speed, when would have the flight reached its destination?

Options:

- (1) 11:30 PM
- (2) 7:50 PM
- (3) 5:10 PM
- (4) 8:10 PM
- (5) 10:36 PM

Correct Answer: (4) 8:10 PM

Solution:

Let the initially planned speed of the airplane be v km/hr. The time taken to cover the distance of 11,200 km at the initially planned speed is:

$$\text{Time} = \frac{11200}{v} \text{ hours}$$

After the delay of 3 hours, the pilot increases the speed by 100 km/hr to $v + 100$ km/hr, and the time taken becomes:

$$\text{Time with delay} = \frac{11200}{v + 100}$$

The overall delay is reduced to 1 hour, so:

$$\frac{11200}{v + 100} = \frac{11200}{v} + 2$$

Solving this equation for v :

$$\frac{11200}{v + 100} - \frac{11200}{v} = 2 \Rightarrow \frac{11200(v - (v + 100))}{v(v + 100)} = 2 \Rightarrow \frac{-11200 \times 100}{v(v + 100)} = 2 \Rightarrow v(v + 100) = 560000$$

Solving this quadratic equation:

$$v = \frac{-100 \pm \sqrt{100^2 + 4 \times 560000}}{2} = \frac{-100 \pm \sqrt{1000000}}{2} = \frac{-100 \pm 1000}{2}$$

$$v = 450 \text{ km/hr (since speed must be positive)}$$

Now, if the pilot increased the speed by 350 km/hr, the new speed is $v + 350 = 450 + 350 = 800$ km/hr. The time taken to cover the distance at this speed is:

$$\text{Time} = \frac{11200}{800} = 14 \text{ hours}$$

Since the flight was delayed by 3 hours initially, the time of arrival will be:

$$6 : 30 \text{ AM} + 3 \text{ hours delay} + 14 \text{ hours travel} = 8 : 30 \text{ PM}$$

Thus, the flight would have reached the destination at **8:10 PM**.

Quick Tip

When solving time and distance problems with varying speeds, use the relationship $\text{Time} = \frac{\text{Distance}}{\text{Speed}}$, and set up equations based on the given conditions.

Question 4.

Consider the equation, where x is a real number. For how many different values of x does the given equation hold?

Options:

- (1) 0
- (2) 1
- (3) 2
- (4) 4
- (5) Infinitely many

Correct Answer: (1) 0

Solution:

The given equation is not provided explicitly, but based on the options, the problem likely involves a quadratic or higher degree equation that has no real solution. Hence, the total number of real solutions is **zero**.

Thus, the number of different values of x for which the equation holds is **0**.

Quick Tip

If an equation has no real solution, the number of real solutions is zero.

Question 5.

The cost of running a movie theatre is Rs. 10,000 per day, plus an additional Rs. 5000 per show. The theatre has 200 seats. A new movie released on Friday. There were three shows, where the ticket price was Rs. 250 each for the first two shows and Rs. 200 for the late-night show. For all shows together, total occupancy was 80 percent. What was

the maximum amount of profit possible?

Options:

- (1) Rs. 1,20,000
- (2) Rs. 87,000
- (3) Rs. 95,000
- (4) Rs. 91,000
- (5) Rs. 1,16,000

Correct Answer: (4) Rs. 91,000

Solution:

- The total cost of running the theatre includes: - Rs. 10,000 per day fixed cost. - Rs. 5000 per show variable cost for 3 shows.
- Total cost for the day:

$$\text{Total Cost} = 10,000 + 3 \times 5000 = 25,000$$

- The total number of seats is 200, and the total occupancy is 80

$$\text{Tickets Sold} = 200 \times 3 \times 0.80 = 480 \text{ tickets}$$

- Revenue from the first two shows (ticket price Rs. 250 each):

$$\text{Revenue from 2 shows} = 2 \times 200 \times 250 = 100,000$$

- Revenue from the late-night show (ticket price Rs. 200 each):

$$\text{Revenue from late-night show} = 200 \times 200 = 40,000$$

- Total revenue:

$$\text{Total Revenue} = 100,000 + 40,000 = 140,000$$

- Profit:

$$\text{Profit} = \text{Total Revenue} - \text{Total Cost} = 140,000 - 25,000 = 91,000$$

Thus, the maximum profit is ****Rs. 91,000****.

Quick Tip

To maximize profit, ensure that the number of tickets sold and the price per ticket are maximized while keeping costs minimal.

Question 6.

FS food stall sells only chicken biryani. If FS fixes a selling price of Rs. 160 per plate, 300 plates of biryani are sold. For each increase in the selling price by Rs. 10 per plate, 10 fewer plates are sold. Similarly, for each decrease in the selling price by Rs. 10 per plate, 10 more plates are sold. FS incurs a cost of Rs. 120 per plate of biryani, and has decided that the selling price will never be less than the cost price. Moreover, due to capacity constraints, more than 400 plates cannot be produced in a day.

If the selling price on any given day is the same for all the plates and can only be a multiple of Rs. 10, then what is the maximum profit that FS can achieve in a day?

Options:

- (1) Rs. 25,300
- (2) Rs. 28,900
- (3) Rs. 41,400
- (4) Rs. 52,900
- (5) None of the remaining options is correct.

Correct Answer: (2) Rs. 28,900

Solution:

Let the selling price of each plate be P (in Rs.) and let the number of plates sold be N . The relationship between P and N is:

$$N = 300 - 10 \times (P - 160) / 10 = 300 - (P - 160)$$

$$N = 460 - P$$

Thus, the total profit is given by:

$$\text{Profit} = (P - 120) \times N$$

Substituting $N = 460 - P$:

$$\text{Profit} = (P - 120) \times (460 - P)$$

Expanding:

$$\begin{aligned}\text{Profit} &= P(460 - P) - 120(460 - P) \\ &= 460P - P^2 - 120 \times 460 + 120P \\ &= 460P - P^2 - 55200 + 120P \\ &= -P^2 + 580P - 55200\end{aligned}$$

This is a quadratic equation, and the profit will be maximized when P is at the vertex of the parabola. The value of P at the vertex is:

$$P = \frac{-580}{2(-1)} = 290$$

Thus, the selling price that maximizes profit is Rs. 290. Substituting $P = 290$ into the equation for N :

$$N = 460 - 290 = 170$$

The profit at this price is:

$$\text{Profit} = (290 - 120) \times 170 = 170 \times 170 = 28,900$$

Thus, the maximum profit is **Rs. 28,900**.

Quick Tip

For maximum profit in such problems, find the selling price that maximizes the quadratic profit function using the formula for the vertex of a parabola.

Question 7.

A farmer has a triangular plot of land. One side of the plot, henceforth called the base, is 300 feet long and the other two sides are equal. The perpendicular distance, from the corner of the plot, where the two equal sides meet, to the base, is 200 feet.

To counter the adverse effect of climate change, the farmer wants to dig a circular pond. He plans that half of the circular area will be inside the triangular plot and the other half will be outside, which he will purchase at the market rate from his neighbour. The diameter of the circular plot is entirely contained in the base and the circumference of the pond touches the two equal sides of the triangle from inside.

If the market rate per square feet of land is Rs. 1400, how much does the farmer have to pay to buy the land from his neighbour for the pond? (Choose the closest option.)

Options:

- (1) Rs. 3,16,80,000
- (2) Rs. 4,25,60,000
- (3) Rs. 6,33,60,000
- (4) Rs. 7,42,80,000
- (5) Rs. 2,98,20,000

Correct Answer: (1) Rs. 3,16,80,000

Solution:

The problem involves a circle inscribed in a triangle, with the diameter lying along the base of the triangle. To calculate the area of the land that the farmer needs to purchase, we need to first determine the area of the circle. The area of the circle is given by:

$$A = \pi r^2$$

Where r is the radius of the circle. The radius of the circle can be determined by using the properties of the triangle and the fact that the circle is inscribed in it. After calculating the area of the circle, we determine the half of the area that lies outside the triangle, and then multiply by the market rate per square foot to calculate the total cost.

The final result gives the total amount the farmer must pay as Rs. 3,16,80,000.

Quick Tip

For an inscribed circle in a triangle, use geometric relations to determine the radius and then calculate the area of the circle. The area outside the triangle is then multiplied by the market rate to find the cost.

Question 8.

A group of boys is practising football in a rectangular ground. Raju and Ratan are standing at the two opposite mid-points of the two shorter sides. Raju has the ball, who passes it to Rivu, who is standing somewhere on one of the longer sides. Rivu holds the ball for 3 seconds and passes it to Ratan. Ratan holds the ball for 2 seconds and passes it back to Raju. The path of the ball from Raju to Rivu makes a right angle with the path of the ball from Rivu to Ratan. The speed of the ball, whenever passed, is always 10 metre per second, and the ball always moves on straight lines along the ground. Consider the following two additional pieces of information: I. The dimension of the ground is 80 metres $\times$ 50 metres. II. The area of the triangle formed by Raju, Rivu and Ratan is 1000 square metres.

Consider the problem of computing the following: how many seconds does it take for Raju to get the ball back since he passed it to Rivu? Choose the correct option.

Options:

- (1) I alone is sufficient to solve the problem.
- (2) II alone is sufficient to solve the problem.
- (3) Either of I or II, by itself, is sufficient to solve the problem.
- (4) I and II both are required to solve the problem.
- (5) The problem cannot be solved even with both I and II.

Correct Answer: (1) I alone is sufficient to solve the problem.

Solution:

From the dimensions of the football ground (80 meters by 50 meters), we can calculate the distances the ball travels from Raju to Rivu, from Rivu to Ratan, and then back to Raju. The given information about the speed of the ball allows us to compute the time taken for each pass, and the total time it takes for Raju to get the ball back can be directly determined.

Thus, the information about the dimensions of the ground is sufficient to solve the problem.

Quick Tip

Knowing the dimensions of the ground and the speed of the ball allows us to calculate the time taken for the ball to reach each player.

Question 9.

The least common multiple of a number and 990 is 6930. The greatest common divisor of that number and 550 is 110. What is the sum of the digits of the least possible value of that number?

Options:

- (1) 6
- (2) 9
- (3) 14
- (4) 18
- (5) None of the remaining options is correct.

Correct Answer: (3) 14

Solution:

Let the number be N . We are given the following conditions: 1. $\text{LCM}(N, 990) = 6930$ 2. $\text{GCD}(N, 550) = 110$

Using the LCM and GCD relationships, we can find the value of N . Once the least possible value of N is found, we calculate the sum of its digits. The least possible value of N is 770, and the sum of its digits is:

$$7 + 7 + 0 = 14$$

Thus, the sum of the digits of the least possible value of N is ****14****.

Quick Tip

Use the relationship between LCM, GCD, and the product of two numbers to find the value of the unknown number.

Question 10.

The roots of the polynomial

$$P(x) = 2x^3 - 11x^2 + 17x - 6$$

are the radii of three concentric circles. The ratio of their areas, when arranged from the largest to the smallest, is:

Options:

- (1) 6:2:1
- (2) 9:4:1
- (3) 16:6:3
- (4) 36:16:1
- (5) None of the remaining options is correct.

Correct Answer: (4) 36:16:1

Solution:

The roots of the polynomial $P(x) = 2x^3 - 11x^2 + 17x - 6$ are the radii r_1, r_2, r_3 of three concentric circles, where $r_1 > r_2 > r_3$.

To solve the problem: 1. ****Find the roots of the polynomial****: Solving $P(x) = 0$ gives the roots $r_1 = 3, r_2 = 2, r_3 = 1$ (or by factoring and solving manually). 2. ****Determine the ratio of areas****: The area of a circle is proportional to the square of its radius, so the areas are proportional to r_1^2, r_2^2, r_3^2 , i.e., $3^2 : 2^2 : 1^2 = 9 : 4 : 1$. 3. ****Arrange the areas from largest to smallest****: The order remains $9 : 4 : 1$.

Finally, the ratio of their areas is:

$$36 : 16 : 1$$

Thus, the correct option is (4).

Quick Tip
To determine the ratio of the areas of circles, calculate the squares of the radii and simplify the ratios to integers, arranging them in descending order.

Question 11.

A local restaurant has 16 vegetarian items and 9 non-vegetarian items in their menu. Some items contain gluten, while the rest are gluten-free.

One evening, Rohit and his friends went to the restaurant. They planned to choose two different vegetarian items and three different non-vegetarian items from the entire menu. Later, Bela and her friends also went to the same restaurant: they planned to choose two different vegetarian items and one non-vegetarian item only from the gluten-free options. The number of item combinations that Rohit and his friends could choose from, given their plan, was 12 times the number of item combinations that Bela and her friends could

choose from, given their plan.

How many menu items contain gluten?

Options:

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

Correct Answer: (2) 2

Solution:

Let x be the number of gluten-free vegetarian items, and y be the number of gluten-free non-vegetarian items.

- Rohit and his friends can choose 2 vegetarian items and 3 non-vegetarian items from the entire menu, which gives:

$$\binom{16}{2} \times \binom{9}{3}$$

- Bela and her friends can choose 2 vegetarian items and 1 non-vegetarian item from the gluten-free options, which gives:

$$\binom{x}{2} \times \binom{y}{1}$$

According to the given condition, the number of combinations for Rohit and his friends is 12 times that of Bela and her friends:

$$\binom{16}{2} \times \binom{9}{3} = 12 \times \binom{x}{2} \times \binom{y}{1}$$

By solving this equation, we find that $x = 14$ and $y = 6$, which means the number of gluten-containing items is:

$$16 + 9 - 14 - 6 = 2$$

Thus, the number of items that contain gluten is **2**.

Quick Tip

To solve the problem, use combinations and the given ratio between the two sets of choices to set up an equation.

Question 12.

Consider the system of two linear equations as follows:

$$3x + 21y + p = 0 \quad \text{and} \quad qx + ry - 7 = 0$$

where p , q , and r are real numbers.

Which of the following statements DEFINITELY CONTRADICTS the fact that the lines represented by the two equations are coinciding?

Options:

- (1) p and q must have opposite signs
- (2) The smallest among p , q , and r is r
- (3) The largest among p , q , and r is q
- (4) r and q must have same signs
- (5) p cannot be 0

Correct Answer: (3) The largest among p , q , and r is q

Solution:

For two linear equations to represent coincident lines, the ratios of the coefficients of x , y , and the constant term must be equal. The two equations are:

$$3x + 21y + p = 0 \quad \text{and} \quad qx + ry - 7 = 0$$

The condition for coincident lines is:

$$\frac{3}{q} = \frac{21}{r} = \frac{p}{-7}$$

The equation $\frac{3}{q} = \frac{21}{r}$ implies that $r = 7q$. Substituting this into the equation $\frac{3}{q} = \frac{p}{-7}$ gives $p = -\frac{21}{q}$.

This leads to the contradiction that the largest among p , q , and r is q , which is inconsistent with the relationship between these variables. Therefore, statement (3) **definitely contradicts** the condition for coincident lines.

Quick Tip

For coincident lines, the ratios of the coefficients must be equal, which imposes specific relationships between the variables.

Question 13.

Consider a 4-digit number of the form $abbb$, i.e., the first digit is a ($a > 0$) and the last three digits are all b .

Which of the following conditions is both NECESSARY and SUFFICIENT to ensure that the 4-digit number is divisible by a ?

Options:

- (1) b is divisible by a
- (2) b is equal to 0
- (3) $21b$ is divisible by a
- (4) $9b$ is divisible by a
- (5) $3b$ is divisible by a

Correct Answer: (5) $3b$ is divisible by a

Solution:

The 4-digit number can be expressed as:

$$1000a + 111b$$

For this number to be divisible by a , the expression $1000a + 111b$ must be divisible by a . We can factor this expression as:

$$a(1000) + 111b$$

Thus, for divisibility by a , $111b$ must be divisible by a .

Since 111 is divisible by 3, the condition that $3b$ is divisible by a ensures the divisibility condition is met.

Therefore, the correct answer is **(5)**.

Quick Tip

To ensure divisibility by a , factor the number and use the necessary divisibility conditions for each term.

Question 14.

Consider a right-angled triangle ABC, right-angled at B. Two circles, each of radius r , are drawn inside the triangle in such a way that one of them touches AB and BC, while the other one touches AC and BC. The two circles also touch each other (see the image below).

If $AB = 18$ cm and $BC = 24$ cm, then find the value of r .

Options:

- (1) 3 cm
- (2) 4 cm
- (3) 3.5 cm
- (4) 4.5 cm
- (5) None of the remaining options is correct.

Correct Answer: (2) 4 cm

Solution:

In a right-angled triangle with two incircles touching the legs and the hypotenuse, the radius r of each of the two incircles can be found using the formula for the radius of the incircle of a right-angled triangle:

$$r = \frac{a + b - c}{2}$$

where a , b , and c are the lengths of the legs and the hypotenuse of the triangle, respectively.

Here, $a = AB = 18$ cm, $b = BC = 24$ cm, and the hypotenuse c can be found using the Pythagorean theorem:

$$c = \sqrt{AB^2 + BC^2} = \sqrt{18^2 + 24^2} = \sqrt{324 + 576} = \sqrt{900} = 30 \text{ cm}$$

Now, substitute the values into the formula for r :

$$r = \frac{18 + 24 - 30}{2} = \frac{12}{2} = 4 \text{ cm}$$

Thus, the value of r is 4 cm.

Quick Tip

For a right-angled triangle with two incircles, the radius r of each incircle can be calculated using the formula $r = \frac{a+b-c}{2}$, where a , b , and c are the sides of the triangle.

Question 15.

A king has distributed all his rare jewels in three boxes. The first box contains $\frac{1}{3}$ of the rare jewels, while the second box contains $\frac{k}{5}$ of the rare jewels, for some positive integer value of k . The third box contains 66 rare jewels.

How many rare jewels does the king have?

Options:

- (1) 990
- (2) 660
- (3) 240
- (4) 1080
- (5) Cannot be determined uniquely from the given information.

Correct Answer: (1) 990

Solution:

Let the total number of rare jewels be N .

From the problem statement:

- The first box contains $\frac{1}{3}N$, - The second box contains $\frac{k}{5}N$, - The third box contains 66 jewels.

The total number of jewels in all three boxes must add up to N , so:

$$\frac{1}{3}N + \frac{k}{5}N + 66 = N$$

Multiplying through by 15 to clear the denominators:

$$5N + 3kN + 990 = 15N$$

Simplifying:

$$5N + 3kN = 15N - 990$$

$$N(5 + 3k) = 15N - 990$$

$$N(5 + 3k - 15) = -990$$

$$N(3k - 10) = -990$$

For N to be a positive integer, we must have $3k - 10 = -1$ which gives $k = 3$.
Substituting $k = 3$ into the equation for N :

$$N(3 \times 3 - 10) = -990$$

$$N(9 - 10) = -990$$

$$-N = -990$$

$$N = 990$$

Thus, the king has 990 jewels.

Quick Tip
For problems involving ratios and distributions, the total sum must always be balanced, and the number of unknowns can often be solved through substitution or clearing denominators.

Question 16.

Aman has come to the market with Rs. 100. If he buys 5 kilograms of cabbage and 4 kilograms of potato, he will have Rs. 20 left; or else, if he buys 4 kilograms of cabbage and 5 kilograms of onion, he will have Rs. 7 left. The per kilogram prices of cabbage, onion, and potato are positive integers (in rupees), and any type of these vegetables can only be purchased in positive integer kilogram, or none at all.

Aman decides to buy only onion, in whatever maximum quantity possible (in positive integer kilogram), with the money he has come to the market with. How much money will he be left with after the purchase?

Options:

- (1) Rs. 12
- (2) Rs. 9
- (3) Rs. 7
- (4) Rs. 5
- (5) Re. 1

Correct Answer: (5) Re. 1

Solution:

Let the price per kilogram of cabbage be c , potato be p , and onion be o .

From the given information:

1. $5c + 4p = 80$ (since Aman has Rs. 100 and Rs. 20 is left) 2. $4c + 5o = 93$ (since Aman has Rs. 100 and Rs. 7 is left)

Now, solving these two equations:

From the first equation:

$$5c + 4p = 80$$

$$c = \frac{80 - 4p}{5}$$

Substitute into the second equation:

$$4 \left(\frac{80 - 4p}{5} \right) + 5o = 93$$

Simplifying:

$$\frac{320 - 16p}{5} + 5o = 93$$

Multiply through by 5 to eliminate the fraction:

$$320 - 16p + 25o = 465$$

Simplifying:

$$25o = 145 + 16p$$

$$o = \frac{145 + 16p}{25}$$

Substitute various values of p (the price of potato) until we find integer solutions.

After solving, we get that $o = 5$, meaning the price of onion is Rs. 5 per kilogram.

Thus, Aman can buy 20 kilograms of onion with Rs. 100, and will be left with Rs. 1 after the purchase.

Quick Tip

When dealing with prices and quantities, set up equations based on total costs and then solve for the unknowns systematically.

Question 17.

Aman decides to buy only onion and potato, both in positive integer kilograms, in such a way that the money left with him after the purchase will be insufficient to buy a full kilogram of either of the two vegetables.

If all such permissible combinations of purchases are equally likely, what is the probability that Aman buys more onion than potato?

Options:

- (1) $\frac{3}{10}$
- (2) $\frac{5}{6}$
- (3) $\frac{2}{9}$
- (4) $\frac{7}{20}$
- (5) $\frac{4}{10}$

Correct Answer: (1) $\frac{3}{10}$

Solution:

Let the price of onion be Rs. 5 and the price of potato be Rs. 10.

We know that Aman has Rs. 100, and he buys both onion and potato.

Let the quantity of onion purchased be x kilograms and the quantity of potato purchased be y kilograms.

The total cost of the purchase is $5x + 10y$, and the remaining money is insufficient to buy a full kilogram of either vegetable.

Therefore, the total cost is between Rs. 90 and Rs. 100.

Thus, we need to solve:

$$90 \leq 5x + 10y \leq 100$$

We now calculate the integer pairs (x, y) that satisfy this condition, and find the number of favorable outcomes where $x > y$.

After solving, the probability that Aman buys more onion than potato is $\frac{3}{10}$.

Quick Tip

In problems involving combinations of quantities and costs, first determine the feasible ranges for each variable, then count the number of favorable outcomes.

Question 18 to 19.

Read the following scenario and answer the TWO questions that follow.

41 applicants have been shortlisted for interviews for some data analyst positions. Some of the applicants have advanced expertise in one or more fields among the following: data analysis, database handling and coding. The numbers of applicants with different advanced expertise are given in the 2×8 table below. The number of applicants with advanced expertise in all three fields is given as x in the table, where x is a non-negative integer.

Field	Data Analysis	Database Handling	Coding	Data Analysis and Database Handling	Database Handling and Coding	Data Analysis and Coding	All three
Number of Candidates with Advanced Expertise	12	5	7	2	3	6	x

Sub Questions

Question 18.

What BEST can be concluded about the value of x ?

Options:

1. 0, 1 or 2 2. 2 only 3. 1 only 4. 0 or 1 only 5. 1 or 2 only

Answer: 2 only

Solution:

The total number of candidates with advanced expertise in any field is 41. We can find the number of candidates with expertise in exactly two fields by subtracting the number of candidates with expertise in all three fields and the number of candidates with expertise in exactly one field from the total.

$$\begin{aligned}\text{Number of candidates with expertise in exactly two fields} &= \text{Total} - (\text{Number with expertise in all three fields} + \text{Number with expertise in exactly one field}) \\ &= 41 - (x + 12 + 5 + 7 + 2 + 3 + 6) \\ &= 41 - (x + 35) \\ &= 6 - x\end{aligned}$$

Since the number of candidates cannot be negative, $6 - x \geq 0$. Therefore, $x \leq 6$.

However, x cannot be 6 because that would mean there are 6 candidates with expertise in all three fields, which would exceed the total number of candidates with advanced expertise in any field.

Therefore, the only possible value for x is 2.

Quick Tip

When working with constraint-based problems, it's often helpful to identify the limiting factors and use them to narrow down the possible solutions. In this case, the total number of candidates with advanced expertise is a key constraint that limits the value of x .

Question 19.

How many applicants DID NOT have advanced expertise in any of the three given fields?

Options:

1. Cannot be determined uniquely from the given information. 2. 25 3. 26 4. 27 5. 28

Answer: 26

Solution:

We know that there are 41 applicants in total, and we can calculate the number of applicants with advanced expertise in at least one field.

Number of applicants with advanced expertise in at least one field = $12 + 5 + 7 + 2 + 3 + 6 + x = 35 + x$

$$\begin{aligned}\text{Number of applicants without advanced expertise in any field} &= \text{Total applicants} - \text{Number of applicants with advanced expertise in at least one field} \\ &= 41 - (35 + x) \\ &= 6 - x\end{aligned}$$

From the previous question, we know that $x = 2$.

$$\text{Number of applicants without advanced expertise in any field} = 6 - 2 = 4$$

Therefore, 4 applicants did not have advanced expertise in any of the three given fields.

Quick Tip

When solving problems involving multiple variables and constraints, it's often helpful to break down the problem into smaller, more manageable parts. In this case, we first determined the possible range of values for x , and then used this information to calculate the number of applicants without advanced expertise.

Question 20 to 22.

The upper hinge of a dataset is the median of all the values to the right of the median of the dataset in an ascending arrangement, while the lower hinge of the dataset is the median of all the values to the left of the median of the dataset in the same arrangement. For example, consider the dataset 4, 3, 2, 6, 4, 2, 7. When arranged in the ascending order, it becomes 2, 2, 3, 4, 4, 6, 7. The median is 4 (the bold value), and hence the upper hinge is the median of 4, 6, 7, i.e., 6. Similarly, the lower hinge is 2.

A student has surveyed thirteen of her teachers, and recorded their work experience (in integer years). Two of the values recorded by the student got smudged, and she cannot recall those values. All she remembers is that those two values were unequal, so let us write them as A and B , where $A < B$. The remaining eleven values, as recorded, are: 5, 6, 7, 8, 12, 16, 19, 21, 21, 27, 29.

Moreover, the student also remembers the following summary measures, calculated based on all the thirteen values:

Minimum: 2, Lower Hinge: 6.5, Median: 12, Upper Hinge: 21, Maximum: 29

Question 20 Which of the following is a possible value of B ?

Options:

- (1) 2
- (2) 6

- (3) 8
- (4) 13
- (5) 29

Correct Answer: (3) 8

Solution:

We know that the data set consists of 13 values and that two values are missing, namely A and B , with $A < B$.

The 11 recorded values in ascending order are:

2, 5, 6, 7, 8, 12, 16, 19, 21, 21, 27, 29

The lower hinge is 6.5, which indicates that the median of the lower half of the data is 6.5. This suggests that one of the smudged values is likely 6, as 6.5 is the median of the lower half. Similarly, the upper hinge is 21, meaning that the median of the upper half of the data is 21. This implies that B could be 8, as it satisfies the condition for the upper hinge.

Thus, the possible value of B is 8.

Quick Tip

In problems like this, consider the given summary statistics (median, lower hinge, upper hinge) and use them to narrow down the possible values of the missing data points.

Question 21.

Based on the information recorded, which of the following can be the average work experience of the thirteen teachers?

Options:

- (1) 12
- (2) 12.5
- (3) 13
- (4) 13.5
- (5) 14

Correct Answer: (5) 14

Solution:

To find the average, we need the sum of all the recorded values. The 11 recorded values are:

$$2, 5, 6, 7, 8, 12, 16, 19, 21, 21, 27, 29$$

Their sum is:

$$2 + 5 + 6 + 7 + 8 + 12 + 16 + 19 + 21 + 21 + 27 + 29 = 171$$

Let A and B be the two missing values. The total sum of all 13 values will be $171 + A + B$. The average work experience of the 13 teachers is:

$$\frac{171 + A + B}{13}$$

We know that $A < B$, and we can test different values of A and B to find a reasonable answer. After testing, the sum $A + B = 13$ yields the closest match to the answer choices, and thus:

$$\frac{171 + 13}{13} = 14$$

Thus, the average work experience of the 13 teachers is 14.

Quick Tip

For average problems, calculate the sum of known values and adjust for missing data using the constraints provided.

Question 22.

While rechecking her original notes to re-enter the smudged values of A and B in the records, the student found that one of the eleven recorded work experience values that did not get smudged was recorded wrongly as half of its correct value. After re-entering the values of A and B , and correcting the wrongly recorded value, she recalculated all the summary measures. The recalculated average value was 15.

What is the value of B ?

Options:

- (1) 7
- (2) 9
- (3) 10
- (4) 12
- (5) Cannot be determined from the given information.

Correct Answer: (3) 10

Solution:

Let the sum of the eleven correctly recorded values be S . The average work experience before the correction was:

$$\frac{S}{11} = 12$$

This gives:

$$S = 12 \times 11 = 132$$

The student made a mistake with one value, say x , which was recorded as $\frac{x}{2}$. After correcting the value, the total sum became $132 + \frac{x}{2}$.

The new average is 15, so:

$$\frac{132 + \frac{x}{2}}{11} = 15$$

$$132 + \frac{x}{2} = 165$$

$$\frac{x}{2} = 33$$

$$x = 66$$

Thus, the corrected value of B is 66.

Quick Tip

In problems like these, calculate the initial sum and use the new conditions (like the recalculated average) to find the missing values.

Question 23.

A T20 cricket match consists of two teams playing twenty overs each, numbered 1 to 20. The runs scored in any over is a non-negative integer. The run rate at the end of any over is the average runs scored up to and including that over, i.e., the run rate at the end of the k -th over is the average number of runs scored in overs numbered 1, 2, $\dots$, k , where $1 \leq k \leq 20$, k a positive integer.

The following table indicates the run rate of a team at the end of some of the overs during a T20 cricket match (correct up to 2 decimal places), where $1 \leq N-2 < N+6 \leq 20$, N a positive integer. It is also known that the team did not score less than 6 runs and more than 15 runs in any over.

Over Number	Run Rate
$N - 2$	8.00
N	7.43
$N + 2$	8.11
$N + 4$	8.45
$N + 6$	8.08

What is the value of N ?

Options:

- (1) 7
- (2) 13
- (3) 14
- (4) 9
- (5) 12

Correct Answer: (1) 7

Solution:

To determine the value of N , we need to analyze the information provided about the run rate and the constraints on the scoring. By carefully analyzing the constraints, we find that N is most likely **7**.

Quick Tip

In problems involving averages and run rates, analyze the constraints carefully to deduce the most plausible values.

Question 24.

In which of these pairs of over numbers, the team could have scored 22 runs in total?

Options:

- (1) 6 and 7
- (2) 7 and 8
- (3) 8 and 9
- (4) 9 and 10
- (5) 10 and 11

Correct Answer: (4) 9 and 10

Solution:

To find the pair of overs where the total number of runs scored is 22, we analyze the given conditions and the run rates for each pair of overs. Based on the available data, the correct pair is **9 and 10**.

Quick Tip

When dealing with run rates in cricket, it's important to look for combinations of overs that match the total sum of runs given.

Question 25.

In which of the following over numbers, the team **MUST** have scored the least number of runs?

Options:

- (1) 7
- (2) 8
- (3) 9
- (4) 10
- (5) 11

Correct Answer: (1) 7

Solution:

After analyzing the given information, the over in which the team must have scored the least number of runs is **over 7**. This is because the team did not score less than 6 runs and more than 15 runs in any over, and the run rate constraints suggest that over 7 had the lowest score.

Quick Tip

When determining the over with the least runs, consider the overall scoring pattern and constraints given in the problem.

Question 26.

Four customers used four different discount coupons for their respective transactions in such a way that they obtained a total discount of Rs. 710.

Which discount coupon was not used?

Options:

- (1) Coupon A
- (2) Coupon B
- (3) Coupon C
- (4) Coupon D
- (5) Coupon E

Correct Answer: (5) Coupon E

Solution:

We need to check the total discount received by the four customers using the different coupons. After calculating the individual discounts using each coupon, we find that Coupon E is the one that wasn't used.

Thus, Coupon E was not used.

Quick Tip

To solve problems with multiple discounts, calculate the total discount using the given values for each coupon and compare it with the given total.

Question 27.

Four customers used four different discount coupons for their respective transactions in such a way that nobody used any discount coupon sub-optimally. (A discount coupon is used sub-optimally if using another discount coupon could have resulted in a higher discount for the same transaction.)

What was the minimum combined spend (before application of any discount)?

Options:

- (1) Rs. 2250
- (2) Rs. 2500
- (3) Rs. 2350
- (4) Rs. 2300
- (5) Rs. 1550

Correct Answer: (2) Rs. 2500

Solution:

By ensuring that the customers used the coupons optimally (i.e., maximizing the discount for each customer), the minimum combined spend can be calculated. The correct amount

is Rs. 2500, which is the minimum combined spend that results in the total discounts being applied correctly.

Quick Tip

Always verify that each customer uses the coupon that maximizes the discount given the total spend to minimize the overall cost.

Question 28.

A family wanted to purchase four products worth Rs. 1000 each, and another product worth Rs. 300. They were told that they could: I) Pay for the five products through one or more transactions in any way they wanted, as long as the purchase amount of any one product would not get split into different transactions, and II) Use the same discount coupon repeatedly for separate transactions, if they opt for more than one transaction.

What was the maximum discount that they could obtain for their purchase?

Options:

- (1) Rs. 600
- (2) Rs. 645
- (3) Rs. 650
- (4) Rs. 700
- (5) None of the remaining options is correct.

Correct Answer: (3) Rs. 650

Solution:

Given the information, the maximum discount can be obtained by using the optimal coupon for each transaction. The maximum discount achievable under the given conditions is Rs. 650.

Quick Tip

When dealing with multiple products and discounts, apply the most favorable discount coupon for each transaction to maximize the total discount.

Question 29.

Sharda was contemplating whether she should inform Vimla that she found Mr. Singh's ring.

Which of the following considerations will BEST dissuade Sharda in sharing the information about the ring with Vimla?

Options:

- (1) Mr. Singh will probably terminate Sharda if he gets to know that she has revealed this information.
- (2) Had Vimla done her job properly, she would have found the ring and avoided this incident.
- (3) Vimla already knows she has not stolen anything, so telling her will not give her any new information.
- (4) Sharda is not keeping well, and Mr. Singh warned her that her frequent absences could lead to her termination.
- (5) Whenever Sharda was absent, Vimla used to help her by taking over her responsibilities.

Correct Answer: (1) Mr. Singh will probably terminate Sharda if he gets to know that she has revealed this information.

Solution:

The best consideration that would dissuade Sharda from informing Vimla is the fear of Mr. Singh terminating her if he finds out she revealed the information. This would likely affect Sharda's decision.

Quick Tip

When faced with ethical dilemmas, consider the potential consequences of your actions, especially if it could affect your job or relationship with others.

Question 30.

Two months passed, and owing to Sharda's improved health and dedication, Sharda started working in three more houses. However, Vimla was dismissed from her jobs in two more houses primarily due to the ring incident. News of the discovery of the lost ring had not become public, and Sharda wanted to help Vimla.

Which of the following actions, by Sharda, will BEST help Vimla?

Options:

- (1) Confront Mr. Singh about concealing the discovery of the lost ring from the housing society residents.
- (2) Inform Vimla that the ring has been found and advise her to demand compensation from Mr. Singh for tarnishing her image.

- (3) Inform as many domestic helps in the housing society as possible that she has found the ring.
- (4) Quit the job at Mr. Singh's house and ask him to consider offering that job to Vimla.
- (5) Divulge to Vimla's employers in the housing society that she has found the ring.

Correct Answer: (2) Inform Vimla that the ring has been found and advise her to demand compensation from Mr. Singh for tarnishing her image.

Solution:

The best course of action for Sharda would be to inform Vimla that the ring has been found and advise her to demand compensation from Mr. Singh for tarnishing her image. This action directly addresses the wrong done to Vimla and helps her restore her dignity.

Quick Tip

In situations of unfair treatment, it's important to take steps to ensure justice is served, whether through direct communication or formal actions like compensation.

Question 31.

The news of the discovery of the lost ring eventually became public. The domestic helps in the society were chagrined by the treatment meted out to Vimla and the fact that the news of the discovery was not made public immediately. They wanted to ensure that they would not get targeted every time if something goes missing.

Which of the following policy options will BEST minimize the chance of employers suspecting their domestic workers of theft in the future?

Options:

- (1) The domestic workers will undergo a daily search by the security guards when leaving the society.
- (2) When a domestic worker is terminated on suspicion of theft without proof, they will have to be paid at least one month's salary in full.
- (3) The current address and contact details of all domestic workers should be submitted to the housing society.
- (4) If there is a suspicion of theft, the security guards will first conduct a thorough search of the affected house.
- (5) When a domestic worker is terminated on suspicion of theft, the employer will have to publicly apologize if the domestic worker can prove their innocence.

Correct Answer: (1) The domestic workers will undergo a daily search by the security

guards when leaving the society.

Solution:

To minimize suspicion, it is essential to introduce a policy that helps prevent any false accusations from being made. A daily search would serve as a preventive measure, reducing the chances of domestic workers being unjustly suspected of theft.

Quick Tip

Transparency and preventive policies can help build trust and reduce unfounded accusations in sensitive work environments.

Question 32.

Shalini's comments deeply hurt Nalini, especially since she had always considered Shalini to be a close friend. Nalini felt like declining the bonus, given her respect for and relationship with Shalini.

Which of the following reasons, if true, will BEST dissuade Nalini from declining the bonus?

Options:

- (1) Shalini, good at heart, is known for making insensitive comments.
- (2) Shalini is known for confronting her boss whenever they changed deadlines.
- (3) In her close group, Nalini is the first person to receive the bonus.
- (4) Very few people, who are not considered loyal, receive the bonus.
- (5) Shalini's irreverent comment about her previous boss pushed her out of that team.

Correct Answer: (1) Shalini, good at heart, is known for making insensitive comments.

Solution:

The fact that Shalini is known for making insensitive comments would help Nalini realize that Shalini's remarks are not necessarily a reflection of her true feelings but rather a characteristic of her communication style. This could dissuade Nalini from declining the bonus.

Quick Tip

Understanding a friend's personality and communication habits can help mitigate misunderstandings and prevent emotional decisions.

Question 33.

Since receiving the performance bonus, Nalini noticed a change in how her teammates behaved with her; they appeared indifferent towards her. Although there were no major issues, Nalini could not help but sense that her teammates began to perceive her as having a closer relationship with the top brass, following her recent accomplishment. Nalini assumed that her teammates might be influenced by Shalini; consequently, they seemed to be avoiding informal interactions with her.

As Nalini had to rely on the support of her teammates, what could Nalini BEST do to normalize her relationship with them?

Options:

- (1) Do nothing in the hope that things will normalize in time.
- (2) Confront Shalini and ask her to stop spreading rumors.
- (3) Invite her teammates for dinner on a weekend.
- (4) Start saying negative things about their bosses to her teammates.
- (5) Talk to her teammates regarding their indifference towards her.

Correct Answer: (5) Talk to her teammates regarding their indifference towards her.

Solution:

To resolve the issue, Nalini should address the situation directly with her teammates. Open communication can help clear up any misunderstandings and restore normal working relationships.

Quick Tip

Addressing issues openly and directly often leads to resolution, especially in a professional setting where team collaboration is key.

Question 34.

A significant project recently arrived at Symbolis, and Nalini was chosen to spearhead it. She was given the autonomy to create her own team to collaborate and drive this project to success. Nalini wanted to build a team where each of the team members worked with great comradery. As Shalini had previous experience of working with the client, Nalini offered her to join the team. However, Shalini expressed her willingness to work on the project only on the condition that she would be appointed as a team leader.

Nalini was aware that the client was very difficult to work with. Of the three previous projects with the client, only the one, where Shalini was a team member, was successfully completed.

What should be the BEST course of action for Nalini regarding the inclusion of Shalini in the team?

Options:

- (1) Form a team without Shalini and inform her boss about Shalini's demand.
- (2) Ask Shalini to reconsider as this project can be important to both of them.
- (3) Tell her boss that Shalini should lead the team as she has worked with the client before.
- (4) Complain about Shalini's attitude to the human resource manager.
- (5) Request her boss to order Shalini to join the team.

Correct Answer: (3) Tell her boss that Shalini should lead the team as she has worked with the client before.

Solution:

Given Shalini's successful track record with the difficult client, it would be in the best interest of the project to allow Shalini to lead the team. Her previous experience will help ensure the project's success.

Quick Tip

In team leadership decisions, experience and proven success with the client or project are key factors to consider.

Question 35.

Flying Groceries was planning to implement a much-needed update to enhance the functionality and user experience of their app. According to Suraj, the update was expected to take at least six months to complete. Suraj wanted Raman to lead this project because his leadership was critical for the project's success. However, Raman knew that he would be there only for three months; he was not sure whether he should accept the project.

Which of the following information, if true, will BEST assist Raman in accepting the role of leading the project?

Options:

- (1) During his time with Flying Groceries, Raman finished some projects ahead of schedule.
- (2) Raman could requisition more human resources to his team for the next three months.
- (3) Suraj might advise against the update if he got to know that Raman was leaving soon.

- (4) The last two projects Raman led were successfully completed by his subordinates during his exams.
- (5) Raman had previously taken many projects home, and the business school would have no classes during the weekends.

Correct Answer: (1) During his time with Flying Groceries, Raman finished some projects ahead of schedule.

Solution:

The fact that Raman completed projects ahead of schedule would give Suraj confidence in his ability to lead the update project even with a shorter tenure. This would help Raman decide to take on the role, knowing that his past efficiency could mitigate any concerns about project delays.

Quick Tip

Previous successful project completions can demonstrate the capability to meet deadlines, even when the timeline is short.

Question 36.

After a couple of months, Raman resigned. Suraj was shocked by Raman's resignation and asked him to reconsider his decision. When Raman expressed his inability to continue, Suraj felt betrayed. This led to a series of heated arguments between them, and they swore to never work together again.

Raman joined the business school; however, he soon realized that the summer internship placements were approaching. Consequently, he would require verification of his responsibilities from Flying Groceries.

Which of the following actions is the MOST appropriate for Raman to obtain his verification?

Options:

- (1) Raman should write a sincere and professional apology letter, expressing regret for the argument Raman had with Suraj.
- (2) Raman should write an email to Suraj, emphasizing Raman's roles and responsibilities, and request him to approve them.
- (3) Raman should contact the HR representative to facilitate the verification of Raman's responsibilities.
- (4) Raman should reach out to a mutual acquaintance within the company and ask her to intervene.
- (5) Raman should re-establish communication with Suraj through social media platforms like Facebook and persuade him there.

Correct Answer: (3) Raman should contact the HR representative to facilitate the verification of Raman's responsibilities.

Solution:

The most professional and neutral approach would be to contact the HR representative. HR can independently verify Raman's responsibilities without the emotional tension caused by the fallout with Suraj.

Quick Tip

When facing potential workplace conflict, contacting HR for documentation or verification is often the most effective and impartial option.

Question 37.

Raman received a verification letter from Flying Groceries outlining his basic job responsibilities during his tenure there. However, Raman required a document to substantiate the additional responsibilities he undertook at Flying Groceries by going beyond his call of duty. Sadly, he did not have any documentation of such additional responsibilities.

Which of the following options will BEST help substantiate the additional responsibilities Raman undertook?

Options:

- (1) Raman should create documentation, detailing quantifiable metrics and results about his extra work based on his memory.
- (2) Raman should collect testimonials on his additional responsibilities from his ex-teammates at Flying Groceries.
- (3) Raman should write a public post on social media, appealing to Suraj, mentioning the challenges he faced while taking additional responsibilities, and how he overcame them.
- (4) Raman should call Suraj and explain that he will not be able to get a consulting or an operations job without verification.
- (5) Raman should reach out to the recently recruited Chief Supply Chain officer at Flying Groceries to highlight the additional work he contributed to facilitate the officer's tasks.

Correct Answer: (2) Raman should collect testimonials on his additional responsibilities from his ex-teammates at Flying Groceries.

Solution:

Collecting testimonials from ex-teammates can provide credible, peer-verified evidence of

the additional responsibilities Raman took on. These testimonials can serve as strong proof when applying for future roles.

Quick Tip

Testimonials from colleagues can act as compelling evidence of work performed beyond official duties, providing a personal and credible perspective.

Question 38.

Prabhu decided to increase the taxi fare for all future trips. He planned to charge Rs. 3000 for a one-way trip to the airport, and Rs. 1000 more for a round trip.

Which of the following facts will BEST help Prabhu's regular customers in accepting the increase in fare?

Options:

- (1) Because, the cost of living has gone up in Kasta.
- (2) Because, Prabhu is punctual and reliable.
- (3) Because, Prabhu is facing financial hardships.
- (4) Because, Prabhu offers repair services to residents' car-related issues.
- (5) Because, Prabhu serves many top officials of the steel plant.

Correct Answer: (2) Because, Prabhu is punctual and reliable.

Solution:

Prabhu's reputation for punctuality and reliability will likely help his customers understand the fare increase. His customers value the trustworthiness and consistency he brings, especially for women traveling alone, which could justify the price hike.

Quick Tip

When facing price increases, a strong reputation for reliability and customer service can often mitigate customer resistance.

Question 39.

After Prabhu increased his charges by 30

Which of the following options will BEST help Prabhu to retain his revenue flow?

Options:

- (1) Revert the pricing of services to its prior rate.
- (2) Give 50(3) Stick to his current increased charges.
- (4) Charge a premium when women travel solo.
- (5) Charge a premium for the steel plant's official trips.

Correct Answer: (3) Stick to his current increased charges.

Solution:

Prabhu should maintain his current increased charges while emphasizing the reliability and trustworthiness of his service. Offering a discount or charging premiums for specific groups could undermine his brand's value. Retaining the current pricing strategy will help sustain customer loyalty in the long run, despite the dip in family bookings.

Quick Tip

Consistency in pricing, coupled with emphasizing quality and reliability, is often the best way to retain long-term customers.

Question 40.

Saroj, the new Chief Financial Officer (CFO) at the steel plant, used the services of Manoj when he first travelled from the Michaelganj airport to the plant. Manoj was a rival of Prabhu in the taxi service business at Kasta. Manoj, upon learning that Saroj would be responsible for hiring taxi services for the steel plant, charged Saroj only Rs. 1500 for that trip. Further, he assured Saroj to charge the same for a one-way trip and additional Rs. 500 for a round trip to the airport. Upon realizing that the plant utilized Prabhu's services for all official trips to the airport, Saroj contacted Prabhu to discuss the rates offered by Manoj and inquired why the plant should continue using his service when Manoj provided the same at a lower price. Prabhu realized that Manoj charged an extremely low price just to push Prabhu out of his business in the Steel Plant.

Which of the following reasons given by Prabhu will BEST help his cause?

Options:

- (1) Prabhu should warn Saroj that Manoj's offer is not sustainable.
- (2) Prabhu should request Saroj to talk to a few of his colleagues before taking any decision.
- (3) Prabhu should introduce Saroj to Ms. Nidhi Tawde, his regular customer.
- (4) Prabhu should offer to lower his price to the one offered by Manoj, exclusively for the steel plant.

(5) Prabhu should tell Saroj that Manoj is unreliable and tardy, and women are unsafe with him.

Correct Answer: (1) Prabhu should warn Saroj that Manoj's offer is not sustainable.

Solution:

Prabhu should focus on the unsustainable nature of Manoj's low pricing strategy. While Manoj's initial offer may seem attractive, it is unlikely that he can maintain such prices without compromising service quality in the long term. This insight will appeal to Saroj's concern for reliability and consistency in the steel plant's operations.

Quick Tip

Highlighting the unsustainable nature of an offer, particularly in competitive businesses, often persuades decision-makers to value long-term reliability over short-term savings.

Question 41.

Due to her old car's frequent breakdowns, Vineeta decided it was time to replace it. She was afraid whether buying a Diplomatico SUV from Balaji Motors, as suggested by Shyam, would be the right decision for her.

Which of the following pieces of additional information will help her the MOST in taking the right decision?

Options:

- (1) She has no idea which SUV to choose, and she feels that all SUVs are the same.
- (2) Her brother, an SUV enthusiast, staying in a metro city, has advised her to stay away from Diplomatico Cars.
- (3) In Jampur, SUVs have a 6-month waiting period; however, one red-coloured Diplomatico SUV, not her favourite colour, is available at Balaji Motors.
- (4) Jampur, being an old city with congested roads, has a parking problem in many areas.
- (5) A new dealership of Panther Motors, the highest selling car brand in the country, is about to come to the town soon.

Correct Answer: (2) Her brother, an SUV enthusiast, staying in a metro city, has advised her to stay away from Diplomatico Cars.

Solution:

Vineeta's brother's advice is likely to carry weight, especially as he is an SUV enthusiast

and can provide valuable, informed insights about the Diplomatico brand. This additional input can help her make an informed decision based on both her needs and her brother's expertise.

Quick Tip

Seeking advice from experts or those with direct knowledge of a product can help consumers avoid impulsive decisions and make more informed choices.

Question 42.

Shyam's satisfaction from meeting the month's quota for selling SUVs turned to dismay when one of his young executives nervously told him that he mistakenly punched an extended warranty for free into Vineeta's purchase contract earlier that morning. This could not be reversed from the company's system and meant a loss of Rs. 19,000 for the dealership. The executive was very sorry and was ready to take accountability. However, the amount was too large to be borne by the executive.

Shyam was not concerned about placing accountability, but rather the recovery of the loss. He was unsure whether he should ask Vineeta for the money.

The following pieces of information are available to Shyam: A. Shyam is aware that Vineeta is very happy with the deal he gave her for the car. B. Shyam feels that Diplomatico's software system is complicated for new employees, which might have also played a role in the error. C. Vineeta has a wide network and can connect Shyam with many potential customers. D. Vineeta's brother, a car enthusiast, has enough knowledge of how car dealers operate. E. Shyam feels that if he maintains the current sales volume, he might be able to persuade Diplomatico to write off the amount (Rs. 19,000).

Which of the following combinations, of the above pieces of information, will MOST likely stop Shyam from trying to recover the money from Vineeta?

Options:

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

Correct Answer: (1) A and B

Solution:

Shyam is aware that Vineeta is happy with the deal, which shows that she is satisfied with her purchase. Additionally, Shyam acknowledges that the error may have been caused by

the complexity of the software system, making it unlikely that Vineeta would intentionally take advantage of the mistake. These factors combined make it more reasonable for Shyam to absorb the loss rather than burden Vineeta.

Quick Tip

When a customer is satisfied, and the mistake is likely due to external factors, it may be more beneficial to absorb the loss rather than ask the customer for payment.

Question 43.

Three months passed. While returning from a friend's house, Vineeta's new SUV was hit by another car. Fortunately, she was not injured, but the SUV was badly damaged. Surprisingly, when Vineeta took the car for repairs to Balaji Motors, she was told that the repairs would not cost her anything as the extended warranty on her car covered such accidents. Vineeta could not recall purchasing such a warranty; hence, she contacted Shyam. Shyam informed her that the extended warranty was mistakenly punched into her contract by an executive. As this mistake could not be reversed due to the company's rigid policies, Shyam bore the cost of Rs. 19,000. He further added that Vineeta should consider it a gift from Balaji Motors for purchasing the highest-priced Diplomatico SUV. As Vineeta rode back home, she wondered if she should pay Rs. 19,000 to Shyam since the extended warranty came to her aid that day.

Which of the following is the MOST compelling rationale for Vineeta to justify not paying Rs. 19,000 to Shyam?

Options:

- (1) She paid more for the Diplomatico SUV, compared to the price of a similar SUV from Panther.
- (2) She is aware that for expensive SUVs like hers, dealers often offer free extended warranty.
- (3) The mistake happened three months back and is water under the bridge now.
- (4) Had the accident not happened, she would not have been aware of the warranty.
- (5) Shyam would have come back to her if he had needed the money.

Correct Answer: (2) She is aware that for expensive SUVs like hers, dealers often offer free extended warranty.

Solution:

Vineeta is aware that extended warranties are commonly offered with expensive SUVs like hers, and she did not specifically request or pay for the warranty. Since it was a mistake that worked out in her favor, she does not owe the dealership anything.

Quick Tip

In situations where a benefit arises from an error not requested by the customer, it is often justified for the customer not to feel obligated to repay.

Question 44.

Recently, some alumni of ABC threatened that their children should be given preference in admissions, or they would withdraw as recruiters. The director was, however, hesitant about allowing alumni to interfere in running the school because the fairness of the admissions process had earned ABC high respect within the corporate world that recruited from the school.

Which of the following reasons, if true, will BEST help the director NOT to worry about pandering to those alumni?

Options:

- (1) The alumni were the reason that ABC was able to attract corporates.
- (2) Some of the alumni were regularly teaching as guest faculty in the school.
- (3) The alumni depend upon ABC's success to enhance their employability.
- (4) No business school, in the region, has allowed alumni any say in managing the operations.
- (5) ABC has not entertained any requests from the alumni till date.

Correct Answer: (4) No business school, in the region, has allowed alumni any say in managing the operations.

Solution:

If no other business schools have allowed alumni any say in operations, the director can confidently assert that maintaining the fairness of the admissions process is in line with industry standards, and deviating from it could set a dangerous precedent.

Quick Tip

Maintaining industry standards often helps in resisting external pressure and keeping operations transparent and fair.

Question 45.

Across the country, business schools were ranked by popular magazines. A few business schools in the same region were applying for rankings, hoping that rankings will affect their visibility among corporate houses and recruiters. To achieve a good rank, ABC faculty members, who have primarily focused on teaching thus far, would need to actively engage in research and consulting activities. The director was aware that asking the faculty to switch to research and consulting would not be easy.

Which of the following facts will BEST help the director not to worry about applying for rankings?

Options:

- (1) The alumni do not follow research publications in general.
- (2) The alumni do not care for the teachers, or classes, in general.
- (3) The alumni are aware that ABC offers a retainable talent pool.
- (4) ABC's placements in the previous year were completed in 4 days.
- (5) ABC could never break into the top 40 ranks in the country when it applied earlier.

Correct Answer: (4) ABC's placements in the previous year were completed in 4 days.

Solution:

The fact that placements were completed in just 4 days shows that ABC already has strong connections with recruiters, and a ranking may not be essential for attracting companies. This can help the director not worry about rankings and focus on maintaining strong placement ties.

Quick Tip

When the school already has excellent industry connections and strong placement records, the pressure to chase rankings diminishes.

Question 46.

A few faculty members complained to the director regarding the lack of attendance and seriousness among many students during classes and exams. The director knew that this had been the case for decades but became more rampant in the last few years. He was also aware that the classes were mostly rituals, conducted to tell the world that ABC believed in education and had little bearing on placements. However, he believed that students must be told to attend classes and take exams with serious attitude.

Which of the following announcements by the director will BEST ensure that faculty stop complaining about student attendance?

Options:

- (1) Students, who attend every class, should be given “thank you” notes from the director.
- (2) Students should be asked to pay a monetary penalty for missing classes.
- (3) Faculty members, who make classes very engaging, should be felicitated during the convocation.
- (4) Only students, with at least 85 percent class attendance, will participate in placements.
- (5) Students should be rewarded for contributing to in-class discussions and learning.

Correct Answer: (4) Only students, with at least 85 percent class attendance, will participate in placements.

Solution:

Making class attendance a condition for placement participation directly ties academic engagement to career outcomes, which will motivate students to attend and take classes seriously. This rule is straightforward and can reduce complaints from faculty about student attendance.

Quick Tip

Linking attendance and performance to tangible benefits, such as placement eligibility, effectively encourages student engagement.

Question 47.

GoValve has recently proposed a maintenance package for the valves to DeepSea, which includes a clause that whenever a valve at Level 3 malfunctions, all valves at that level will be replaced. Accepting the clause will cost a significant premium. The management of DeepSea have the following pieces of additional information under consideration:

- A. The valves are known to be prone to malfunction.
- B. Any malfunction in one valve often results in leakage from the neighboring valves.
- C. GoValve is ready to negotiate a discount if the clause is accepted.
- D. Replacing the valves at Level 3 is a very difficult job, which is best done by GoValve.
- E. The chances of pressure buildups are higher near the seabed.

Which of the following combinations, of the above pieces of additional information, will help the management of DeepSea the MOST in accepting the clause?

Options:

- (1) A, B and D

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

Correct Answer: (1) A, B and D

Solution:

Since the valves are prone to malfunction (A), and a malfunction in one valve may cause leakage in neighboring valves (B), it is crucial to replace all valves at Level 3 in case of a failure to ensure safety. Additionally, since replacing the valves is a difficult task best handled by GoValve (D), the clause seems necessary despite the premium.

Quick Tip

Replacing the entire set of valves when one malfunctions provides a safety net, particularly when leakage may spread to neighboring valves.

Question 48.

A startup, SafeValve, has started importing a technologically superior brand of valves from abroad, which boasts a significant reduction in gas leakage. SafeValve has established a large inventory of these imported valves but is struggling to gain foothold in the local market. An NGO, working for the protection of marine lives, has appealed to DeepSea to replace their existing valves with the product from SafeValve. However, the installation of this new valve will require substantial modification in the pipeline, entailing unknown challenges in installation and maintenance.

Which of the following reasons, if TRUE, can DeepSea BEST cite to publicly reject the appeal?

Options:

- (1) The new valves cost twice as much as the existing valves.
- (2) GoValve is a reputed brand and had a partnership with DeepSea for a long time.
- (3) Only some developed countries have mandated the use of the new valves.
- (4) SafeValve depends exclusively on imports and may be prone to procurement issues.
- (5) GoValve follows the strictest global industry standards of leakage prevention.

Correct Answer: (4) SafeValve depends exclusively on imports and may be prone to procurement issues.

Solution:

DeepSea can reject the appeal by highlighting that SafeValve's reliance on imports makes its supply chain potentially unreliable, which is a critical concern for a company managing a high-risk pipeline system.

Quick Tip

Supply chain stability is crucial when dealing with critical infrastructure. Reliance on imports might introduce uncertainties.

Question 49.

A startup, SafeValve, has started importing a technologically superior brand of valves from abroad, which boasts a significant reduction in gas leakage. An update to industry safety regulations has come out, which allows a lower number of valves in a pipeline network, if technologically superior valves, similar to those imported by SafeValve, are used for the entire network.

DeepSea is aware that the more the number of valves, the better is DeepSea's ability to contain blowouts. However, a higher number of valves increases the chance of a leakage. Therefore, DeepSea is contemplating a proposal to reduce the number of valves to almost half, by replacing the existing valves (by GoValve) with the valves sold by SafeValve. A team, tasked with evaluating the proposal, has made some observations, listed below.

Which of the following observations is the MOST helpful in REJECTING the proposal?

Options:

- (1) There is no clear industry standard for the minimum number of valves required at a certain level.
- (2) At Level 1, the chance of a pressure rise is much lesser compared to the other two levels.
- (3) At Level 3, a blowout results in more time consuming and expensive repairs compared to the other two levels.
- (4) The superiority of the SafeValve products is only in terms of preventing leakage, not blowouts.
- (5) If a GoValve valve is opened to prevent a blowout, the chance of leakage from the valves within a certain distance increases.

Correct Answer: (4) The superiority of the SafeValve products is only in terms of preventing leakage, not blowouts.

Solution:

If SafeValve valves only excel at preventing leakage but do not offer superior protection against blowouts, reducing the number of valves may significantly reduce DeepSea's ability to control blowouts, making the proposal more risky.

Quick Tip

Blowout prevention is a critical function, and reducing the number of valves could lead to catastrophic consequences if the new valves do not provide adequate protection.

Question 50.

Read the following statement carefully.

_____ like a fake can be a sign of _____, and clinging too tightly to what feels like one's authentic self can _____ that growth.

Fill in the blanks meaningfully, in the above statement, from the following options.

Options:

- (1) acting, progress, enhance
- (2) feeling, growth, hinder
- (3) behaving, improvement, support
- (4) performing, stupidity, change
- (5) operating, smartness, increase

Correct Answer: (2) feeling, growth, hinder

Solution:

The correct phrase is "feeling like a fake" (meaning a sense of being inauthentic) can be a sign of "growth" (as self-awareness and growth often involve questioning one's authenticity), and clinging too tightly to one's authentic self can "hinder" growth, as it limits the capacity to change.

Quick Tip

Sometimes, growth involves discomfort and self-reflection, which may feel like being inauthentic.

Question 51.

Read the following statement carefully and fill up the blanks from the given options.

As _____ evolved and eventually moved to cities, close proximity

_____ how we viewed and assessed each _____.

Options:

- (1) civilization, enhanced, situation
- (2) generations, changed, other
- (3) culture, helped, life
- (4) lives, destroyed, culture
- (5) people, helped, nation

Correct Answer: (2) generations, changed, other

Solution:

The correct option is "generations, changed, other" as the movement of generations to cities has changed how we view and assess each other, especially in urban environments.

Quick Tip

The impact of moving to cities often brings a shift in how individuals perceive and interact with each other.

Question 52.

Read the following sentences carefully.

- A. I shall be there at about 9: 00 a.m.
- B. Keep off of the grass.
- C. My old car was much faster than the new one.
- D. I was angry at my friend.
- E. Rohit is as capable as Virat.

Which of the following combinations has all the INCORRECT sentences?

Options:

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

Correct Answer: (1) A and B

Solution:

- Sentence A ("I shall be there at about 9:00 a.m.") is incorrect because the use of "shall" is outdated and awkward. It should be "I will be there." - Sentence B ("Keep off of the

grass.”) is incorrect because the phrase ”off of” is redundant. The correct form is ”Keep off the grass.”

Quick Tip

Avoid redundant phrases like ”off of” and use more modern forms like ”I will be there” for clarity.

Question 53.

Read the following sentences carefully.

- A. Everybody accepts his responsibilities.
- B. Nobody in that group have their reports up to date, as they should have.
- C. Either of the boys is acceptable to do the errands.
- D. Both of the mice is underfed.
- E. It is I who am next.
- F. The teacher told he and I to leave early.

Which of the following combinations has all the sentences grammatically CORRECT?

Options:

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

Correct Answer: (4) A, E and F

Solution:

- Sentence A is correct. - Sentence E is correct because ”It is I who am next” uses the grammatically correct form ”I” and ”am”. - Sentence F is correct because ”he and I” is the proper pronoun usage in the objective case.

Quick Tip

In English, ”It is I” is considered the correct form, though ”It’s me” is commonly used in casual speech.

Question 54.

Read the following statements and answer the question that follows.

- A. Back then, they were owned by companies and installed on their premises.
- B. Rooms and servers began to replace computer mainframes in the 1990's.
- C. These were supplemented by processors from Intel, which by the mid-2000s translated its dominance of PC semiconductors into a near monopoly of the server market.
- D. They mostly ran on chips made by IBM and HP, the big tech of the day.
- E. Things started to change once again around a decade ago, when Amazon began selling some of its spare server capacity.

Which of the following combinations is the MOST logically ordered?

Options:

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

Correct Answer: (1) A, B, C, D, E

Solution:

The most logical order begins with the historical context (A), followed by the evolution of technology (B, C), and then the dominance of Intel and the transition to new market players (D, E).

Quick Tip

When constructing a logical timeline, it's important to start with the context and progress through developments in order.

Question 55.

Go through the statements below and answer the question that follows.

- A. Maybe you have survived major trauma and have a hard time feeling safe.
- B. You'll probably discover that your fear and struggles make sense on account of what you've lived through.
- C. Instead of beating yourself up for reacting in ways you don't understand, you can develop compassion for yourself and what you've been through.
- D. Perhaps you have experienced a sudden death, and you are often anxious about the health of your loved ones.
- E. You may also find out that you have more strength than you knew, the same strength that has sustained you this far...

Which of the following combinations is the MOST logically ordered?

Options:

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

Correct Answer: (3) E, A, D, C, B

Solution:

The logical order starts with the realization of inner strength (E), then moves to acknowledging trauma (A), experiencing specific anxieties (D), offering self-compassion (C), and concluding with understanding the emotional responses (B).

Quick Tip

The order moves from personal empowerment to understanding the underlying causes and emotions.

Question 56.

Read the following paragraph and answer the question that follows.

Fear is the greatest motivator of all time. Conflict born of fear is behind our every action, driving us forward like the cogs of a clock. Fear is desire's dark dress, its doppelgänger. "Love and dread are brothers," says Julian of Norwich. As desire is wanting and fear is not-wanting, they become inexorably linked; just as desire can be destructive (the desire for power), fear can be constructive (fear of hurting another); fear of poverty becomes desire for wealth.

Which of the following statements can be BEST concluded from the paragraph?

Options:

- (1) A positive action generally has a foundation of fear underneath.
- (2) The interplay of fear and desire helps in guiding one's action.
- (3) Fear is a powerful motivator that leads to extraordinary achievements.
- (4) While fear is perceived as negative, it can be a force for good.
- (5) Fear paves the way to positive transformation when paired with desire.

Correct Answer: (2) The interplay of fear and desire helps in guiding one's action.

Solution:

The paragraph suggests that fear and desire are interconnected forces that drive human action, guiding our decisions and motivations.

Quick Tip

Fear and desire work in tandem, sometimes complementing each other, leading to both destructive and constructive outcomes.

Question 57.

Read the following paragraphs and answer the question that follows.

Paragraph 1:

Here are some handy rules of thumb. Anyone who calls themselves a thought leader is to be avoided. A man who does not wear socks cannot be trusted. And a company that holds an employee-appreciation day does not appreciate its employees.

Paragraph 2:

It is not just that the message sent by acknowledging staff for one out of 260-odd working days is a bit of a giveaway (there isn't a love-your-spouse day ... for the same reason). It is also that the ideas are usually so tragically unappreciative. You have worked hard all year so you get a slice of cold pizza or a rock stamped with the words "You rock"?

Which of the following BEST describes the relationship of the first paragraph with the second paragraph?

Options:

- (1) The first paragraph is redundant, in the presence of the second paragraph.
- (2) The first paragraph is humorous, while the second paragraph is sarcastic.
- (3) The second paragraph gives evidence to the claims made by the first paragraph.
- (4) Without the second paragraph the first paragraph is meaningless.
- (5) The first paragraph evokes interest, the second paragraph elaborates.

Correct Answer: (3) The second paragraph gives evidence to the claims made by the first paragraph.

Solution:

The second paragraph explains and justifies the sarcastic claims made in the first paragraph about employee-appreciation days and their superficial nature.

Quick Tip

The second paragraph elaborates on the critique of employee appreciation, providing examples of its ineffectiveness.

Question 58.

Read the following passage and answer the question that follows.

How do we choose one discovery over any other? The physician Lewis Thomas made a choice. He bluntly asserts: “The greatest of all the accomplishments of 20th-century science has been the discovery of human ignorance.”

The science writer Timothy Ferris agrees: “Our ignorance, of course, has always been with us, and always will be. What is new is our awareness of it, our awakening to its fathomless dimensions, and it is this, more than anything else, that marks the coming of age of our species.”

It is an odd, unsettling thought that the culmination of our greatest century of discovery should be the confirmation of our ignorance. How did such a thing come about?

Which of the following statements can be BEST concluded from the above passage?

Options:

- (1) Humans know more when they know they know very little.
- (2) Humans became scientists when they realized that they were ignorant.
- (3) Humans progressed because they knew that they knew very little.
- (4) The realization that humans are ignorant led them to invent new things.
- (5) That they do not know enough make humans seek to know more.

Correct Answer: (5) That they do not know enough make humans seek to know more.

Solution:

The passage emphasizes how the recognition of human ignorance drives the desire to learn more and push the boundaries of knowledge.

Quick Tip

Awareness of ignorance is a key driver of progress, leading humans to seek deeper understanding and discoveries.

Question 59.

Read the following paragraph and answer the question that follows.

You may accumulate a vast amount of knowledge but it will be of far less value to you

than a much smaller amount if you have not thought it over for yourself; because only through ordering what you know by comparing every truth with every other truth can you take complete possession of your knowledge and get it into your power.

Based on the above information, which of the following statements **MUST** be true?

Options:

- (1) If she wants to master knowledge, she must reflect on the information.
- (2) If she reflects on the information, she will master the knowledge.
- (3) If she has not mastered knowledge, she must have not reflected on information.
- (4) If she has mastered the knowledge, she might have reflected on the information.
- (5) If she is a master of knowledge, it is because she is a reflector of information.

Correct Answer: (1) If she wants to master knowledge, she must reflect on the information.

Solution:

The paragraph clearly states that reflection and comparison of knowledge are necessary for mastering it.

Quick Tip

Mastery of knowledge requires more than just accumulation; it demands thoughtful reflection and integration of ideas.

Question 60.

Read the following passage and answer the question that follows.

That's how life plays out for all of us. We lose some. Like sportspersons, we too pack our gear and go to work. But unlike them, the gaze of the world is not upon us. Most of us do our business in anonymity, very few of us are emotionally wired to the outcomes of our day jobs. We don't come back feeling like winners. Or losers. As sports fans we can summon empathy for those who stretch their bodies and minds to the limit in the pursuit of athletic excellence and provide such joys in the process.

But we will never experience the highs that are their reward. And we will never know the depth of their lows, which are their burden.

Still, no one will know better than Rohit and Dravid that it's already a new day. There might never be a World Cup win for them. But there are loved ones to go to. Life awaits still.

Which of the following statements **BEST** summarizes the above passage?

Options:

- (1) Life moves on, and as sports fans, we should do too.
- (2) The wins and losses in sports do not exist in other professions.
- (3) We should treat winning and losing as imposters.
- (4) Just because we enjoy sports does not mean we understand the sportspersons.
- (5) We should put ourselves in others' shoes rather than judge them for performance.

Correct Answer: (4) Just because we enjoy sports does not mean we understand the sportspersons.

Solution:

The passage highlights the emotional distance between being a sports fan and being a sportsperson, emphasizing that we cannot truly understand their struggles and triumphs from the outside.

Quick Tip

Empathy is important, but it's vital to acknowledge the differences in experience between fans and athletes.

Question 61.

Read the following poem and answer the question that follows.

*In the darkened room
a woman
cannot find her reflection in the mirror
waiting as usual
at the edge of sleep
In her hands she holds
the oil lamp
whose drunken yellow flames
know where her lonely body hides*

Which of the following statements BEST conveys the theme of the poem?

Options:

- (1) The poem explores the quality of life of a woman.
- (2) The poem laments the suffering and frustration of a woman.
- (3) The poem celebrates the woman's futile and meaningless life.
- (4) The poem revolves around a woman whose liberty has been throttled.
- (5) The poem revolves around the woman's feeling of alienation.

Correct Answer: (5) The poem revolves around the woman's feeling of alienation.

Solution:

The poem conveys a sense of alienation, emphasizing the woman's solitude and the disconnect she feels from her own reflection and surroundings.

Quick Tip

The imagery of darkness and the oil lamp suggests a search for self and identity in a lonely and disconnected state.

Question 62.

What do the lines "the drunken yellow flames/know where her lonely body hides" BEST represent?

Options:

- (1) The lines represent flames as forces that are aware of her solitude.
- (2) The lines represent flames as turbulent emotions of a nameless woman.
- (3) The lines represent flames that highlight the location of her body.
- (4) The lines represent flames as distorted memories that preserve her identity.
- (5) The lines represent flames as her desperate pursuit for her lost self.

Correct Answer: (1) The lines represent flames as forces that are aware of her solitude.

Solution:

The flames, described as "drunken" and aware of her hiding place, suggest that they represent a force that perceives and reveals her isolation.

Quick Tip

The flames illuminate the woman's loneliness and the intimate knowledge they have of her hidden self.

Question 63.

Read the following passage and answer the question that follows.

But as the behavioral economists like to remind us, we are already prone to all sorts of reductions as a species. It's not just the scientists. We compress complex reality down into abbreviated heuristics that often work beautifully in everyday life for high-frequency, low-significance decisions. Because we are an unusually clever and self-reflective species,

we long ago realized that we needed help overcoming those reductive instincts when it really matters. And so we invented a tool called storytelling. At first, some of our stories were even more reductive than the sciences would prove to be: allegories and parables and morality plays that compressed the flux of real life down to archetypal moral messages. But over time the stories grew more adept at describing the true complexity of lived experience, the whorls and the threadlike pressures. One of the crowning achievements of that growth is the realist novel. That, of course, is the latent implication of Prince Andrei's question: "innumerable conditions made meaningful only in unpredictable moments" would fare well as a description of both *War and Peace* and *Middlemarch*, arguably the two totemic works in the realist canon. What gives the novel the grain of truth lies precisely in the way it doesn't quite run along the expected grooves, the way it dramatizes all the forces and unpredictable variables that shape the choices humans confront at the most meaningful moments of their lives.

When we read those novels—or similarly rich biographies of historical figures—we are not just entertaining ourselves; we are also rehearsing for our own real-world experiences. . . .

Which of the following is the BEST interpretation regarding reductive instincts?

Options:

- (1) Reductive instincts tell us to reduce every situation to a heuristic.
- (2) After the invention of storytelling, humans have overcome their reductive instincts.
- (3) Reductive instincts can help us in handling uncertainty.
- (4) Reductive instincts have to be overcome for survival in the real world.
- (5) Reductive instincts led to compression of complex reality to moral messages.

Correct Answer: (3) Reductive instincts can help us in handling uncertainty.

Solution:

The passage explains how reductive instincts simplify complex situations, helping humans navigate everyday decisions, though they must be supplemented by storytelling when it matters.

Quick Tip

While reductive instincts are useful for routine decisions, storytelling provides a way to deal with complexity and uncertainty in more significant matters.

Question 64.

Why would a realist novel consist of "innumerable conditions made meaningful only in unpredictable moments?"

Options:

- (1) To keep the reader engaged till the end of the novel.
- (2) To bring in as much content as possible without making it seem forced.
- (3) To showcase unexpected complexity while making it seem relevant in the given context.
- (4) To show to the reader that realist novel does not work on expected lines.
- (5) To engage the reader with realism and fantasy at the same time.

Correct Answer: (3) To showcase unexpected complexity while making it seem relevant in the given context.

Solution:

Realist novels aim to present life's unpredictable nature, showcasing how unexpected conditions shape the choices and outcomes of characters' lives.

Quick Tip

By highlighting complex and unpredictable moments, realist novels capture the nuanced realities of human experience.

Question 65.

Read the following passage and answer the question that follows.

Beauty has an aesthetic, but it is not the same as aesthetics, not when it can be embodied, controlled by powerful interests, and when it can be commodified. Beauty can be manners, also a socially contingent set of traits. Whatever power decides that beauty is, it must always be more than reducible to a single thing. Beauty is a wonderful form of capital in a world that organizes everything around gender and then requires a performance of gender that makes some of its members more equal than others.

Beauty would not be such a useful distinction were it not for the economic and political conditions. It is trite at this point to point out capitalism, which is precisely why it must be pointed out. Systems of exchange tend to generate the kind of ideas that work well as exchanges. Because it can be an idea and a good and a body, beauty serves many useful functions for our economic system. Even better, beauty can be political. It can exclude and include, one of the basic conditions of any politics. Beauty has it all. It can be political, economic, external, individualized, generalizing, exclusionary, and perhaps best of all a story that can be told. Our dominant story of beauty is that it is simultaneously a blessing, of genetics or gods, and a site of conversion. You can become beautiful if you accept the right prophets and their wisdoms with a side of products thrown in for good measure. Forget that these two ideas—unique blessing and earned reward—are antithetical to each other. That makes beauty all the more perfect for our (social and political) time, itself anchored in paradoxes like freedom and property, opportunity and equality.

Which of the following CANNOT be inferred about beauty?

Options:

- (1) Beauty is no longer an abstract concept.
- (2) Beauty has become an aspirational good.
- (3) Different powers and influences delineate beauty for us.
- (4) Beauty is defined and appreciated by the perceiver.
- (5) The beautiful does not define the standards of beauty.

Correct Answer: (5) The beautiful does not define the standards of beauty.

Solution:

The passage discusses how beauty is a social construct influenced by economic and political systems, and not something that is defined by those who possess it.

Quick Tip

Beauty, as described in the passage, is shaped by external powers and not by the individuals considered beautiful.

Question 66.

Based on the passage, which of the following BEST explains beauty to be simultaneously a “blessing” and a “site of conversion?”

Options:

- (1) Both are narratives, with one supporting the other.
- (2) When properly communicated people will believe anything.
- (3) Because beauty is a blessing everyone wants to possess it by converting to the standards.
- (4) A blessing, when sought, results in a provider of the blessing, in a capitalistic society.
- (5) Though beauty is a unique blessing, one can become beautiful by imitating beautiful people.

Correct Answer: (3) Because beauty is a blessing everyone wants to possess it by converting to the standards.

Solution:

The passage contrasts beauty as a “blessing” and a “site of conversion,” suggesting that beauty is both inherent and something people strive for by adhering to societal standards.

Quick Tip

Beauty is portrayed as a cultural construct that offers both inherent value and the potential for transformation through social standards.

Question 67.

Read the following passage and answer the question that follows.

What I call fast political thinking is driven by simplified moral frames. These moral frames give us the sense that those who agree with us have the right answer, while those who disagree are unreasonable, or worse.

Each moral frame sets up an axis of favorable and unfavorable. Progressives use the oppressor-oppressed axis. Progressives view most favorably those groups that can be regarded as oppressed or standing with the oppressed, and they view most unfavorably those groups that can be regarded as oppressors. Conservatives use the civilization-barbarism axis. Conservatives view most favorably the institutions that they believe constrain and guide people toward civilized behavior, and they view most unfavorably those people who they see as trying to tear down such institutions. Libertarians use the liberty-coercion axis. Libertarians view most favorably those people who defer to decisions that are made on the basis of personal choice and voluntary agreement, and they view most unfavorably those people who favor government interventions that restrict personal choice.

If you have a dominant axis, I suggest that you try to learn the languages spoken by those who use the other axes. Don't worry—learning other languages won't make it easy for others to convert you to their point of view. By the same token, it will not make it easy to convert others to your point of view. However, you may become aware of assumptions your side makes that others might legitimately question.

What learning the other languages can do is enable you to understand how others think about political issues. Instead of resorting to the theory that people with other views are crazy or stupid or evil, you may concede that they have a coherent point of view. In fact, their point of view could be just as coherent as yours. The problem is that those people apply their point of view in circumstances where you are fairly sure that it is not really appropriate.

Consider that there may be situations in which one frame describes the problem much better than the others. For example, I believe that the civil rights movement in the United States is best described using the progressive heuristic of the oppressed and the oppressor. In the 1950s and the early 1960s, the people who had the right model were the people who were fighting for black Americans to have true voting rights, equal access to housing, and an end to the Jim Crow laws. The civilization-barbarism axis and the liberty-coercion axis did not provide the best insight into the issue. . .

Which of the following BEST describes the civilization-barbarism axis?

Options:

- (1) The way we are trained to behave affects our peace in life.
- (2) Some people are barbaric and should be restrained from public life.
- (3) It is how you behave, not who you are, that makes you acceptable.
- (4) Government should play a very heavy role in maintaining law and order.
- (5) Every society has to have a harmonious mix of civilized and the barbaric for it to survive.

Correct Answer: (3) It is how you behave, not who you are, that makes you acceptable.

Solution:

The civilization-barbarism axis focuses on behavior and the belief that those who conform to civilized standards should be favored, while those who do not are viewed negatively.

Quick Tip

The axis is concerned with societal behaviors that maintain civilization versus those that are seen as disruptive or barbaric.

Question 68.

Which of the following BEST explains the author's usage of the term moral frames?

Options:

- (1) The frames give those who believe in them the right to question others' behaviours.
- (2) The frames define what the believer believes as right or wrong.
- (3) A frame is a belief and cannot be rationally explained.
- (4) What is right to the believer is wrong to those who do not share that belief.
- (5) It makes easy for the believer to declare others as wrong.

Correct Answer: (2) The frames define what the believer believes as right or wrong.

Solution:

Moral frames are simplified lenses through which individuals determine what is right or wrong, often excluding alternative perspectives.

Quick Tip

Moral frames serve as the basis for forming judgments about what is acceptable behavior and who holds the "right" perspective.

Question 69.

Which of the following can BEST be concluded from the above passage?

Options:

- (1) Knowing why you think the way you think, enables you to understand others' perspectives.
- (2) Most controversial issues in the world can be simplified into three axes.
- (3) The assumptions we hold leads to our dominant axis.
- (4) Issues can be solved by looking at them from the right axis and questioning the assumptions.
- (5) Most problems in the world are because of applying the wrong axis to a particular problem.

Correct Answer: (1) Knowing why you think the way you think, enables you to understand others' perspectives.

Solution:

The passage emphasizes the importance of understanding others' perspectives by recognizing the assumptions and frames we use to evaluate political issues.

Quick Tip

Awareness of our own moral frames can help us approach political issues with empathy and understanding of differing viewpoints.

Question 70.

Read the following passage and answer the question that follows.

Because it's so easy to judge the idiocy of others, it may be sorely tempting to think this doesn't apply to you. But the problem of unrecognized ignorance is one that visits us all. And over the years, I've become convinced of one key, overarching fact about the ignorant mind. One should not think of it as uninformed. Rather, one should think of it as misinformed.

An ignorant mind is precisely not a spotless, empty vessel, but one that's filled with the clutter of irrelevant or misleading life experiences, theories, facts, intuitions, strategies, algorithms, heuristics, metaphors, and hunches that regrettably have the look and feel of useful and accurate knowledge. This clutter is an unfortunate by-product of one of our greatest strengths as a species. We are unbridled pattern recognizers and profligate theorizers. Often, our theories are good enough to get us through the day, or at least to an age when we can procreate. But our genius for creative storytelling, combined with our inability to detect our own ignorance, can sometimes lead to situations that are embarrassing, unfortunate, or downright dangerous—especially in a technologically

advanced, complex democratic society that occasionally invests mistaken popular beliefs with immense destructive power. As the humorist Josh Billings once put it, “It ain’t what you don’t know that gets you into trouble. It’s what you know for sure that just ain’t so.” (Ironically, one thing many people “know” about this quote is that it was first uttered by Mark Twain or Will Rogers—which just ain’t so.)

Because of the way we are built, and because of the way we learn from our environment, we are all engines of misbelief. And the better we understand how our wonderful yet kludge-ridden, Rube Goldberg engine works, the better we—as individuals and as a society—can harness it to navigate toward a more objective understanding of the truth.

Which of the following statement is NOT true about an ignorant mind?

Options:

- (1) An ignorant mind is often filled with unfounded and misguided distractions.
- (2) An ignorant mind succumbs to illusionary pattern detection.
- (3) An ignorant mind theorizes without robust evidence.
- (4) An ignorant mind is unaware of its own limitations.
- (5) An ignorant mind often fuels scepticism.

Correct Answer: (5) An ignorant mind often fuels scepticism.

Solution:

The passage describes an ignorant mind as one that is misinformed and filled with misleading knowledge, but it does not mention that such a mind fuels scepticism. Instead, it suggests that ignorance is based on mistaken beliefs.

Quick Tip

The passage emphasizes misbelief and the clutter of incorrect knowledge, not scepticism as a feature of ignorance.

Question 71.

Based on the passage, what does the author BEST mean when he says, “we are all engines of misbelief?”

Options:

- (1) Driven by misbelief, we blend our creativity and ignorance.
- (2) Our brains are wired with certain heuristics that can lead to systematic errors in judgement.
- (3) We are prone to holding beliefs that are not necessarily true.
- (4) We are naturally inclined to form, and often share, misleading and inaccurate beliefs.
- (5) We are always fuelled by our ignorance to spread information.

Correct Answer: (4) We are naturally inclined to form, and often share, misleading and inaccurate beliefs.

Solution:

The author refers to the way our brains are wired to form beliefs that are not always true, resulting in the spread of misbeliefs. This is described as an inevitable by-product of our cognitive processes.

Quick Tip

The phrase "engines of misbelief" suggests that our minds naturally generate incorrect or misleading beliefs, which we often share with others.

Question 72.

With which of the following statements will the author agree the MOST?

Options:

- (1) We must try not to see patterns in everything that we observe.
- (2) We must be aware that the patterns we see may not necessarily reflect the truth.
- (3) We must be sceptical of the beliefs we have, regardless how true they seem to us.
- (4) The more we are sure of something, the more we are wrong about it.
- (5) Our desire to see patterns in everything makes us unable to detect misbeliefs in others.

Correct Answer: (2) We must be aware that the patterns we see may not necessarily reflect the truth.

Solution:

The author emphasizes the tendency of humans to recognize patterns, even when they do not reflect the truth, and the importance of being cautious about these patterns.

Quick Tip

The passage warns that our ability to detect patterns can lead us to false conclusions, so we should be aware of the limitations in our pattern recognition.

Question 73.

Read the following passage and answer the question that follows.

If we imagine the action of a vaccine not just in terms of how it affects a single body, but also in terms of how it affects the collective body of a community, it is fair to think of vaccination as a kind of banking of immunity. Contributions to this bank are donations to those who cannot or will not be protected by their own immunity. This is the principle of herd immunity, and it is through herd immunity that mass vaccination becomes far more effective than individual vaccination.

Any given vaccine can fail to produce immunity in an individual, and some vaccines, like the influenza vaccine, are less effective than others. But when enough people are vaccinated with even a relatively ineffective vaccine, viruses have trouble moving from host to host and cease to spread, sparing both the unvaccinated and those in whom vaccination has not produced immunity. This is why the chances of contracting measles can be higher for a vaccinated person living in a largely unvaccinated community than they are for an unvaccinated person living in a largely vaccinated community.

The unvaccinated person is protected by the bodies around her, bodies through which disease is not circulating. But a vaccinated person surrounded by bodies that host disease is left vulnerable to vaccine failure or fading immunity. We are protected not so much by our own skin, but by what is beyond it. The boundaries between our bodies begin to dissolve here. Donations of blood and organs move between us, exiting one body and entering another, and so too with immunity, which is a common trust as much as it is a private account. Those of us who draw on collective immunity owe our health to our neighbors.

Which of the following CANNOT be concluded?

Options:

- (1) A vaccine cannot guarantee immunity in an individual.
- (2) Our survival, as a community, is largely based on herd immunity.
- (3) A vaccinated person may get infected if her surroundings are largely unvaccinated.
- (4) Collective immunity protects those with compromised immune systems.
- (5) Even, relatively, ineffective vaccines can stop the spread of viruses if enough people are vaccinated.

Correct Answer: (4) Collective immunity protects those with compromised immune systems.

Solution:

The passage does not specifically mention compromised immune systems as being directly protected by herd immunity. It discusses how collective immunity helps prevent the spread of viruses, but it does not imply that it is specifically for those with compromised immunity.

Quick Tip

The passage focuses more on general protection through herd immunity, not specifically protecting vulnerable groups such as those with compromised immune systems.

Question 74.

Why does the author think about vaccination as a “banking of immunity?”

Options:

- (1) Because it creates a reserve of immunity within a person’s immune system.
- (2) Because when somebody is vaccinated, it is a deposit of protection against a particular disease.
- (3) Because different vaccines contribute to a diverse portfolio of immune defences.
- (4) Because it is like providing a safety net for those who are more vulnerable to diseases.
- (5) Because it is a way to mitigate health risks for those who may not have access to vaccination.

Correct Answer: (2) Because when somebody is vaccinated, it is a deposit of protection against a particular disease.

Solution:

The author uses the analogy of banking immunity to explain how vaccinations serve as deposits of protection, benefiting not only the individual but also the community.

Quick Tip

The author views vaccination as contributing to a collective “bank” of immunity that offers protection beyond the individual, especially for those who cannot be vaccinated.

Question 75.

Based on the last paragraph of the passage, which of the following would the author BEST agree with?

Options:

- (1) In times of health crises, communities should come together to support and protect each other.
- (2) It is important to express gratitude to those who contribute to the herd immunity by getting vaccinated.

- (3) It is an ethical obligation of individuals to get vaccinated for the greater good.
- (4) In any community, immunity is transactional.
- (5) Immunity of a community is interconnected, and everyone plays a role to keep each other healthy.

Correct Answer: (5) Immunity of a community is interconnected, and everyone plays a role to keep each other healthy.

Solution:

The final paragraph of the passage emphasizes how immunity is a shared responsibility, with each individual contributing to the overall health of the community. This interconnectedness is central to the author's argument.

Quick Tip

The author stresses the communal aspect of immunity, suggesting that individuals are interdependent when it comes to health and protection against diseases.

Question 76.

Please type the following sentence: "The quick brown fox jumps over the lazy dog."

Response Type: Alphanumeric

Solution:

The correct sentence is: "The quick brown fox jumps over the lazy dog."

Quick Tip

This sentence is a pangram, meaning it contains every letter of the alphabet at least once. It's often used in typing practice.

Question 77.

Which of the following years is NOT a leap year?

Options:

- (1) 1900
- (2) 2000
- (3) 1896
- (4) 1924

(5) 2024

Correct Answer: (1) 1900

Solution:

A year is a leap year if it is divisible by 4, but years divisible by 100 are not leap years unless they are also divisible by 400. Therefore, 1900 is not a leap year, even though it is divisible by 4, because it is also divisible by 100 but not by 400.

Quick Tip

While 1900 is divisible by 4, its divisibility by 100 and lack of divisibility by 400 makes it a common year, not a leap year.

Question 78.

Which two teams competed in the final match of the Women's Premier League (WPL) 2023, held on March 26, 2023 in Mumbai?

Options:

- (1) Delhi Capitals and Mumbai Indians
- (2) Gujarat Giants and Delhi Capitals
- (3) UP Warriorz and Delhi Capitals
- (4) Royal Challengers Bangalore and Mumbai Indians
- (5) Delhi Capitals and Gujarat Giants

Correct Answer: (2) Gujarat Giants and Delhi Capitals

Solution:

The Women's Premier League (WPL) 2023 final was played between the Gujarat Giants and Delhi Capitals on March 26, 2023.

Quick Tip

The final match of the WPL 2023 saw Gujarat Giants face Delhi Capitals, with the match held in Mumbai.

Question 79.

Which city hosted the recently concluded Asian Games 2022 (which happened in 2023)?

Options:

- (1) Incheon
- (2) Hangzhou
- (3) Jakarta
- (4) Guangzhou
- (5) Busan

Correct Answer: (2) Hangzhou

Solution:

The Asian Games 2022, which were postponed and held in 2023, took place in Hangzhou, China.

Quick Tip

The Asian Games were scheduled for 2022 but were postponed to 2023 due to the pandemic. The event was hosted in Hangzhou, China.

Question 80.

Which of the following countries has NOT been invited to join the BRICS in the BRICS' expansion plan for 2024?

Options:

- (1) Egypt
- (2) Ethiopia
- (3) Saudi Arabia
- (4) Iran
- (5) Pakistan

Correct Answer: (5) Pakistan

Solution:

The BRICS' expansion plan for 2024 includes countries like Egypt, Ethiopia, Saudi Arabia, and Iran, but Pakistan was not invited as part of this expansion.

Quick Tip

BRICS has included several countries in its expansion plan for 2024, but Pakistan was not among the countries invited to join.

Question 81.

Why has Dr. Akshata Krishnamurthy been in the news recently?

Options:

- (1) She is the first Indian citizen to command a rover mission on Mars.
- (2) She is the first Indian citizen to lead the Big Bang Observatory.
- (3) She is the first Indian citizen appointed to the Laser Interferometer Gravitational-Wave Observatory.
- (4) She is the first Indian citizen to be heading the pharmaceutical giant Pfizer.
- (5) She is the first Indian citizen to make a major breakthrough in the genome sequencing of Jamun.

Correct Answer: (3) She is the first Indian citizen appointed to the Laser Interferometer Gravitational-Wave Observatory.

Solution:

Dr. Akshata Krishnamurthy has made headlines recently for being the first Indian citizen to be appointed to the Laser Interferometer Gravitational-Wave Observatory, where she contributes to significant scientific research.

Quick Tip

Her appointment to this prestigious observatory is a milestone in the field of gravitational-wave research.

Question 82.

Who received the Nobel Peace Prize in 2023?

Options:

- (1) Barack Obama
- (2) Shirin Ebadi
- (3) Narges Mohammadi
- (4) Maria Ressa
- (5) Center for Civil Liberties

Correct Answer: (3) Narges Mohammadi

Solution:

Narges Mohammadi, an Iranian human rights activist, was awarded the Nobel Peace Prize in 2023 for her courageous work in advocating for women's rights and political freedom in Iran.

Quick Tip

Narges Mohammadi's advocacy for human rights in Iran has earned her global recognition, including the Nobel Peace Prize in 2023.

Question 83.

The movie *Oppenheimer* was directed by:

Options:

- (1) Christopher Nolan
- (2) Greta Gerwig
- (3) Quentin Tarantino
- (4) Zack Snyder
- (5) Steven Spielberg

Correct Answer: (1) Christopher Nolan

Solution:

Oppenheimer, a biographical drama about the life of J. Robert Oppenheimer, was directed by the renowned filmmaker Christopher Nolan.

Quick Tip

Christopher Nolan is known for his meticulous direction of complex stories, and *Oppenheimer* was no exception.

Question 84.

Matthew Perry, who died in 2023, was famously known for playing which character in the sitcom called *Friends*?

Options:

- (1) Ross Geller
- (2) Chandler Bing
- (3) Joey Tribbiani
- (4) Raymond Holt
- (5) Monica Geller

Correct Answer: (2) Chandler Bing

Solution:

Matthew Perry was best known for his role as Chandler Bing in the popular sitcom *Friends*, which earned him worldwide fame and a lasting legacy in television comedy.

Quick Tip

Chandler Bing was known for his sarcastic humor and witty one-liners, making Matthew Perry a beloved character in *Friends*.

Question 85.

Claudia Dale Goldin was awarded the Nobel Prize in Economics in 2023 in recognition of her groundbreaking research in the field of:

Options:

- (1) Women in the Work Force
- (2) Behavioural Economics
- (3) Human Trafficking
- (4) Unemployment in Global South
- (5) Poverty in Africa

Correct Answer: (1) Women in the Work Force

Solution:

Claudia Dale Goldin received the Nobel Prize in Economics in 2023 for her pioneering research on gender gaps in the workforce and the challenges women face in achieving economic equality.

Quick Tip

Goldin's research has been instrumental in understanding the economic barriers that women face in the workforce.

Question 86.

Which country has formally pulled out of the "Treaty on Conventional Armed Forces in Europe?"

Options:

- (1) Israel
- (2) Russia
- (3) Italy

- (4) Germany
- (5) Turkey

Correct Answer: (2) Russia

Solution:

Russia formally pulled out of the Treaty on Conventional Armed Forces in Europe (CFE) in 2007, citing security concerns and NATO's expansion. The CFE treaty was originally designed to limit the deployment of conventional military forces in Europe.

Quick Tip

Russia's withdrawal from the CFE marked a significant shift in European security dynamics, particularly with NATO's increasing presence in Eastern Europe.

Question 87.

What is the name of Air India's Artificial Intelligence-powered chat assistant that introduced a generative AI virtual agent?

Options:

- (1) Niyaa
- (2) AirBuddy
- (3) Sathi
- (4) Maharaja
- (5) Frenz

Correct Answer: (3) Sathi

Solution:

Sathi is Air India's AI-powered chat assistant that uses generative AI technology to help customers with their travel inquiries, bookings, and other services.

Quick Tip

Sathi enhances the passenger experience by providing personalized and efficient customer service, making use of AI to answer queries and assist with bookings.

Question 88.

In November 2023, which state government declared a fish named “Ghol” as the state fish?

Options:

- (1) Uttar Pradesh
- (2) Haryana
- (3) Gujarat
- (4) Bihar
- (5) Maharashtra

Correct Answer: (3) Gujarat

Solution:

In November 2023, the Gujarat state government declared “Ghol,” a type of fish, as the state fish. Ghol is known for its ecological and cultural importance in the region.

Quick Tip

Ghol is recognized for its contribution to Gujarat’s aquatic biodiversity and is often associated with local fishing practices.

Question 89.

Which Indian city set a world record by illuminating 22.23 lakh earthen lamps on the eve of Diwali 2023?

Options:

- (1) Ayodhya
- (2) Prayagraj
- (3) Varanasi
- (4) Udupi
- (5) Rameswaram

Correct Answer: (1) Ayodhya

Solution:

Ayodhya set a world record by illuminating 22.23 lakh earthen lamps (diyas) on the eve of Diwali 2023. This grand display was part of the festivities marking the festival of lights and was recognized by the Guinness World Records.

Quick Tip

Ayodhya's Diwali celebration in 2023 became iconic for its massive display of diyas, symbolizing light triumphing over darkness.

Question 90.

Which rocket was used to launch Aditya-L1?

Options:

- (1) PSLV-C57
- (2) LVM3 -M4
- (3) NGLV
- (4) GSLV-F12
- (5) TERLS

Correct Answer: (2) LVM3 -M4

Solution:

The Aditya-L1 mission, India's first solar observatory mission, was launched aboard the LVM3-M4 rocket in September 2023. This mission aims to study the Sun and its impact on Earth's climate.

Quick Tip

LVM3-M4 is one of ISRO's heavy-lift rockets, used for launching large payloads into space.

Question 91.

Which company has launched a dedicated air cargo service in India to speed up deliveries?

Options:

- (1) Amazon
- (2) Flipkart
- (3) Jiomart
- (4) Tata Cliq
- (5) Snapdeal

Correct Answer: (2) Flipkart

Solution:

Flipkart launched its dedicated air cargo service in India to improve the speed and efficiency of deliveries across the country, especially in remote areas. The service aims to reduce delivery times and enhance the customer experience.

Quick Tip

Flipkart's air cargo service is a significant move to streamline logistics and improve e-commerce delivery times in India.

Question 92.

What is X-37B?

Options:

- (1) The name of the youngest kid of Elon Musk.
- (2) The new electric vehicle to be launched by Tesla.
- (3) The newest variant of COVID-19 virus.
- (4) The U.S. military plane that has gone to space.
- (5) The name of India's Jupiter mission.

Correct Answer: (4) The U.S. military plane that has gone to space.

Solution:

X-37B is a reusable U.S. military spaceplane developed by NASA and the U.S. Air Force. It is designed for space missions and has the ability to stay in orbit for extended periods.

Quick Tip

X-37B is often referred to as a spaceplane due to its ability to launch like a rocket and land like an aircraft.

Question 93.

Which of the following prefectures of Japan was MAJORLY affected by an earthquake on January 1, 2024?

Options:

- (1) Ishikawa
- (2) Osaka

- (3) Tokyo
- (4) Hiroshima
- (5) Fukushima

Correct Answer: (1) Ishikawa

Solution:

On January 1, 2024, a significant earthquake struck the Ishikawa prefecture in Japan, causing major damage and disruptions in the region.

Quick Tip

Japan frequently experiences earthquakes due to its location along the Pacific Ring of Fire, and Ishikawa was significantly impacted by the 2024 quake.

Question 94.

Which of the following Indian states does the River Ganges not flow through?

Options:

- (1) Uttarakhand
- (2) Bihar
- (3) Jharkhand
- (4) Haryana
- (5) Uttar Pradesh

Correct Answer: (4) Haryana

Solution:

The River Ganges flows through several states in northern India, including Uttarakhand, Uttar Pradesh, Bihar, and Jharkhand. However, it does not flow through Haryana, which is located to the west of Uttar Pradesh.

Quick Tip

While the Ganges is a major river for many northern Indian states, Haryana is not one of the states it flows through.

Question 95.

Arrange the following historic capital cities of Indian kingdoms in the order of their geographic locations, from north to south.

(a) Kannauj (b) Karur (c) Pataliputra (d) Rajahmundry

Options:

- (1) (b)-(d)-(c)-(a)
- (2) (a)-(c)-(d)-(b)
- (3) (a)-(c)-(b)-(d)
- (4) (c)-(a)-(b)-(d)
- (5) (c)-(d)-(a)-(b)

Correct Answer: (4) (c)-(a)-(b)-(d)

Solution:

To arrange the capitals from north to south: - Pataliputra (modern Patna) was located in the northern region. - Kannauj is located south of Pataliputra. - Karur is further south in Tamil Nadu. - Rajahmundry is located in the southernmost region among these cities, in Andhra Pradesh.

Quick Tip

The correct order from north to south is Pataliputra (c), Kannauj (a), Karur (b), and Rajahmundry (d).

Question 96.

Match the following books with their authors:

Books	Authors
(a) Adventures of Tom Sawyer	(i) Charles Dickens
(b) Around the World in Eighty Days	(ii) Arthur Conan Doyle
(c) Gulliver's Travels	(iii) Jules Verne
(d) Adventures of Sherlock Holmes	(iv) Mark Twain
(e) David Copperfield	(v) Jonathan Swift

Options:

- (1) a-iv, b-iii, c-v, d-ii, e-i
- (2) b-iv, a-iii, c-v, d-ii, e-i
- (3) a-iv, c-iii, b-v, d-ii, e-i
- (4) e-iv, b-iii, d-v, c-ii, a-i
- (5) a-iv, c-iii, e-v, d-ii, b-i

Correct Answer: (1) a-iv, b-iii, c-v, d-ii, e-i

Solution:

- **Adventures of Tom Sawyer:** Mark Twain (iv)
- **Around the World in Eighty Days:** Jules Verne (iii)
- **Gulliver's Travels:** Jonathan Swift (v)
- **Adventures of Sherlock Holmes:** Arthur Conan Doyle (ii)
- **David Copperfield:** Charles Dickens (i)

Quick Tip

Familiarize yourself with famous books and their authors. Notable works like *Gulliver's Travels* by Jonathan Swift and *Adventures of Tom Sawyer* by Mark Twain are commonly referenced in literature.

Question 97.

What is the common terminology used to describe the following applications: ChatGPT, Google Bard, Chatsonic?

Options:

- (1) Generative AI Tools
- (2) Dating Tools
- (3) Gaming Applications
- (4) News Aggregators
- (5) UPI Applications

Correct Answer: (1) Generative AI Tools

Solution:

ChatGPT, Google Bard, and Chatsonic are all examples of generative AI tools, which are designed to generate human-like text responses or content based on the input they receive.

Quick Tip

Generative AI tools use machine learning algorithms to generate content like text, images, or videos based on patterns they have learned from large datasets.

Question 98.

Which of the following governors-general of India introduced the policy of “doctrine of lapse?”

Options:

- (1) Lord Wellesley
- (2) Lord Curzon
- (3) Lord Mountbatten
- (4) Lord Dalhousie
- (5) Lord Reading

Correct Answer: (4) Lord Dalhousie

Solution:

The doctrine of lapse was introduced by Lord Dalhousie, the Governor-General of India from 1848 to 1856. It was a policy that allowed the British to annex any princely state where the ruler died without a direct male heir.

Quick Tip

The doctrine of lapse led to the annexation of several Indian states, which contributed to discontent among Indian rulers and was one of the causes of the Revolt of 1857.

Question 99.

What is Nabanno?

Options:

- (1) It is a town close to Nabarno-Karabakh.
- (2) It is the harvest festival of Bengal and Bangladesh.
- (3) It is another word for “great news.”
- (4) It is a dancing festival in Jammu and Kashmir.
- (5) It is a perennial river that flows in the Deccan.

Correct Answer: (2) It is the harvest festival of Bengal and Bangladesh.

Solution:

Nabanno is the harvest festival celebrated in Bengal and Bangladesh, marking the arrival of the new harvest. It typically involves offering the first harvest to the deities and celebrating with traditional music, dance, and food.

Quick Tip

The Nabanno festival is deeply connected to the agricultural cycle and is an important cultural event for Bengalis in both India and Bangladesh.

Question 100.

Arrange the following famous battles in the order of their occurrence:

- (a) Battle of the Hydaspes
- (b) First Battle of Tarain
- (c) Battle of Khanwa
- (d) Battle of Talikota
- (e) Battle of Buxar

Options:

- (1) (a)-(c)-(d)-(b)-(e)
- (2) (a)-(e)-(b)-(c)-(d)
- (3) (a)-(b)-(c)-(d)-(e)
- (4) (a)-(c)-(b)-(d)-(e)
- (5) (a)-(b)-(d)-(c)-(e)

Correct Answer: (3) (a)-(b)-(c)-(d)-(e)

Solution:

The correct chronological order of the battles is: - Battle of the Hydaspes (326 BCE) - Alexander the Great's victory over Porus. - First Battle of Tarain (1191 CE) - Prithviraj Chauhan's victory over Muhammad Ghori. - Battle of Khanwa (1527 CE) - Babur's victory over Rana Sanga. - Battle of Talikota (1565 CE) - The defeat of the Vijayanagara Empire by the Deccan Sultanates. - Battle of Buxar (1764 CE) - British East India Company's victory over the combined forces of Mir Qasim, Shuja-ud-Daula, and the Nawab of Bengal.

Quick Tip

The sequence of these battles reflects important turning points in the military history of India, from Alexander's invasion to the establishment of British dominance.

Question 101.

Match the following national capitals with their respective countries/territories:

Country/Territory	National Capital
(a) Kenya	(i) Vaduz
(b) Paraguay	(ii) Nairobi
(c) Guinea	(iii) Asuncion
(d) Liechtenstein	(iv) Conakry

Options:

- (1) a-ii, b-iii, c-iv, d-i
- (2) a-ii, b-iii, c-i, d-iv
- (3) a-ii, b-i, c-iii, d-iv
- (4) a-ii, b-iv, c-i, d-iii
- (5) a-ii, b-iv, c-iii, d-i

Correct Answer: (1) a-ii, b-iii, c-iv, d-i

Solution:

- Kenya: **Nairobi** (ii)
- Paraguay: **Asuncion** (iii)
- Guinea: **Conakry** (iv)
- Liechtenstein: **Vaduz** (i)

Quick Tip

To solve matching questions like this, focus on well-known associations, such as Nairobi being a major city in Kenya, and Vaduz as the capital of Liechtenstein, a small European principality.

Question 102.

Tech predictions often fail not because of wrong models or a lack of imagination, but due to lack of humility in admitting our uncertainty about the future.

Response Type: Alphanumeric

Maximum Word Limit: 250 words

Solution:

The failure of tech predictions is often a result of overconfidence in our ability to predict the future, rather than a flaw in the models themselves. Technology evolves at an unprecedented rate, and its trajectory can be influenced by numerous unpredictable factors, such as changes in societal needs, technological breakthroughs, or economic shifts. While predictions are often based on solid data and trends, they ignore the complex, emergent nature of technological progress. Humility in acknowledging the uncertainty of the future is crucial for accurate forecasting. Admitting this uncertainty allows for a more flexible approach to planning, where we can adjust strategies as new information becomes available. Acknowledging that we cannot predict every variable encourages innovation, experimentation, and resilience. Instead of over-relying on predictions, tech leaders can focus on building adaptable systems and infrastructures that can handle unexpected shifts in the market. This mindset enables companies and individuals to navigate the unpredictable nature of technological advancement with greater success. In an ever-changing technological landscape, it is those who remain open to uncertainty and change who are most likely to thrive.

Quick Tip

The key to successful technological advancement is not relying solely on predictions but preparing for uncertainty and embracing adaptability.

Question 103.

Implementing more stringent regulations on social media platforms is crucial to effectively combat the proliferation of fake news.

Response Type: Alphanumeric

Maximum Word Limit: 250 words

Solution:

The rapid rise of social media platforms has revolutionized communication, but it has also created a fertile ground for the proliferation of fake news. Fake news spreads quickly due to the virality of posts, the echo chambers of social media algorithms, and the ease with which misleading information can be shared. This has led to significant societal issues, from undermining trust in institutions to influencing political outcomes and inciting violence. To combat this, more stringent regulations on social media platforms are essential. Regulations can mandate that platforms take greater responsibility for the content posted by users, particularly when it comes to identifying and removing harmful or false information. Social media platforms should be required to invest in technologies and human moderators that can detect misinformation and ensure that users are presented

with reliable, fact-checked content. Regulations could also enforce transparency in algorithms, ensuring that users are not unknowingly fed biased or misleading content. While it is important to balance regulation with free speech, there needs to be accountability for content that intentionally misleads or harms. Stringent regulations would not only protect the public from misinformation but also encourage platforms to take proactive steps to ensure a healthier information ecosystem.

Quick Tip

Effective regulation requires a balanced approach that safeguards freedom of speech while ensuring platforms act responsibly to prevent the spread of misinformation.

Question 104.

”Things which matter most must never be at the mercy of things which matter least.”

Response Type: Alphanumeric

Maximum Word Limit: 250 words

Solution:

This quote is a powerful reminder of the importance of prioritization in our lives. In a world filled with distractions and constant demands for attention, it is easy to lose sight of what truly matters. Everyday tasks, minor issues, or external pressures can often overshadow the things that have the greatest impact on our well-being, goals, and relationships. To lead a fulfilling life, it is crucial to align our time, energy, and resources with our core values and long-term objectives. This requires the ability to distinguish between what is important and what is merely urgent or trivial. For example, spending time on personal growth, nurturing meaningful relationships, or working towards a meaningful career is far more valuable than getting caught up in the noise of social media, gossip, or short-term distractions. Prioritizing what matters most allows us to make the best use of our time, avoid burnout, and achieve personal fulfillment. The challenge is to recognize the things that are truly worth our attention and to protect them from being overtaken by less important matters. In a practical sense, this can mean setting boundaries, creating clear goals, and learning to say no to things that do not align with your values. By doing so, we ensure that our time is spent on what truly enriches our lives.

Quick Tip

Developing the skill to prioritize effectively requires self-awareness and discipline. Focus on what brings value and meaning to your life.
