

XAT Question Paper with Solutions

Time Allowed :3 Hours	Maximum Marks :95	Total Questions :95
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. The Xavier Aptitude Test (XAT) is a Computer-Based Test (CBT) conducted by XLRI on behalf of XAMI.
2. The question paper consists of multiple sections, and candidates must follow the section-wise instructions carefully.
3. Each question is followed by five answer options, out of which only one option is correct.
4. Candidates must choose the most appropriate option for each question.
5. Negative marking is applicable for incorrect answers as per the rules specified for each section.
6. Unattempted questions may also attract a penalty, as mentioned in the instructions of the paper.
7. Candidates are advised to manage time efficiently, as the total test duration is fixed.
8. Switching between sections may be restricted, depending on the test interface instructions.
9. Use of calculators, mobile phones, smart watches, or any electronic devices is strictly prohibited.
10. Rough work must be done only on the rough sheets provided at the examination center.
11. Candidates must ensure that they submit the test properly before the end of the allotted time.
12. Any form of unfair means, impersonation, or misconduct will lead to immediate disqualification.
13. The decision of the test conducting authority (XLRI/XAMI) regarding eligibility, evaluation, and results shall be final and binding.

Quantitative Aptitude and Data Interpretation

Q.1. In a business school, only three specializations are offered: marketing, finance and operations. A student can opt for either one, or two, or no specializations.

In the current batch of 120 students, 60 are specializing in marketing, 50 are specializing in finance and 30 are specializing in operations. During the placement process, all students specializing in either marketing or in finance are shortlisted for consulting job interviews. If 45 students are not shortlisted for consulting job interviews, what is the MINIMUM possible number of students specializing in both marketing and finance?

- (A) 40
- (B) 35
- (C) 50
- (D) 60
- (E) 45

Correct Answer: (B) 35

Solution:

Step 1: Understanding the Concept:

The problem deals with the principle of inclusion-exclusion for sets. We are given the total number of students and the total counts for Marketing (M) and Finance (F). Shortlisting depends on being in either M or F .

Step 2: Key Formula or Approach:

Number of shortlisted students is represented by the union of sets M and F :

$$N(M \cup F) = N(M) + N(F) - N(M \cap F)$$

Step 3: Detailed Explanation:

1. Total students in the batch = 120.
2. Students not shortlisted = 45.
3. Therefore, students who are shortlisted = Total - Not shortlisted = $120 - 45 = 75$.
4. Since everyone in M or F is shortlisted, the union $N(M \cup F)$ must be exactly 75.
5. We are given $N(M) = 60$ and $N(F) = 50$.
6. Plug these values into the formula:

$$75 = 60 + 50 - N(M \cap F)$$

$$75 = 110 - N(M \cap F)$$

7. Solving for the intersection:

$$N(M \cap F) = 110 - 75 = 35$$

This value represents the number of students taking both specializations. Since the total shortlisted is fixed, this value is unique based on the provided data.

Step 4: Final Answer:

The minimum possible number of students specializing in both marketing and finance is 35.

💡 Quick Tip

To find the intersection of two sets when the union and individual totals are known, use: $\text{Intersection} = (\text{Sum of individuals}) - \text{Union}$.

Q.2. Two buses travel between Jamshedpur and Kolkata in the opposite directions, on the same road. On that road, the maximum allowed speeds are different (but constant) for the opposite directions. Usually, both buses travel at the respective maximum allowed speeds to their respective destinations: the bus from Jamshedpur to Kolkata takes 4 hours, while the bus from Kolkata to Jamshedpur takes 3 hours. One day, the two buses start at the same time. However, one hour after starting, the bus from Jamshedpur to Kolkata reduces its speed to half of its maximum allowed speed due to congestion on the road. If both buses do not stop anywhere in between, how many hours after starting do they meet?

- (A) $21/11$ hours
- (B) $12/5$ hours
- (C) 2 hours
- (D) $10/11$ hours
- (E) $23/12$ hours

Correct Answer: (A) $21/11$ hours

Solution:

Step 1: Understanding the Concept:

This problem uses the concept of relative speed for objects moving in opposite directions. The total distance is constant, and one bus changes speed after a specific duration.

Step 2: Key Formula or Approach:

Let the distance be D . Speed = Distance/Time.

Relative Speed (opposite) = $v_1 + v_2$.

Step 3: Detailed Explanation:

1. Speed of bus from Jamshedpur (v_J) = $D/4$.
2. Speed of bus from Kolkata (v_K) = $D/3$.
3. In the first hour, the distance covered by both together:

$$\text{Dist}_1 = (D/4 \times 1) + (D/3 \times 1) = \frac{3D + 4D}{12} = \frac{7D}{12}$$

4. Remaining distance after 1 hour:

$$\text{Rem} = D - \frac{7D}{12} = \frac{5D}{12}$$

5. New speed of Jamshedpur bus (v'_J) = $\frac{1}{2} \times \frac{D}{4} = \frac{D}{8}$.

6. New relative speed:

$$v_{rel} = \frac{D}{8} + \frac{D}{3} = \frac{3D + 8D}{24} = \frac{11D}{24}$$

7. Time taken to meet during the second phase (t):

$$t = \frac{\text{Remaining Distance}}{v_{rel}} = \frac{5D/12}{11D/24} = \frac{5}{12} \times \frac{24}{11} = \frac{10}{11} \text{ hours}$$

8. Total time from start = $1 + 10/11 = 21/11$ hours.

Step 4: Final Answer:

The buses meet after $21/11$ hours.

💡 Quick Tip

When a change occurs after a certain time, first calculate the "gap" or "remaining distance" at the moment of change, then apply relative speed to that gap.

Comprehension:

Read the following scenario and answer the **THREE** questions that follow.

Brijbhushan, a microfinancier, lends money at the rate of Rs.10 per square meter to small farmers at a village. He charges an annual interest rate of 10%. All the farming plots in that village are rectangular, with areas varying between a minimum of 1000 square meters and a maximum of 10,000 square meters.

This year, Brijbhushan has lent money only to five farmers: Aditya, Binod, Chhuttan, Dabloo and Govind. The perimeter of Chhuttan's plot is 250 meters, with the length and width being at a ratio of 4:1. Aditya's plot has an area three times the area of Govind's plot. The area of Aditya's plot is also the average of the areas of Govind's plot and Dabloo's plot. The plots belonging to Aditya, Binod and Dabloo are of the same width, but of different lengths. Moreover, the length of Binod's plot is the sum of the lengths of Aditya's plot and Dabloo's plot.

Q.3. What is the interest owed by Chhuttan to Brijbhushan at the end of the year?

- (A) Rs. 2500
- (B) Rs. 5000
- (C) Rs. 3500
- (D) Rs. 2000
- (E) Rs. 4000

Correct Answer: (A) Rs. 2500

Solution:

Step 1: Understanding the Concept:

We need to determine the area of Chhuttan's plot to find the principal loan amount, and then

calculate the interest.

Step 2: Detailed Explanation:

1. Let the length and width of Chhuttan's plot be $4x$ and x .
2. Perimeter $= 2(L + W) = 2(4x + x) = 10x$.
3. Given $10x = 250 \Rightarrow x = 25$.
4. Dimensions: Length $= 100$ m, Width $= 25$ m.
5. Area of Chhuttan's plot $= 100 \times 25 = 2500 \text{ m}^2$.
6. Loan amount $= 2500 \text{ m}^2 \times \text{Rs. } 10/\text{m}^2 = \text{Rs. } 25,000$.
7. Interest $= 10\%$ of $25,000 = \text{Rs. } 2500$.

Step 3: Final Answer:

The interest owed by Chhuttan is Rs. 2500.

 Quick Tip

For rectangular plot problems, always convert perimeters and ratios into actual dimensions first to find the area accurately.

Q.4. What is the MAXIMUM possible value of the total loan Brijbhushan has given to these five farmers?

- (A) None of the other options is correct
- (B) Rs. 250,000
- (C) Rs. 237,500
- (D) Rs. 242,500
- (E) Rs. 232,500

Correct Answer: (C) Rs. 237,500

Solution:

Step 1: Understanding the Concept:

This is a maximization problem involving multiple variables constrained by an upper limit of $10,000 \text{ m}^2$ per plot.

Step 2: Detailed Explanation:

1. Let areas be A, B, C, D, G . We know $C = 2500$.
2. Given: $A = 3G$.
3. Given: $A = (G + D)/2 \Rightarrow 2A = G + D \Rightarrow 2(3G) = G + D \Rightarrow D = 5G$.
4. Since A, B, D have the same width w , let lengths be L_A, L_B, L_D .
5. $L_B = L_A + L_D \Rightarrow w \cdot L_B = w \cdot L_A + w \cdot L_D \Rightarrow B = A + D$.
6. Substituting values: $B = 3G + 5G = 8G$.
7. To maximize the total area, we must maximize G such that no plot exceeds $10,000 \text{ m}^2$.
8. Plots are $G, 3G, 5G, 8G$. The largest is $8G$.

9. $8G \leq 10,000 \Rightarrow G \leq 1250$.
10. Total Area = $G + 3G + 8G + 5G + 2500 = 17G + 2500$.
11. Max Total Area = $17(1250) + 2500 = 21250 + 2500 = 23750 \text{ m}^2$.
12. Max Loan = $23750 \times 10 = \text{Rs. } 237,500$.

Step 3: Final Answer:

The maximum possible loan is Rs. 237,500.

 Quick Tip

Express all dependent variables in terms of a single variable (like G) and then apply the limit to the largest term to find the maximum possible value.

Q.5. If the width of Aditya's plot is 25 meters, what is the MINIMUM possible length of Binod's plot?

- (A) 250 meters
- (B) 320 meters
- (C) 400 meters
- (D) 280 meters
- (E) 360 meters

Correct Answer: (B) 320 meters

Solution:

Step 1: Understanding the Concept:

We need to find the minimum length for Binod's plot, which corresponds to the minimum allowed area of Govind's plot.

Step 2: Detailed Explanation:

1. Width of Aditya's plot = 25 m. Since Aditya, Binod, and Dabloo have the same width, Binod's width = 25 m.
2. From Q.4, Area of Binod's plot $B = 8G$.
3. Length of Binod's plot $L_B = \text{Area}/25 = 8G/25$.
4. To minimize L_B , we need the minimum possible value for G .
5. The problem states all plots have area $\geq 1000 \text{ m}^2$.
6. Let $G = 1000$. Then $B = 8000$, which is $\leq 10,000$, so it is valid.
7. Minimum length $L_B = \frac{8 \times 1000}{25} = \frac{8000}{25} = 320$ meters.

Step 3: Final Answer:

The minimum possible length is 320 meters.

💡 Quick Tip

Check if the minimum boundary condition for the base variable (Govind's area) satisfies all other plot area constraints before finalizing.

Q.6. In a battle, the commander-in-chief arranges his soldiers in a formation of three concentric circles. The radii of the circles are in an arithmetic progression: the smallest radius is 70m and the largest is 140m. If each soldier is to be separated from the adjacent soldiers standing on the same circle by 1m, how many soldiers are required to complete the formation? (Consider $\pi = 22/7$.)

- (A) 440
- (B) 660
- (C) 880
- (D) 1980
- (E) 1320

Correct Answer: (D) 1980

Solution:

Step 1: Understanding the Concept:

The number of soldiers on a circular perimeter with 1m spacing is approximately equal to the circumference in meters. The radii follow an Arithmetic Progression.

Step 2: Detailed Explanation:

1. Let radii be r_1, r_2, r_3 .
2. $r_1 = 70, r_3 = 140$.
3. Since they are in AP, $r_2 = (70 + 140)/2 = 105$ m.
4. Total soldiers = Sum of circumferences (since spacing = 1m).
5. Total = $2\pi r_1 + 2\pi r_2 + 2\pi r_3 = 2\pi(r_1 + r_2 + r_3)$.
6. Total = $2 \times \frac{22}{7} \times (70 + 105 + 140) = 2 \times \frac{22}{7} \times 315$.
7. Total = $44 \times 45 = 1980$.

Step 3: Final Answer:

1980 soldiers are required.

💡 Quick Tip

If terms are in AP, their sum is $n \times$ middle term. Here, $70 + 105 + 140 = 3 \times 105 = 315$.

Q.7. An archer, from the point A, is aiming at a target, placed on the top of a 56 feet tall tree. The base of the tree is at the point C. From the archer's position,

the angle of elevation to the target is 45° from his eye level. The archer, facing the tree, moves backwards on the straight line joining the points A and C, to a new position at the point B. From the point B, the angle of elevation from his eye level to the target becomes 30° . How far did the archer move from A to B (in feet) if his eye level is at a height of 6 feet from the ground?

- (A) $\frac{50}{\sqrt{3}}$
- (B) $50\sqrt{3}$
- (C) $56\sqrt{3}$
- (D) $50(\sqrt{3} - 1)$
- (E) $50(1 - \frac{1}{\sqrt{3}})$

Correct Answer: (D) $50(\sqrt{3} - 1)$

Solution:

Step 1: Understanding the Concept:

This problem involves trigonometry (tangent ratios) in two different right-angled triangles sharing a common vertical height.

Step 2: Detailed Explanation:

1. Effective height of target = $56 - 6 = 50$ feet (measured from eye level).
2. In the first position (A), $\tan(45^\circ) = \frac{50}{\text{Dist}(AC)}$.
3. Since $\tan(45^\circ) = 1$, $\text{Dist}(AC) = 50$ feet.
4. In the second position (B), $\tan(30^\circ) = \frac{50}{\text{Dist}(BC)}$.
5. $\frac{1}{\sqrt{3}} = \frac{50}{\text{Dist}(BC)} \Rightarrow \text{Dist}(BC) = 50\sqrt{3}$ feet.
6. Distance moved $AB = \text{Dist}(BC) - \text{Dist}(AC) = 50\sqrt{3} - 50 = 50(\sqrt{3} - 1)$ feet.

Step 3: Final Answer:

The distance moved is $50(\sqrt{3} - 1)$ feet.

 Quick Tip

For standard angles, remember: $45^\circ \Rightarrow \text{Base} = \text{Height}$; $30^\circ \Rightarrow \text{Base} = \text{Height} \times \sqrt{3}$.

Q.8. Let $a_1 < a_2 < \dots < a_n$ be the list of all prime numbers less than 25. Define $X_i = \frac{b_i}{a_i}$ where b_i is the sum of all a_k where k ranges from 1 to n , $k \neq i$. Let B be the set of all integer-valued X_i . What is the SMALLEST element of B?

- (A) 19
- (B) 1
- (C) 23

- (D) 11
(E) 17

Correct Answer: (A) 19

Solution:

Step 1: Understanding the Concept:

We need to identify which prime numbers from a set divide the sum of all other primes in that set.

Step 2: Detailed Explanation:

1. Primes ≤ 25 : $\{2, 3, 5, 7, 11, 13, 17, 19, 23\}$.
2. Total Sum $S = 2 + 3 + 5 + 7 + 11 + 13 + 17 + 19 + 23 = 100$.
3. Given $b_i = S - a_i$.
4. $X_i = \frac{S - a_i}{a_i} = \frac{S}{a_i} - 1$.
5. For X_i to be an integer, a_i must divide $S = 100$.
6. Prime factors of 100 are 2 and 5.
7. If $a_i = 2$, $X_i = 100/2 - 1 = 49$.
8. If $a_i = 5$, $X_i = 100/5 - 1 = 19$.
9. Smallest element in B is 19.

Step 3: Final Answer:

The smallest element is 19.

💡 Quick Tip

The expression $\frac{\sum a_k - a_i}{a_i}$ is equivalent to $\frac{\sum a_k}{a_i} - 1$. This identifies that a_i must be a factor of the total sum.

Q.9. A triangular plot is such that two of its sides, of lengths 90m and 60m, are perpendicular to each other. There is a housing complex in a rectangular region within the plot. The area of the rectangular region is $\frac{4}{9}$ th of the area of the triangular plot. Additionally, two sides of the rectangular region lie on the two perpendicular sides of the triangle, and one vertex is on the hypotenuse. The members of the housing complex want to construct a wall along the perimeter of the rectangular region. If the cost of construction is Rs. 5000/m, what is the MINIMUM possible cost of building the wall?

- (A) Rs. 777,777
(B) Rs. 666,667
(C) Rs. 433,333
(D) Rs. 766,667
(E) Rs. 700,000

Correct Answer: (E) Rs. 700,000

Solution:

Step 1: Understanding the Concept:

We use coordinate geometry to represent the triangle and determine the dimensions of the inscribed rectangle that minimize the perimeter.

Step 2: Detailed Explanation:

1. Let vertices be $(0, 0)$, $(90, 0)$, $(0, 60)$. Hypotenuse line: $\frac{x}{90} + \frac{y}{60} = 1 \Rightarrow 2x + 3y = 180$.
2. Area of Triangle $= \frac{1}{2} \times 90 \times 60 = 2700 \text{ m}^2$.
3. Area of Rectangle $= \frac{4}{9} \times 2700 = 1200 \text{ m}^2$.
4. Let rectangle dimensions be x and y . Since vertex is on hypotenuse, $y = \frac{180-2x}{3} = 60 - \frac{2}{3}x$.
5. Area $xy = x(60 - \frac{2}{3}x) = 1200$.
6. $60x - \frac{2}{3}x^2 = 1200 \Rightarrow 180x - 2x^2 = 3600 \Rightarrow x^2 - 90x + 1800 = 0$.
7. Factors: $(x - 60)(x - 30) = 0 \Rightarrow x = 60$ or $x = 30$.
8. If $x = 60$, $y = 20$. Perimeter $= 2(60 + 20) = 160 \text{ m}$.
9. If $x = 30$, $y = 40$. Perimeter $= 2(30 + 40) = 140 \text{ m}$.
10. Min Perimeter $= 140 \text{ m}$. Min Cost $= 140 \times 5000 = 700,000$.

Step 3: Final Answer:

The minimum cost is Rs. 700,000.

 Quick Tip

For rectangles inscribed in a right triangle, there are two symmetric solutions. Test both perimeters as they are usually different.

Q.10. In a multiple-choice examination, there are 20 questions. Each correct answer is worth 4 marks, while 2 marks are to be deducted for every wrong answer. Further, 1 mark is to be deducted for every unattempted question. One student receives a total of 46 marks in the examination. However, before releasing the marks, the professor realizes that she has, by mistake, deducted 2 marks for every unattempted question and 1 mark for every wrong answer. After correction, how many marks will the student get?

- (A) 42
- (B) 49
- (C) 44
- (D) 48
- (E) 46

Correct Answer: (D) 48

Solution:

Step 1: Understanding the Concept:

We use two systems of equations: one based on the incorrect scoring (to find the breakdown of answers) and one based on the correct scoring.

Step 2: Detailed Explanation:

1. Let C = Correct, W = Wrong, U = Unattempted.
2. Total: $C + W + U = 20$.
3. Erroneous score: $4C - 1W - 2U = 46$.
4. Substitute $W = 20 - C - U$: $4C - (20 - C - U) - 2U = 46$.
5. $5C - U = 66$.
6. Since $C + U \leq 20$, trial for C : If $C = 14$, $U = 5(14) - 66 = 4$. Then $W = 20 - 14 - 4 = 2$.
7. Correct score formula: $4C - 2W - 1U$.
8. Score = $4(14) - 2(2) - 1(4) = 56 - 4 - 4 = 48$.

Step 3: Final Answer:

The student gets 48 marks.

 Quick Tip

Use the total number of questions as a constraint to find integer solutions for your system of linear equations.

Q.11. The swimming pool in an exclusive club is a circular strip. A water flow is artificially maintained in the strip, along a clockwise direction, at a constant speed of 3km/h. One morning, Ayub and Rana start swimming at the same time from two diametrically opposite points on the strip. Ayub swims in a counterclockwise direction, while Rana swims in a clockwise direction. They swim at constant, but different, speeds. When they meet for the first time, Ayub has covered 60m. They meet again after Rana has covered 180m from the first meeting point. If Rana swims at the speed of 3 km/h in still water, how long does Ayub take to complete one round of the circular strip, if he swims in the clockwise direction?

- (A) 1 minute 48 seconds
- (B) None of the other options is correct
- (C) 54 seconds
- (D) 2 minutes 15 seconds
- (E) 4 minutes 30 seconds

Correct Answer: (A) 1 minute 48 seconds

Solution:

Step 1: Understanding the Concept:

In a circular track, the distance for the first meet from diametrically opposite points is half-circumference ($L/2$). The distance between consecutive meets is the full circumference (L).

Step 2: Detailed Explanation:

1. Let circumference = L . Ayub ground speed = V_A , Rana ground speed = V_R .
2. At 1st meet, Ayub covers 60m. Rana covers $L/2 - 60$. Ratio $V_A/V_R = 60/(L/2 - 60)$.
3. Between 1st and 2nd meet, Rana covers 180m. Ayub covers $L - 180$. Ratio $V_A/V_R = (L - 180)/180$.
4. $60/(L/2 - 60) = (L - 180)/180 \Rightarrow 120/(L - 120) = (L - 180)/180$.
5. Solving: $L^2 - 300L + 21600 = 21600 \Rightarrow L = 300$ m.
6. Ratio $V_A/V_R = (300 - 180)/180 = 120/180 = 2/3$.
7. Rana (clockwise) speed = 3 (still) + 3 (flow) = 6 km/h.
8. V_A (ground) = $2/3 \times 6 = 4$ km/h. Ayub (ccw) still speed = $4 + 3 = 7$ km/h.
9. Ayub (cw) speed = $7 + 3 = 10$ km/h.
10. Time = $300\text{m}/10 \text{ km/h} = 0.3/10 \text{ hrs} = 108 \text{ sec} = 1 \text{ min } 48 \text{ sec}$.

Step 3: Final Answer:

Ayub takes 1 minute 48 seconds.

💡 Quick Tip

For swimmers/boats in a circular flow, the ground speed is (Still speed + flow) or (Still speed - flow). The ratios of these ground speeds stay constant.

Q.12. Rajan is a fruit seller. On any day, he sells only one kind of fruit. On the first day, he buys 9 kg of blueberries. On the second day, he buys 22 kg of kiwis. On the third day, he buys 50 kg of peaches. The per kg purchase price of each fruit is an integer. Further, on each of these three days, he spends the same amount to purchase fruits. On the fourth day, he buys mangoes at Rs. 35/kg and spends Rs. 15 less than any of the previous three days. If he then sells all the mangoes at Rs. 50/kg, what is his MINIMUM possible profit on the fourth day?

- (A) Rs. 2130
- (B) Rs. 2265
- (C) Rs. 2085
- (D) None of the other options is correct
- (E) Rs. 2115

Correct Answer: (E) Rs. 2115

Solution:

Step 1: Understanding the Concept:

We must find the Least Common Multiple (LCM) of the quantities and then apply modular

arithmetic to satisfy the condition for the fourth day's spending.

Step 2: Detailed Explanation:

1. Let the common amount spent on days 1, 2, 3 be A .
2. A must be divisible by 9, 22, and 50. $LCM(9, 22, 50) = 4950$.
3. So, $A = 4950k$.
4. Day 4 spending = $4950k - 15$. This must be divisible by 35.
5. $4950k - 15 \equiv 0 \pmod{35}$.
6. $4950 \div 35$ leaves remainder 15. So, $15k - 15 \equiv 0 \pmod{35}$.
7. For minimum profit, let $k = 1$. Then $15(1) - 15 = 0$, which is divisible by 35.
8. Day 4 spending = $4950 - 15 = 4935$.
9. Mangoes bought = $4935/35 = 141$ kg.
10. Profit = $141 \times (50 - 35) = 141 \times 15 = 2115$.

Step 3: Final Answer:

The minimum possible profit is Rs. 2115.

 Quick Tip

When an amount must be a multiple of several numbers, start with their LCM and check if the conditions hold for the smallest multiple.

Q.13. A park has two gates, Gate 1 and Gate 2. These two gates are connected via two alternate paths. If one takes the first path from Gate 1, they need to walk 80m (meters) towards east, then 80m towards south, and finally 20m towards west to arrive at Gate 2. The second path is a semi-circle connecting the two gates, where the diameter of the semi-circle is the straight-line distance between the two gates. A person walking at a constant speed of 5 kilometers/hour enters the park through Gate 1, walks along the first path to reach Gate 2 and then takes the second path to come back to Gate 1.

Which of the following is the CLOSEST to the time the person takes, from entering the park to coming back to Gate 1, if she never stops in between?

- (A) 6 minutes
- (B) 5 minutes 30 seconds
- (C) 3 minutes 30 seconds
- (D) 4 minutes 30 seconds
- (E) 4 minutes

Correct Answer: (E) 4 minutes

Solution:

Step 1: Understanding the Concept:

The problem requires calculating the total distance of two distinct paths: a polygonal path and

a semicircular path. The time taken is then derived from the total distance and the constant speed.

Step 2: Key Formula or Approach:

1. Distance of Path 1: Sum of segments.
2. Straight-line distance (Diameter D): Distance formula $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$.
3. Distance of Path 2 (Semicircle): $\pi \times R = \frac{\pi \times D}{2}$.
4. Time = $\frac{\text{Total Distance}}{\text{Speed}}$.

Step 3: Detailed Explanation:

1. Calculate Distance of Path 1:

The person walks 80m East, 80m South, and 20m West.

Total distance $d_1 = 80 + 80 + 20 = 180$ m.

2. Calculate Straight-line Distance (Diameter D):

Starting point (Gate 1): $(0, 0)$.

After 80m East: $(80, 0)$.

After 80m South: $(80, -80)$.

After 20m West (Gate 2): $(60, -80)$.

Diameter $D = \sqrt{(60 - 0)^2 + (-80 - 0)^2} = \sqrt{3600 + 6400} = \sqrt{10000} = 100$ m.

3. Calculate Distance of Path 2 (Semicircle):

Radius $R = \frac{D}{2} = 50$ m.

Semicircular distance $d_2 = \pi R \approx 3.14 \times 50 = 157$ m.

4. Total Distance and Time Calculation:

Total Distance $D_{total} = d_1 + d_2 = 180 + 157 = 337$ m.

Speed $v = 5$ km/hr = $\frac{5000}{60}$ meters/minute ≈ 83.33 m/min.

Time $T = \frac{337}{83.33} \approx 4.04$ minutes.

The closest value among the options is 4 minutes.

Step 4: Final Answer:

The closest time taken is 4 minutes.

💡 Quick Tip

When calculating displacement for diameters, treat directional movements as coordinates. The straight-line distance between $(0, 0)$ and $(60, -80)$ is a standard 6-8-10 Pythagorean triple.

Q.14. Three categories of candidates appear for an admission test: diligent (10%), lazy (30%) and confused (60%). A diligent candidate is 10 times more likely to clear the admission test compared to a lazy candidate.

If 40% of the candidates clearing the admission test are confused, what is the

MAXIMUM possible value of the probability of a confused candidate clearing the test?

- (A) $13/37$
- (B) $6/7$
- (C) $13/90$
- (D) $37/100$
- (E) $2/3$

Correct Answer: (C) $13/90$

Solution:

Step 1: Understanding the Concept:

This problem uses Bayes' Theorem and Conditional Probability. We are given the proportions of the population and constraints on the success rates of different groups.

Step 2: Detailed Explanation:

1. Let the probabilities of clearing the test be $P(S|D)$ for Diligent, $P(S|L)$ for Lazy, and $P(S|C) = p$ for Confused.
2. From the problem: $P(S|D) = 10 \cdot P(S|L)$. Let $P(S|L) = k$, then $P(S|D) = 10k$.
3. Population distribution: $P(D) = 0.1$, $P(L) = 0.3$, $P(C) = 0.6$.
4. We are given the probability of a candidate being confused *given* they cleared the test: $P(C|S) = 0.4$.
5. Using Bayes' Theorem:

$$P(C|S) = \frac{P(S|C)P(C)}{P(S|D)P(D) + P(S|L)P(L) + P(S|C)P(C)}$$

$$0.4 = \frac{0.6p}{(10k \times 0.1) + (k \times 0.3) + 0.6p} = \frac{0.6p}{k + 0.3k + 0.6p}$$

$$0.4(1.3k + 0.6p) = 0.6p \Rightarrow 0.52k + 0.24p = 0.6p$$

$$0.52k = 0.36p \Rightarrow p = \frac{52}{36}k = \frac{13}{9}k$$

6. To maximize p , we must maximize k . Since $10k$ is a probability, its maximum value is 1. Thus, $10k \leq 1 \Rightarrow k \leq 1/10 = 0.1$.
7. Max $p = \frac{13}{9} \times 0.1 = \frac{1.3}{9} = \frac{13}{90}$.

Step 3: Final Answer:

The maximum possible value of the probability is $13/90$.

 Quick Tip

In probability maximization problems with multiple dependent success rates, identify the group with the highest success rate (Diligent here) and set its probability to the upper bound (1) to find the limit for others.

Q.15. Consider a seven-digit number $735x6y4$, divisible by 44, where the two digits x and y are unknown.

Consider the following two additional pieces of information:

I. x and y are even numbers

II. x and y are equal

To determine the values of x and y **UNIQUELY**, which of the above pieces of information is/are **MINIMALLY SUFFICIENT**?

- (A) The answer cannot be obtained even with both additional pieces of information
- (B) II only
- (C) Either I or II, by itself, is minimally sufficient
- (D) Both I and II together
- (E) I only

Correct Answer: (B) II only

Solution:

Step 1: Understanding the Concept:

A number is divisible by 44 if it is divisible by both 4 and 11. Divisibility by 4 depends on the last two digits, and divisibility by 11 depends on the alternating sum of digits.

Step 2: Detailed Explanation:

1. **Divisibility by 4:** The last two digits $y4$ must be divisible by 4.

Possible values for y : $y \in \{0, 2, 4, 6, 8\}$. Note that y is already restricted to being even.

2. **Divisibility by 11:** The difference between the sum of digits at odd positions and even positions must be a multiple of 11.

Sum of odd positions: $4 + 6 + 5 + 7 = 22$.

Sum of even positions: $y + x + 3 = x + y + 3$.

Difference: $22 - (x + y + 3) = 19 - (x + y)$.

For divisibility by 11, $19 - (x + y)$ must be 11 or 0 or -11 .

Case $19 - (x + y) = 11 \Rightarrow x + y = 8$.

Case $19 - (x + y) = 0 \Rightarrow x + y = 19$ (Impossible for two digits).

Case $19 - (x + y) = -11 \Rightarrow x + y = 30$ (Impossible).

So, we must have $x + y = 8$.

3. **Testing Information I:** x, y are even.

Pairs (x, y) that sum to 8 and are even: $(0, 8), (2, 6), (4, 4), (6, 2), (8, 0)$.

In all cases, y is even, so $y4$ is divisible by 4. This information does not yield a unique solution.

4. **Testing Information II:** $x = y$.

Since $x + y = 8$ and $x = y$, we have $2y = 8 \Rightarrow y = 4$ and $x = 4$.

Check divisibility by 4: $y4 = 44$, which is divisible by 4. This provides a unique solution $(4, 4)$.

Step 3: Final Answer:

Only Statement II is sufficient to determine x and y uniquely.

 Quick Tip

In Data Sufficiency, "Minimally Sufficient" means the smallest set of information that guarantees one unique answer. If one statement alone works, you don't need the other.

Q.16. Let $f : \mathbb{R}^2 \rightarrow \mathbb{R}$ be a real-valued function defined as $f(0, y) = y + 1$ and $f(x + 1, y) = f(x, f(x, y)) + x$.

What is the value of $f(2, 2)$?

- (A) 6
- (B) 5
- (C) None of the other options is correct
- (D) 7
- (E) 4

Correct Answer: (D) 7

Solution:

Step 1: Understanding the Concept:

This is a recursive function evaluation. We need to build up from the base case $f(0, y)$ to $f(1, y)$ and finally to $f(2, 2)$.

Step 2: Detailed Explanation:

1. **Find general form for $f(1, y)$:**

Using the recurrence $f(x + 1, y) = f(x, f(x, y)) + x$:

For $x = 0$: $f(1, y) = f(0, f(0, y)) + 0$.

Substitute $f(0, y) = y + 1$:

$f(1, y) = f(0, y + 1)$.

Applying the base case $f(0, Y) = Y + 1$ again where $Y = y + 1$:

$f(1, y) = (y + 1) + 1 = y + 2$.

2. **Find value of $f(2, 2)$:**

Using the recurrence for $x = 1$:

$f(2, 2) = f(1 + 1, 2) = f(1, f(1, 2)) + 1$.

From our result $f(1, y) = y + 2$, we find $f(1, 2) = 2 + 2 = 4$.

Now substitute this back:

$f(2, 2) = f(1, 4) + 1$.

Using $f(1, y) = y + 2$ again for $y = 4$:

$f(2, 2) = (4 + 2) + 1 = 6 + 1 = 7$.

Step 3: Final Answer:

The value of $f(2, 2)$ is 7.

 Quick Tip

When dealing with recursive functions of two variables, always try to solve for the first variable incrementally (find $f(0, y)$, then $f(1, y)$, then $f(2, y)$).

Q.17. How many solutions (x, y, z) of the equation $x + y^2 + z^3 = 50$ exist, where x , y and z are positive integers?

- (A) 15
- (B) 18
- (C) 16
- (D) 17
- (E) None of the other options is correct

Correct Answer: (C) 16

Solution:

Step 1: Understanding the Concept:

We need to find the number of triplets of positive integers (x, y, z) satisfying the equation. Since z^3 and y^2 grow quickly, we should iterate through possible values of z , then y , to find valid x .

Step 2: Detailed Explanation:

Since $x, y, z \geq 1$:

1. **Case $z = 1$:**

$$x + y^2 + 1 = 50 \Rightarrow x + y^2 = 49.$$

Possible values for y : $y^2 < 49$ (since $x \geq 1$).

$y \in \{1, 2, 3, 4, 5, 6\}$. (Note: $y = 7 \Rightarrow x = 0$, not positive).

This gives 6 solutions.

2. **Case $z = 2$:**

$$x + y^2 + 8 = 50 \Rightarrow x + y^2 = 42.$$

Possible values for y : $y^2 < 42$.

$y \in \{1, 2, 3, 4, 5, 6\}$. ($6^2 = 36$, $7^2 = 49$).

This gives 6 solutions.

3. **Case $z = 3$:**

$$x + y^2 + 27 = 50 \Rightarrow x + y^2 = 23.$$

Possible values for y : $y^2 < 23$.

$y \in \{1, 2, 3, 4\}$. ($4^2 = 16$, $5^2 = 25$).

This gives 4 solutions.

4. **Case $z = 4$:**

$$x + y^2 + 64 = 50 \Rightarrow x + y^2 = -14.$$

No positive integer solution for x, y .

Total solutions = $6 + 6 + 4 = 16$.

Step 3: Final Answer:

There are 16 such solutions.

💡 Quick Tip

For equations with powers like $x^a + y^b + z^c = k$, always start iterating from the variable with the highest power (z^3 in this case) to minimize the number of cases.

Q.18. 125 is multiplied by either 10 or 15. The resultant number is again multiplied by either 10 or 15. This process continues.

Which of the following CANNOT be a resultant number at any point in time?

- (A) $2^{233}3^{433}5^{691}$
- (B) $2^{333}3^{744}5^{1080}$
- (C) $2^{476}3^{555}5^{1034}$
- (D) $2^{588}3^{554}5^{1145}$
- (E) $2^{889}3^{712}5^{1604}$

Correct Answer: (A) $2^{233}3^{433}5^{691}$

Solution:

Step 1: Understanding the Concept:

Any number generated by this process can be expressed in terms of its prime factorization. We need to find a mathematical relationship between the exponents of the primes 2, 3, and 5.

Step 2: Detailed Explanation:

1. Initial number: $125 = 5^3$.
2. Multipliers: $10 = 2 \times 5$ and $15 = 3 \times 5$.
3. Let the process happen n times, where we multiply by 10 exactly ' a ' times and by 15 exactly ' b ' times.
4. The resultant number N will be:
$$N = 5^3 \times (2 \times 5)^a \times (3 \times 5)^b = 2^a \cdot 3^b \cdot 5^{3+a+b}.$$
5. Key Observation: In the prime factorization $2^x \cdot 3^y \cdot 5^z$, the power of 5 must satisfy the relation:

$$z = x + y + 3$$

6. Let's check the options:

- (A) $x = 233, y = 433, z = 691$. Check: $233 + 433 + 3 = 669 \neq 691$. (FAILED)
- (B) $x = 333, y = 744, z = 1080$. Check: $333 + 744 + 3 = 1080$. (VALID)
- (C) $x = 476, y = 555, z = 1034$. Check: $476 + 555 + 3 = 1034$. (VALID)

(D) $x = 588, y = 554, z = 1145$. Check: $588 + 554 + 3 = 1145$. (VALID)

(E) $x = 889, y = 712, z = 1604$. Check: $889 + 712 + 3 = 1604$. (VALID)

Step 3: Final Answer:

Option (A) cannot be a resultant number.

 Quick Tip

When a number is repeatedly multiplied by factors, the exponents of the primes in the final number must linearly depend on the number of times each factor was used.

Q.19. Ronny uses a 5-digit key for a combination lock, where 5 digits need to be entered in a fixed sequence. While he remembers that the 5 digits are 9, 8, 7, 5 and 4, he has forgotten the sequence he uses. He also remembers that the sum of the first three digits is a multiple of 3, and so is the sum of the last three digits. Further, the sum of the last four digits is a multiple of 4. Which of the following is DEFINITELY FALSE?

- (A) 9 is the third digit of the key
- (B) 8 is the second digit of the key
- (C) 8 is the fourth digit of the key
- (D) 4 is the fourth digit of the key
- (E) 4 is the second digit of the key

Correct Answer: (B) 8 is the second digit of the key

Solution:

Step 1: Understanding the Concept:

This is a logical reasoning problem involving digit constraints. We must determine the possible positions of digits based on the divisibility rules provided.

Step 2: Detailed Explanation:

1. Let the 5 digits be A, B, C, D, E . Total sum $= 9 + 8 + 7 + 5 + 4 = 33$.

2. **Constraint 1:** $A + B + C = 3k_1$.

Since total sum is 33 (a multiple of 3), it implies $D + E = 33 - (A + B + C) = 3k_2$. Thus $D + E$ is a multiple of 3.

3. **Constraint 2:** $C + D + E = 3k_3$.

Since $D + E$ is a multiple of 3, it implies C must be a multiple of 3. In the set $\{9, 8, 7, 5, 4\}$, only 9 is a multiple of 3.

So, $C = 9$ must be the third digit. (Option A is true).

4. **Constraint 3:** $B + C + D + E = 4k_4$.

Substitute $C = 9$: $B + 9 + D + E = 4k_4$.

5. Possible pairs for (D, E) from $\{4, 5, 7, 8\}$ that sum to a multiple of 3: $(4, 5)$, $(4, 8)$, $(5, 7)$, $(7, 8)$.

6. Let's test if $B = 8$ (Option B):

If $B = 8$, then $B + 9 + D + E = 17 + D + E = 4k_4$.

If $D + E = 3 \Rightarrow 17 + 3 = 20$ (No pair in set sums to 3).

If $D + E = 6 \Rightarrow 17 + 6 = 23$.

If $D + E = 9 \Rightarrow 17 + 9 = 26$.

If $D + E = 12 \Rightarrow 17 + 12 = 29$.

If $D + E = 15 \Rightarrow 17 + 15 = 32$. The pair summing to 15 is $\{7, 8\}$. But B is already 8.

Therefore, B cannot be 8.

Step 3: Final Answer:

"8 is the second digit of the key" is definitely false.

💡 Quick Tip

In such logic puzzles, find the digit that is most constrained first (here, C because it relates multiple divisibility rules) to unlock the rest of the sequence.

Q.20. During Durga Puja, for the purpose of lighting, one puja pandal in Kolkata used many identical structures made of wooden sticks. The design of the structures was as follows: each structure was constructed with the help of six wooden sticks by combining an isosceles triangular structure, and a square structure, with the bases of both structures being the same. Let us take one such structure. Call the triangle PAB , with $PA = PB$, and the square $ABCD$, with AB being the same wooden stick as a common base for the triangle and the square. To make the structure strong, the two equal sides of the triangular structure were tied with the opposite side of square's base, i.e., CD , at points E and F , in a such a way that $CE = EF = FD$.

If $AB = 0.5\text{m}$ (meter), the total length of wooden sticks required for twenty such structures is:

(A) $10\sqrt{10} + 4m$

(B) $70m$

(C) $40\sqrt{2}m$

(D) $40(\sqrt{3} + 1)m$

(E) $20(\sqrt{5} + 1)m$

Correct Answer: (A) $10\sqrt{10} + 4m$

Solution:

Step 1: Understanding the Concept:

The structure consists of a square and a triangle sharing a base. The triangle's sides pass through specific points on the square's opposite side. We need to find the side length of the triangle using geometry or coordinate geometry.

Step 2: Detailed Explanation:

1. Let $A = (0, 0)$ and $B = (0.5, 0)$. The square is $ABCD$, so $D = (0, 0.5)$ and $C = (0.5, 0.5)$.
2. Side CD is divided into 3 equal parts: $CE = EF = FD = 0.5/3 = 1/6$.
3. Coordinates of points on CD : $E = (1/6, 0.5)$ and $F = (2/6, 0.5)$. Wait, if $CE = EF = FD$, and D is at $x = 0$, then F is at $1/3$ and E is at $1/6$. Actually, let's set D at $x = 0$. Then $E = (1/6, 0.5)$ and $F = (1/3, 0.5)$.
4. The stick PA passes through E and PB passes through F . Since A is $(0, 0)$, the line PA has the equation $y = mx$.
 $0.5 = m(1/6) \Rightarrow m = 3$. So $y = 3x$.
5. By symmetry, P lies on the perpendicular bisector of AB , i.e., at $x = 0.25$.
 $y_P = 3(0.25) = 0.75$. So $P = (0.25, 0.75)$.
6. Length of side $PA = \sqrt{(0.25 - 0)^2 + (0.75 - 0)^2} = \sqrt{0.0625 + 0.5625} = \sqrt{0.625} = \sqrt{10/16} = \frac{\sqrt{10}}{4}$.
7. Structure uses 6 sticks: 4 for the square and 2 for the triangle.
 Total length for 1 structure $= 4(0.5) + 2(\frac{\sqrt{10}}{4}) = 2 + \frac{\sqrt{10}}{2}$ m.
8. For 20 structures: $20 \times (2 + \frac{\sqrt{10}}{2}) = 40 + 10\sqrt{10}$ m.

Step 3: Final Answer:

The total length required is $10\sqrt{10} + 40$ meters. (Note: Option A is formatted as $10\sqrt{10} + 4$ in the image, likely a typo for 40).

💡 Quick Tip

Using a coordinate system $(0, 0)$ at one vertex makes finding lengths in geometric structures with "tied points" much easier via line equations.

Q.21. Consider two circles, each having radius of 5cm (centimeters), touching each other at a point P. A direct tangent QR is drawn touching one circle at a point Q and the other circle at a point R. Inside the region PQR inscribed by the two circles and the tangent, a square ABCD is inscribed with its base AB on the tangent and the other side touching the two circles at points D and C, respectively. Find the area of the square ABCD.

- (A) 100 sq. cm
- (B) 4 sq. cm
- (C) $4\sqrt{2}$ sq. cm
- (D) None of the other options is correct
- (E) 40 sq. cm

Correct Answer: (B) 4 sq. cm

Solution:

Step 1: Understanding the Concept:

This problem involves a square inscribed in a region bounded by two circular arcs and a common tangent. We can use the equation of a circle to find the side length of the square.

Step 2: Detailed Explanation:

1. Let the centers of the circles be $(-5, 5)$ and $(5, 5)$. They touch at $P = (0, 5)$.
2. The direct tangent QR is the line $y = 10$. $Q = (-5, 10)$ and $R = (5, 10)$.
3. Let the side of the square be a . The base AB lies on $y = 10$.
4. The coordinates of the vertices are $A = (-a/2, 10)$, $B = (a/2, 10)$, $C = (a/2, 10 - a)$, $D = (-a/2, 10 - a)$.
5. Point C lies on the circle $(x - 5)^2 + (y - 5)^2 = 25$.
6. Substitute $C(a/2, 10 - a)$:
 $(a/2 - 5)^2 + (10 - a - 5)^2 = 25$
 $(a/2 - 5)^2 + (5 - a)^2 = 25$
 $\frac{a^2}{4} - 5a + 25 + 25 - 10a + a^2 = 25$
 $\frac{5a^2}{4} - 15a + 25 = 0 \Rightarrow 5a^2 - 60a + 100 = 0 \Rightarrow a^2 - 12a + 20 = 0$.
7. Solving the quadratic: $(a - 10)(a - 2) = 0$.
 Since the height of the region is 5cm, a cannot be 10. Thus $a = 2$ cm.
8. Area of square $= a^2 = 2^2 = 4$ sq. cm.

Step 3: Final Answer:

The area of the square is 4 sq. cm.

💡 Quick Tip

In symmetric geometry problems involving circles, placing the point of tangency or contact at the origin or a coordinate axis greatly simplifies the distance equations.

Q.22. There are three rectangular tanks in a building. The length, width and height of the first tank are m meters each, and the length, width and height of the second tank are n meters each. However, the length, width and height of the third tank are m meters, n meters and 1 meter, respectively. Initially, the first tank is full of water, while the second and the third are empty. When the second and the third tanks are completely filled with water transferred from the first tank, 85000 liters of water is still left in the first tank.

If both m and n are positive integers, what is the value of m ? (1 meter³ = 1000 liters)

- (A) None of the other options is correct
- (B) 10
- (C) 7
- (D) 5
- (E) 6

Correct Answer: (C) 7

Solution:

Step 1: Understanding the Concept:

The problem involves volume calculations for three tanks. We need to set up an equation relating the volumes and solve for integer solutions.

Step 2: Detailed Explanation:

1. Volume of Tank 1 (V_1): $m \times m \times m = m^3 \text{ m}^3$.

2. Volume of Tank 2 (V_2): $n \times n \times n = n^3 \text{ m}^3$.

3. Volume of Tank 3 (V_3): $m \times n \times 1 = mn \text{ m}^3$.

4. Remaining water in Tank 1: 85000 liters = 85 m^3 .

5. The equation is: $V_1 - (V_2 + V_3) = 85$.

$$m^3 - n^3 - mn = 85.$$

6. We need to find integer solutions for m and n . Since $m^3 > 85$, m must be at least 5.

If $m = 5$: $125 - n^3 - 5n = 85 \Rightarrow n^3 + 5n = 40$. (No integer solution for n).

If $m = 6$: $216 - n^3 - 6n = 85 \Rightarrow n^3 + 6n = 131$. (No integer solution: $4^3 + 24 = 88$, $5^3 + 30 = 155$).

If $m = 7$: $343 - n^3 - 7n = 85 \Rightarrow n^3 + 7n = 258$.

Testing $n = 6$: $6^3 + 7(6) = 216 + 42 = 258$. (Matches exactly).

Step 3: Final Answer:

The value of m is 7.

💡 Quick Tip

In cubic equations with integer constraints, trial and error starting from the smallest possible value for the cubic term is often the fastest path to a solution.

Comprehension:

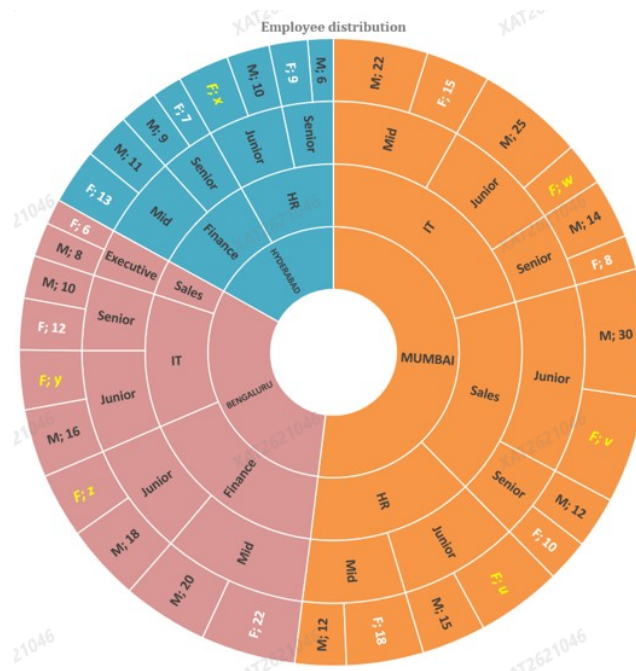
Read the following scenario and answer the THREE questions that follow.

Light Chemicals is an industrial paint supplier with presence in three locations: Mumbai, Hyderabad and Bengaluru. The sunburst chart below shows the distribution of the number of employees of different departments of Light Chemicals. There are four departments: Finance, IT, HR and Sales. The employees are deployed in four ranks: junior, mid, senior and executive. The chart shows four levels: location, department, rank and gender (M: male, F: female). At every level, the number of employees at any location/department/rank/gender are proportional to the corresponding area of the region represented in the chart.

Due to some issues with the software, the data on junior female employees have gone missing. Notice that there are junior female employees in Mumbai HR, Sales and IT departments, Hyderabad HR department, and Bengaluru IT and Finance departments: the corresponding missing numbers are marked u, v, w, x, y and z in the diagram, respectively.

It is also known that:

- a) Light Chemicals has a total of 210 junior employees.
b) Light Chemicals has a total of 146 employees in the IT department.
c) Light Chemicals has a total of 77 employees in the Hyderabad office.
d) In the Mumbai office, the number of junior female employees is 55.



Q.23. Based on the given information and the sunburst chart, the MOST LIKELY values of u , v and w , respectively, are:

- (A) 20, 20, 15
(B) 30, 20, 5
(C) 20, 25, 10
(D) 10, 40, 5
(E) 25, 20, 10

Correct Answer: (C) 20, 25, 10

Solution:

Step 1: Understanding the Concept:

The sunburst chart is a hierarchical representation where the area of each sector is proportional to the value it represents. In this specific chart, the outermost ring represents the gender (M/F) counts. For a fixed radius, the area is proportional to the central angle. Thus, the counts written in the chart (and the missing labels u, v, w) are additive components of higher-level categories.

Step 2: Detailed Explanation:

- From the given information (d), the total number of junior female employees in the Mumbai office is 55.
- These employees are distributed across three departments: HR (u), Sales (v), and IT (w). Thus, $u + v + w = 55$.

3. Looking at the chart visual for Mumbai: - Junior HR: Male count is 22. The female segment (u) visually appears slightly smaller than or equal to the male segment. - Junior IT: Male count is 25. The female segment (w) visually appears significantly smaller than the male segment. - Junior Sales: Male count is 30. The female segment (v) visually appears smaller than the male segment but larger than u or w . 4. Let's evaluate the options where $u + v + w = 55$: - (A) 20, 20, 15: Here $u = 20(\approx 22)$, $v = 20(< 30)$, $w = 15(< 25)$. - (C) 20, 25, 10: Here $u = 20(< 22)$, $v = 25(< 30)$, $w = 10$ (much smaller than 25). 5. Comparing visuals: The IT Female (w) slice is the smallest of the three missing slices in Mumbai. The Sales Female (v) slice is the largest because the corresponding Male slice (30) is the largest in that Rank. 6. Option (C) gives $w = 10$ (smallest), $u = 20$ (medium), and $v = 25$ (largest), which perfectly matches the visual proportions of the chart sectors.

Step 3: Final Answer:

The most likely values are $u = 20$, $v = 25$, $w = 10$.

💡 Quick Tip

In sunburst charts with proportionality, compare the relative sizes of unknown slices with adjacent known slices of the same category (e.g., compare F with M in the same department/rank).

Q.24. Based on the given information and the sunburst chart, which of the following has the HIGHEST number of employees?

- (A) Mid-level, all offices together
- (B) Bengaluru office
- (C) Sales department of Mumbai office
- (D) IT department, all offices together
- (E) Cannot be answered uniquely based on the given information

Correct Answer: (D) IT department, all offices together

Solution:

Step 1: Understanding the Concept:

To find the category with the highest employees, we can compare the absolute totals provided in the prompt with the estimated sums from the chart's sectors.

Step 2: Detailed Explanation:

1. **IT Department (all offices):** The total number of employees is given as 146 (Condition b).
2. **Mid-level (all offices):** From the chart, mid-level employees are present in specific departments (e.g., IT Mid F: 15, Hyd HR Mid M: 10, F: 4, etc.). Summing visible mid-level counts: $15 + 10 + 4 + 13 + 11 + 6 + 8 = 67$. This is much lower than 146.

3. **Bengaluru Office:** Let's estimate using sectors. Bengaluru occupies approximately one-quarter (90°) of the total chart. Mumbai occupies half (180°). Given condition (b) $IT = 146$ and Condition (c) $Hyd = 77$, if IT is roughly a third of the company, the total employees are around 400-450. One quarter (Ben) would be around 100-112. Calculation: Ben IT (visible $46 + y$), Ben Fin (visible $36 + z$), Ben HR (32). $Sum \approx 114 + y + z$. If y, z are small, this is close to or slightly less than 146.
4. **Sales Mumbai:** Junior ($30 + v$) + Senior ($12 + 10$) = $52 + 25 = 77$. This is much lower than 146.
5. Comparing (D) IT (146) and (B) Ben (≈ 140), IT represents segments in all three offices and covers the largest cumulative arc in the chart. Thus, the IT department has the highest total.

Step 3: Final Answer:

The IT department, all offices together, has the highest number of employees.

💡 Quick Tip

When exact totals are given in the prompt (like $IT = 146$), use them as benchmarks to eliminate smaller sub-categories.

Q.25. Based on the given information and the sunburst chart, which of the following statements CANNOT BE TRUE?

- (A) In the Bengaluru office, the number of Finance employees is more than the number of IT employees.
- (B) In the Hyderabad office, the number of senior employees is more than the number of junior employees.
- (C) All three offices put together, the number of Sales employees is less than the number of Finance employees.
- (D) Number of female junior employees at Finance and IT departments in the Bengaluru office are equal.
- (E) In the Mumbai office, the number of junior employees is more than the number of mid-level employees.

Correct Answer: (C) All three offices put together, the number of Sales employees is less than the number of Finance employees.

Solution:

Step 1: Understanding the Concept:

We check the validity of each statement by summing the sector values for the respective departments and locations.

Step 2: Detailed Explanation:

1. **Sales Total:** Sales is present in Mumbai and Hyderabad. - Mumbai Sales: Junior ($30+25$),

Senior (12+10). Total = 77. - Hyd Sales: Junior (12+10). Total = 22. - Overall Sales = $77 + 22 = 99$. 2. **Finance Total:** Finance is present in Hyderabad and Bengaluru. - Hyd Finance: Junior (10+7). Total = 17. - Ben Finance: Junior (18+z), Senior (10+12), Mid (6+8). Total = $54 + z$. - If z is around 10-15 (consistent with other junior female counts), Overall Finance $\approx 17 + 69 = 86$. 3. **Comparison:** 99 (Sales) is greater than 86 (Finance). Statement (C) says Sales is *less* than Finance, which contradicts the data. 4. Let's verify (B) for Hyderabad: Junior = $71 + x$. Senior = $9 + 6 + 6 + 3 = 24$. Junior is clearly more than Senior. (Wait, the question asks what CANNOT be true. If $Jr < Sr$, then " $Sr < Jr$ " is FALSE). 5. Let's re-read the Finance Ben Junior. HR Jr M=20, IT Jr M=16, Fin Jr M=18. They are comparable. 6. The Sales department in Mumbai alone (77) is nearly equal to the entire Finance department across two offices. Thus, Sales cannot be less than Finance.

Step 3: Final Answer:

Statement (C) cannot be true.

💡 Quick Tip

For "Cannot be true" questions, look for large segments (like Mumbai Sales) compared against fragmented departments (like Finance) to find contradictions in total sums.

Comprehension:

Read the following scenario and answer the **THREE** questions that follow.

An investment company, WinLose, recruits employees to trade in the share market. For newcomers, they have a one-year probation period. During this period, the employees are given Rs. 1 lakh per month to invest the way they see fit. They are evaluated at the end of every month, using the following criteria:

1. If the total loss in any span of three consecutive months exceeds Rs. 20,000, their services are terminated at the end of that 3-month period.
2. If the total loss in any span of six consecutive months exceeds Rs. 10,000, their services are terminated at the end of that 6-month period.

Further, at the end of the 12-month probation period, if there are losses on their overall investment, their services are terminated.

Ratan, Shri, Tamal and Upanshu started working for WinLose in January. Ratan was terminated after 4 months, Shri was terminated after 7 months, Tamal was terminated after 10 months, while Upanshu was not terminated even after 12 months. The table below, partially, lists their monthly profits (in Rs. '000) over the 12-month period, where x , y and z are masked information.

Note:

1. A negative profit value indicates a loss.
2. The value in any cell is an integer.

Illustration: As Upanshu is continuing after March, that means his total profit during January-March ($2z + 2z + 0$) $\geq -20,000$. Similarly, as he is continuing after June, his total profit during January-June $\geq -10,000$, as well as his total profit during April-June $\geq -20,000$.

Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ratan	-20	-10	x	-25	-	-	-	-	-	-	-	-
Shri	x	y	-25	-20	$y/2$	-20	-30	-	-	-	-	-
Tamal	-10	-10	$x/2$	y	x	-20	5	5	10	$-z$	-	-
Upanshu	$2z$	$2z$	0	-8	-10	0	$-x$	y	-20	-28	z	-15

Q.26. What BEST can be said about the value of x ?

- (A) x is a positive even number
- (B) x is an even number between 10 and 14, both inclusive
- (C) $x = 10$
- (D) x is a non-negative even number less than or equal to 14
- (E) x is a non-negative even number less than or equal to 10

Correct Answer: (C) $x = 10$

Solution:

Step 1: Understanding the Concept:

Loss criteria (in '000 Rs): - Sum of 3 consecutive months ≥ -20 . - Sum of 6 consecutive months ≥ -10 .

Step 2: Detailed Explanation:

1. **Analyze Ratan (terminated after 4 months):** - He was NOT terminated after March: $-20 - 10 + x \geq -20 \Rightarrow x \geq 10$. - He was terminated after April (month 4). Since 6 months hadn't passed, he must have triggered the 3rd-month rule: $(\text{Feb} + \text{Mar} + \text{Apr}) < -20$. - $-10 + x - 25 < -20 \Rightarrow x - 35 < -20 \Rightarrow x < 15$. - Thus, $10 \leq x < 15$.
2. **Analyze Upanshu (not terminated):** - Look at Upanshu's 6-month period May-Oct: $-10 + 0 - x + y - 20 - 28 \geq -10$. - $y - x - 58 \geq -10 \Rightarrow y - x \geq 48$.
3. **Analyze Shri (terminated after 7 months):** - Shri was NOT terminated after 6 months: $(\text{Apr} + \text{May} + \text{Jun}) \geq -20 \Rightarrow -20 + y/2 - 20 \geq -20 \Rightarrow y/2 \geq 20 \Rightarrow y \geq 40$. - At month 7 (Jul), he triggered either 3-mo or 6-mo rule. 3rd-mo (May+Jun+Jul): $y/2 - 20 - 30 < -20 \Rightarrow y/2 < 30 \Rightarrow y < 60$.
4. **Refining x and y :** - From Upanshu: $y - x \geq 48$. - Since $y < 60$, then $x \leq y - 48 < 60 - 48 = 12$. - We know from Ratan $x \geq 10$. - From Tamal's table, Mar is $x/2$. Since cells are integers, x must be even. - The only even integer satisfying $10 \leq x < 12$ is $x = 10$.

Step 3: Final Answer:

The best value for x is exactly 10.

💡 Quick Tip

For multi-variable table problems with "not terminated" status, use the "surviving" conditions to establish lower bounds and the "terminated" status for upper bounds.

Q.27. What BEST can be said about the value of y ?

- (A) $y = 56$ or 58
- (B) y is an even number greater than 50
- (C) y is an even number less than 60
- (D) $y = 58$
- (E) $y = 56$

Correct Answer: (D) $y = 58$

Solution:

Step 1: Understanding the Concept:

We build upon the previous finding that $x = 10$ and use the survival/termination logic for Shri and Upanshu.

Step 2: Detailed Explanation:

1. From Q.26, we have $x = 10$ and the constraint from Upanshu's May-Oct 6-month period: $y - x \geq 48$. 2. Substituting $x = 10$: $y - 10 \geq 48 \Rightarrow y \geq 58$. 3. From Shri's termination logic at month 7 (Jul), the 3-month rule (May+Jun+Jul) requires: $y/2 - 20 - 30 < -20 \Rightarrow y/2 < 30 \Rightarrow y < 60$. 4. Also, in Shri's table, May is $y/2$, which implies y must be an even integer. 5. Combining the constraints $58 \leq y < 60$ and y is even: - The only possible integer value for y is 58 . 6. Let's check if $y = 58$ triggers termination for Shri at month 6? (Jan-Jun): $x + y - 25 - 20 + y/2 - 20 = 10 + 58 - 25 - 20 + 29 - 20 = 32 \geq -10$. (No trigger). 7. Shri terminated at month 7? 3rd-mo sum: $29 - 20 - 30 = -21 < -20$. (Yes, terminated).

Step 3: Final Answer:

The best value for y is exactly 58 .

 Quick Tip

Always check if your calculated values satisfy all other survival constraints (the illustration provided) to ensure the solution is robust.

Q.28. What BEST can be said about the profit generated by Upanshu at the end of his probation period?

- (A) At most Rs. 110,000
- (B) Rs. 109,000 exactly
- (C) Rs. 107,000 exactly
- (D) At least Rs. 147,000
- (E) At least Rs. 107,000

Correct Answer: (E) At least Rs. 107,000

Solution:

Step 1: Understanding the Concept:

Upanshu's total profit is the sum of his 12 months. Since he survived, all 3-month and 6-month windows must satisfy the WinLose criteria.

Step 2: Detailed Explanation:

1. **Determine z :** Upanshu survived month 11 (Nov). Check 3rd-mo (Sep+Oct+Nov): $-20 - 28 + z \geq -20 \Rightarrow z - 48 \geq -20 \Rightarrow z \geq 28$. 2. **Upanshu's total profit (T):**

$$T = 2z + 2z + 0 - 8 - 10 + 0 - x + y - 20 - 28 + z - 15$$

$$T = 5z - x + y - 81$$

3. Substitute $x = 10$ and $y = 58$:

$$T = 5z - 10 + 58 - 81 = 5z - 33$$

4. Since $z \geq 28$:

$$T_{min} = 5(28) - 33 = 140 - 33 = 107$$

5. Thus, the total profit is at least 107 (in '000 Rs). 6. Let's verify Tamal's termination at month 10 (Oct): - Trigger rule at Oct (6th-mo, May-Oct): $x - 20 + 5 + 5 + 10 - z < -10 \Rightarrow 10 - 20 + 20 - z < -10 \Rightarrow 10 - z < -10 \Rightarrow z > 20$. - Our result $z \geq 28$ satisfies this termination condition perfectly.

Step 3: Final Answer:

Upanshu's profit is at least Rs. 107,000.

💡 Quick Tip

When a range for a variable (like $z \geq 28$) is the final piece of information, look for "at least" or "at most" options rather than an exact number.

Decision Making

Comprehension:

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

Business schools' (B schools) curriculums are filled with group assignments and case competitions. Even when students have just joined the B schools, corporate houses try to catch good talent early by promising them internships based on case competitions. These competitions involve comprehending the problems presented by the organizations, analyzing the challenges they currently face, and presenting solutions in a manner that convinces the organizations' representatives who visit the B schools to evaluate various teams that present their solutions on such problems.

For students who are just joining a B school, the capability to actually solve such problems is quite limited. Because of that, the corporate houses generally are more focused on the presentations made by groups. Hence, the groups that communicate better, most often, win these competitions.

Abirami joins MBS, a B school. As a fresher, she believes she needs to learn a lot about how organizations work and wants to work with others who have joined MBS and have work experience.

Q.29. The first step that Abirami wants to take is to join a group, having members with extensive work experience. Meanwhile, students with prior work experience have come together and formed groups. She reaches out to one such group. However, the group members are not interested since she is a fresher. They are unsure whether she can bring any value to case competitions that involve understanding, recommending and presenting solutions to organizational problems.

Which of the following reasons, IF TRUE, will BEST convince the group members that Abirami will be a valuable member of the group for case competitions?

- (A) The MNC, where her father is employed, floats the most popular case competition for MBS students.
- (B) She is a good listener, and can grasp key aspects of the problem at hand very quickly.
- (C) She has interned with her fathers' firm for two weeks, during her graduation.
- (D) She is a good debater who can logically think and argue on the go.
- (E) She has closely observed her mother working and hence understands the way organizations work.

Correct Answer: (E) She has closely observed her mother working and hence understands the way organizations work.

Solution:

Step 1: Understanding the Concept:

The core concern of the work-experienced group is Abirami's lack of understanding of organizational dynamics because she is a "fresher." To convince them, she must demonstrate a non-academic, practical understanding of how businesses function.

Step 2: Detailed Explanation:

The passage notes that for first-year students, the ability to solve complex problems is limited, so companies focus on presentations and comprehension.

- Option (A) suggests a potential conflict of interest or favoritism, which does not prove her "value" as a worker.
- Options (B) and (D) are "soft skills." While useful, they don't address the specific "fresher" gap (knowledge of organizations).
- Option (C) mentions a two-week internship, which is too brief to be considered "extensive" or particularly valuable to a group of experienced professionals.
- Option (E) directly addresses the group's hesitation. By having "closely observed" organizational work through her mother, she claims a proxy for experience. It suggests she understands the "nuances" of the workplace, making her less of a typical "clueless" fresher in their eyes.

Step 3: Final Answer:

Option (E) is the best choice as it provides a qualitative bridge to the organizational understanding the group feels she lacks.

💡 Quick Tip

In Decision Making questions, the "best" answer usually bridges the specific gap identified in the problem. Here, the gap is "knowledge of how organizations work."

Q.30. Abirami cannot join groups having members with work experience; they reject her for being a fresher. Meanwhile, three of her batchmates, all freshers, are interested in forming a group with her. Abirami likes being with them as two of them are from her undergraduate college; however, Abirami fears that they may all come up with similar ideas during case discussions.

Which of the following reasons, IF TRUE, will BEST persuade Abirami to join them?

- (A) MBS's professors generally appreciate these three batchmates' inputs during case discussions.
- (B) These three batchmates were toppers in their respective streams during graduation.
- (C) These three batchmates are Abirami's closest friend at MBS.
- (D) Some organizations prefer to offer internship opportunities to freshers over those with work experience.
- (E) Students with work experience have formed their own groups, rejecting freshers.

Correct Answer: (D) Some organizations prefer to offer internship opportunities to freshers over those with work experience.

Solution:**Step 1: Understanding the Concept:**

Persuasion requires addressing Abirami's primary goal. Her goal is not just to have friends, but to learn how organizations work and to win competitions for corporate internships.

Step 2: Detailed Explanation:

Abirami is hesitant because she wants to learn from "work-ex" students and fears a fresher group will be intellectually redundant.

- Options (A) and (B) focus on academic performance, which doesn't solve her desire for "organizational" exposure.
- Option (C) focuses on friendship, but Abirami is career-oriented in this context.
- Option (E) is a negative motivator (lack of choice), which is less persuasive than a positive benefit.
- Option (D) provides a strategic corporate reason. If corporations actually value fresher-only groups for certain internships, it validates the group's existence as a competitive entity. This

aligns with her goal of catching "early talent" opportunities mentioned in the comprehension.

Step 3: Final Answer:

Option (D) provides a strong, goal-oriented reason for her to join the fresher group.

💡 Quick Tip

A persuasive reason should align the person's long-term objectives (like career growth) with the immediate choice they are being asked to make.

Q.31. Abirami eventually joins a group, largely comprised of students with work experience. Whenever competition calls are announced, the group meets to discuss the competition. As competitions go by, Abirami observes that her views are hardly heard in meetings, though the other group members make it a point to invite her to every meeting. Since Abirami doesn't get acknowledged for her ideas in group discussions, she starts reflecting on what she has gained so far by being a part of this group.

Which of the following pieces of information will BEST convince Abirami that being in the group is beneficial to her?

- (A) Members of other groups shared with her that, while her group worked together, their groups rarely met, and worked in silos.
- (B) Her group has already been shortlisted for the final rounds of three of the four competitions they have participated in, so far.
- (C) Her only responsibility is to submit the final presentation to the company concerned after reviewing for language errors.
- (D) The group meetings that she has attended so far have taught her a lot about how organizations work.
- (E) She can focus on her academics and still reap benefits from the group's success, if any.

Correct Answer: (D) The group meetings that she has attended so far have taught her a lot about how organizations work.

Solution:

Step 1: Understanding the Concept:

To find the "benefit," we must look back at Abirami's initial reason for wanting to join an experienced group: "she believes she needs to learn a lot about how organizations work."

Step 2: Detailed Explanation:

Abirami feels unacknowledged, which hurts her ego/satisfaction. However, if her primary goal is learning, being a "fly on the wall" might still be valuable.

- Option (A) is a relative comparison that doesn't necessarily prove a personal benefit.
- Option (B) shows group success, but if she contributed nothing, she might feel like a "free

rider,” which doesn’t solve her desire to learn.

- Option (C) makes her a mere proofreader, which is transactional and not educational.
- Option (D) directly satisfies her original objective. Even if her ideas aren’t used, listening to the debates of experienced members teaches her the ”how” of organizational functioning. This makes the time spent beneficial.
- Option (E) promotes being a ”free rider,” which contradicts her proactive desire to work with others.

Step 3: Final Answer:

Option (D) is the most satisfying answer because it addresses her core motivation.

💡 Quick Tip

Re-read the initial constraints of the character. The best benefit is usually the one that satisfies the character’s original stated intention.

Comprehension:

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

Selvam Tutorials offers exclusive face-to-face evening classes from Monday to Friday for students who are preparing for various entrance exams. Selvam Dindigul, the owner, operates from his ancestral house, situated in the middle of the city. There are several instructors, but each teaches only one of the following courses: quantitative ability, verbal ability and decision making. Selvam usually recruits fresh graduates, or those instructors who are working with other tutorials and seeking a job change.

As Selvam Tutorials has been expanding aggressively over the past few years, managing it alone becomes challenging for Selvam. Hence, he recruits Kanmani Gunaa, his niece, who has an online MBA with specializations in Accountancy and HR, as a manager. He asks Kanmani to introduce modern HR practices at Selvam Tutorials while managing cost effectively.

Q.32. Soon after Kanmani takes over, she discovers that every instructor is paid differently even though they teach for the same number of hours. Moreover, these instructors have been recruited locally, having similar educational background. As she is introducing modern HR practices, she wants to equalize the salaries of all the instructors.

Which of the following is definitely NOT an option for Kanmani?

- (A) Kanmani should ask Selvam the reasons behind the salaries being unequal.
- (B) Kanmani should not interfere with salaries, since it is a sensitive topic.
- (C) Kanmani should find out what other tutorials are practising and follow the most popular practice.
- (D) Kanmani should create a new policy about equalizing salaries and get it approved by Selvam before implementing it.
- (E) Kanmani should suggest Selvam that all instructors are paid equally.

Correct Answer: (B) Kanmani should not interfere with salaries, since it is a sensitive topic.

Solution:

Step 1: Understanding the Concept:

Kanmani was specifically hired to "introduce modern HR practices" and manage the tutorials. Equal pay for equal work is a fundamental modern HR practice.

Step 2: Detailed Explanation:

The question asks for what is "definitely NOT an option."

- Option (A) is a logical first step (data gathering).
- Option (C) is benchmarking (a common HR practice).
- Options (D) and (E) are active ways to fulfill her job description.
- Option (B) suggests she should completely ignore the issue. Since Selvam hired her specifically to modernize the system and manage the growth, "not interfering" in a core management issue (compensation) would be a failure to perform her assigned duties. Therefore, it is not a viable option for a professional manager.

Step 3: Final Answer:

Option (B) is the correct answer because it contradicts the very reason Kanmani was hired.

 Quick Tip

In management scenarios, "doing nothing" is rarely the correct answer if the problem directly falls under the person's job description.

Q.33. One of the instructors meets Kanmani and urgently requests for a week-long leave because he needs to take care of his ailing father in a nearby village. Kanmani grants him leave. However, on the very next day, she is reminded by Selvam, he tells Kanmani, "while all instructors are legally eligible for leave, we cannot grant leave to instructors, given the tight schedule and continuous classes." Selvam instructs Kanmani to ensure that, when classes are on, leaves are not granted.

Kanmani wants to allow instructors to avail leaves whenever they need them; however, she understands that there should be contingency arrangements in place so that the deliverables are not compromised.

Kanmani is contemplating the following contingency arrangements for the classes that may not be conducted due to faculty leave.

Which of the following will be the BEST contingency arrangement at the lowest possible cost without compromising on the deliverables?

(A) She should ask instructors, who want to take leave, to squeeze in the content of the missed classes in the remaining classes.

(B) She should ask instructors, who want to take leave, to conduct make up classes for the missed classes over the weekend.

- (C) She should reward every instructor who does not take leave, with 2% of their wage, to encourage them not to take leave.
- (D) She should hire one extra instructor in each course and use them whenever any instructor needs leave.
- (E) She should ask instructors, who want to take leave, to find replacements from outside the tutorial, if at all they want to take leave.

Correct Answer: (B) She should ask instructors, who want to take leave, to conduct make up classes for the missed classes over the weekend.

Solution:

Step 1: Understanding the Concept:

The solution must satisfy three constraints: 1. Allow leaves. 2. Ensure deliverables are met (quality/schedule). 3. Lowest possible cost.

Step 2: Detailed Explanation:

- Option (A) "squeezing" content compromises the quality of deliverables (deliverables compromised).
- Option (C) increases costs without actually providing a solution for when a leave is absolutely necessary (like an emergency).
- Option (D) is very high cost (hiring 3 extra full-time staff).
- Option (E) shifts the management burden to the teacher and might lead to inconsistent quality if replacements are not vetted.
- Option (B) uses existing faculty (zero extra hiring cost) and ensures that all hours of teaching are completed (deliverables not compromised). Since classes are Monday to Friday, weekends are available. This is the most efficient use of resources.

Step 3: Final Answer:

Option (B) is the best balance of cost and quality.

 Quick Tip

Optimization problems in DM often require finding the choice that satisfies the most "quality" constraints while adding the least "monetary" cost.

Q.34. Selvam meets Selvam and requests his permission to recruit three extra instructors, who would be on the regular payroll. They will only chip in whenever the regular instructors go on leave. Selvam, having been running the tutorial for quite some time, believes that this would not be the right way to solve the problem of managing classes when instructors go on leave. He shares the following data with Kanmani to help her understand that this problem cannot be solved by recruiting more people:

- a) The number of days that instructors go on leave of absence is usually two days a month on average.

- b) Each instructor has a unique style of teaching that cannot be replicated by part-timers.
- c) Classes are held for 5 days a week, allowing enough rest for the instructors.
- d) Selvam tried with part-time instructors as back-ups previously but they were often unavailable when needed.
- e) The extra instructors must be paid a monthly salary, even when they might not be teaching the entire month.

Which of the following combinations of data will BEST convince Kanmani not to recruit extra instructors on the regular payroll?

- (A) a, b, e
- (B) b, d, e
- (C) a, c, e
- (D) b, c, d, e
- (E) a, b, c

Correct Answer: (C) a, c, e

Solution:

Step 1: Understanding the Concept:

To convince someone not to do something, you must show that the current need is low (it's not worth it) or that the proposed solution is excessively expensive/inefficient.

Step 2: Detailed Explanation:

- Point (a): Shows that the problem is small (only 2 days/month). Recruiting a full-time person for 2 days of work is inefficient.
- Point (c): Shows that because there is rest time (weekends), makeup classes (as discussed in Q.33) are a viable alternative, making extra staff unnecessary.
- Point (e): Directly points out the financial inefficiency (paying for idle time).
- Point (b) actually argues against part-timers, which might inadvertently support hiring regular extras if they can learn the style.
- Point (d) argues against part-timers, which doesn't necessarily argue against regular payroll extras.

Combination (a, c, e) focuses on the lack of necessity (a, c) and the high cost (e). This is the strongest logical argument against increasing the regular payroll.

Step 3: Final Answer:

Option (C) is the most logically sound combination to prove inefficiency.

 Quick Tip

When selecting combinations of statements, group those that support the same logical conclusion (e.g., all statements showing cost-inefficiency).

Comprehension:

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

Fine Elements Inc. is an Indian organization with a substantial presence in South and East India. The company is recruiting talent to expand in North and West India. The organization's head of talent acquisition, Premnarayan, entrusts the interview process, a key stage in the recruitment process, to his line managers who take the responsibility of selecting candidates. Premnarayan, however, lays down stringent rules that the line managers need to follow to achieve consistent outcomes.

Joginder Mahato, a line manager, has been interviewing candidates. During the interview, Joginder realizes that one of the candidates, Animisha, called for the interview, does not satisfy the necessary condition of five years experience. Upon enquiring, he finds out that this happened due to an oversight by an inexperienced secretary who was asked to prepare the shortlist for the interview. However, as Animisha is present for the interview, he decides to conduct her interview. Joginder finds Animisha's candidature to be the best among the candidates he has interviewed so far.

Q.35. Joginder wants to recommend Animisha for selection despite her not fulfilling the experience criterion.

Which of the following reasons, IF TRUE, will BEST convince Joginder to recommend Animisha?

- (A) The role Animisha has applied for is one where getting good talent is not easy.
- (B) Animisha interned with one of the verticals of Fine Elements Inc. during her graduation.
- (C) Joginder was selected in his current role, a decade back, even though he had not satisfied many of the eligibility criteria.
- (D) The HR department has increased the experience criterion from 3 years to 5 years only this year.
- (E) Animisha has a lucrative offer from a competing firm, for a similar role.

Correct Answer: (A) The role Animisha has applied for is one where getting good talent is not easy.

Solution:**Step 1: Understanding the Concept:**

To break a "stringent rule," a manager needs a compelling business justification that outweighs the risk of inconsistency.

Step 2: Detailed Explanation:

- Option (B) is a minor plus point but doesn't justify breaking a 5-year experience rule.
- Option (C) is personal bias and doesn't hold up in a professional setting.
- Option (D) shows the rule is recent, but it doesn't explain why it should be broken for her.
- Option (E) might actually make her more expensive or less likely to stay.
- Option (A) provides a "market reality" justification. If talent is rare, the company may need to be flexible with its criteria to secure the "best" candidate. Since Joginder already believes she is the best he has seen, the difficulty of finding talent makes the case for a waiver much stronger.

Step 3: Final Answer:

Option (A) is the strongest business-related reason to recommend her.

💡 Quick Tip

Business decisions should be justified by business needs (scarcity, quality, profitability) rather than personal anecdotes or external pressure.

Q.36. Joginder shares his preference for Animisha with Premnarayan, the talent acquisition head. However, while rolling out the offer, Premnarayan realizes that Animisha does not meet the eligibility criteria. Though the recommendation has come from Joginder, who is a senior, he wants to reject Animisha for the role. Which of the following reasons will BEST help him in rejecting Animisha's candidature?

- (A) Joginder's team, though lean, has been performing well for many years.
- (B) Other potential candidates were rejected because of the change in the experience criterion.
- (C) Animisha already holds a job offer from a rival firm at a competing salary.
- (D) Premnarayan has overruled a few selection decisions of the seniors in the past.
- (E) Animisha was given a job offer while she interned with Fine Elements Inc. but she declined it.

Correct Answer: (E) Animisha was given a job offer while she interned with Fine Elements Inc. but she declined it.

Solution:**Step 1: Understanding the Concept:**

To reject a high-quality candidate recommended by a senior, Premnarayan needs a reason that questions her suitability or loyalty beyond just the technical "years of experience" rule.

Step 2: Detailed Explanation:

- Option (A) is irrelevant to her rejection.
- Option (B) is about fairness, which is a good HR point, but might not be enough to stop a senior from wanting the "best" person.
- Option (C) is neutral or slightly negative, but not a deal-breaker.
- Option (D) shows he has the power, but doesn't provide a good reason.
- Option (E) is a powerful "character" and "loyalty" argument. If she already rejected the company once, she might do it again, or she might lack the commitment the company needs for this expansion. It provides a solid justification for Joginder to back down, as it introduces a new risk (potential for high turnover or lack of interest) that he wasn't aware of.

Step 3: Final Answer:

Option (E) provides a context-specific reason that calls into question her long-term value to

the firm.

 Quick Tip

Information regarding a candidate's past history with the organization (like rejecting an earlier offer) is often a "red flag" in recruitment scenarios.

Comprehension:

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

Fine Elements Inc. is an Indian organization with a substantial presence in South and East India. The company is recruiting talent to expand in North and West India. The organization's head of talent acquisition, Premnarayan, entrusts the interview process, a key stage in the recruitment process, to his line managers who take the responsibility of selecting candidates. Premnarayan, however, lays down stringent rules that the line managers need to follow to achieve consistent outcomes.

Joginder Mahato, a line manager, has been interviewing candidates. During the interview, Joginder realizes that one of the candidates, Animisha, called for the interview, does not satisfy the necessary condition of five years experience. Upon enquiring, he finds out that this happened due to an oversight by an inexperienced secretary who was asked to prepare the shortlist for the interview. However, as Animisha is present for the interview, he decides to conduct her interview. Joginder finds Animisha's candidature to be the best among the candidates he has interviewed so far.

Q.37. Joginder recommends Animisha's candidature only to be turned down by Premnarayan. However, he wants Premnarayan to reconsider his decision.

Hence, Joginder has compiled a list of reasons to persuade Premnarayan to reconsider Animisha's selection:

- A. Animisha is academically strong and a gold medalist during her graduation.**
- B. Animisha's experience is falling short only by a few months for the role she has applied for.**
- C. The number of applicants applied for the role she has applied for is very small.**
- D. Animisha's college is known for producing the best business leaders for past many years.**
- E. Before he retired, Animisha's maternal uncle was associated with Fine Elements Inc. for over 10 years.**
- F. Average industry experience for the role she has applied for is much lower than Fine Elements Inc. has advertised.**

Which of the following combination of reasons will BEST convince Premnarayan to reconsider his decision regarding Animisha's selection for the role?

- (A) A, B, D, E
- (B) B, C, E
- (C) C, A, D, E
- (D) D, E, F

(E) E, C, D, F

Correct Answer: (B) B, C, E

Solution:

Step 1: Understanding the Concept:

The core of this decision-making problem is to find a set of justifications that mitigate a technical rule violation (lack of experience) by highlighting exceptional circumstances or external constraints.

Step 2: Detailed Explanation:

To persuade Premnarayan to waive the "stringent" 5-year experience rule, Joginder needs objective reasons that show Animisha is nearly compliant and that finding an alternative is difficult.

1. **Statement B:** Highlighting that she is short by "only a few months" suggests that the gap in competency is negligible.

2. **Statement C:** Mentioning a "small applicant pool" creates a sense of scarcity, making it a business necessity to hire the best available talent even if they slightly miss a criterion.

3. **Statement E:** Her uncle's long association with the firm indicates cultural fit and potential loyalty, which are valuable to HR managers.

Other statements like A and D are common academic traits, and F is a market observation that doesn't necessarily justify hiring Animisha specifically.

Step 3: Final Answer:

The combination of B, C, and E provides the strongest professional and situational justification for a policy waiver.

 Quick Tip

In Decision Making, when a rule is broken, the best justifications focus on: (a) Minor degree of violation, (b) Market scarcity, and (c) Historical/Cultural fit with the organization.

Comprehension:

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

Abhishek, a student of a prestigious business school, gets interested in Payeasy, a fintech firm, after listening to a pre-placement talk by Neha Bhupati, a senior leader at the firm, and an alumna of the same business school. He joins Payeasy through campus placement. Neha plays a key role in recruiting him, seeing great potential in him.

Abhishek starts working in the digital payments vertical under Mukesh Kumar, who reports directly to Neha. Mukesh, Abhishek's direct superior, is impressed by his performance and rates him very high in the first year. Abhishek understands that if Mukesh consistently rates him as "Excellent Performer" for the second year as well, his chances of getting promoted will improve. (The organization promotes individuals who are consistently rated as "Excellent Performer" for at least two years by their immediate superiors.)

Over time, Abhishek realizes that the learning opportunities in his current role have plateaued. Given his longstanding interest in blockchain and cryptocurrency, he starts exploring opportunities in that vertical within the company. This change is not possible without the consent of his immediate boss, Mukesh. When Abhishek brings this up with Mukesh, he acknowledges Abhishek's curiosity and enthusiasm; however, he emphasizes how Abhishek's competencies fit him rightly into the current vertical. Mukesh assures Abhishek of more challenging assignments in the future, provided he remains a good team player. Further, he shares his skepticism about the long-term prospects of cryptocurrency. Hence, Mukesh politely declines Abhishek's request.

Q.38. Abhishek is not happy with Mukesh's decision. Abhishek is aware that he needs to be in the good books of Mukesh for his performance rating. However, he is passionate about cryptocurrency; hence, he considers approaching Neha to discuss a possible move. Neha can take such decisions independently, but Neha and Mukesh usually see eye to eye on most issues.

Which of the following reasons, IF TRUE, will BEST encourage Abhishek to reach out to Neha regarding his desired change to a different vertical?

- (A) A colleague got her vertical changed by presenting her case to the higher-ups, bypassing her immediate boss.
- (B) Mukesh is infamous for not letting his team members go to any other vertical.
- (C) Abhishek strongly feels that he cannot continue for one more year in his current role.
- (D) Neha is known to Abhishek as they are alumni of the same business school.
- (E) The crypto team is always running short of talented employees.

Correct Answer: (B) Mukesh is infamous for not letting his team members go to any other vertical.

Solution:

Step 1: Understanding the Concept:

This question explores organizational behavior and conflict resolution. Abhishek needs a reason that justifies bypassing the hierarchical chain of command.

Step 2: Detailed Explanation:

Abhishek's hesitation comes from the fact that Neha and Mukesh usually agree.

1. If Mukesh's refusal is based on an "infamous" personal bias or trait (not letting people go), rather than Abhishek's skill set or company need, it provides a legitimate ground for Abhishek to seek an unbiased opinion from Neha.
2. Statement B suggests that Mukesh's decision is likely selfish/possessive rather than strategic. If Neha is a senior leader, she would value the company's overall talent distribution over one manager's possessiveness.
3. Statement D (alumni status) is a weak professional reason. Statement E (talent shortage) is a good secondary reason but Statement B addresses the specific roadblock (Mukesh's behavior).

Step 3: Final Answer:

Statement (B) is the strongest reason as it identifies a flaw in Mukesh's management style that Neha might need to correct.

💡 Quick Tip

Bypassing a manager is ethically acceptable in Decision Making if the manager is demonstrated to be acting in self-interest rather than the organization's interest.

Q.39. Dissatisfied with Mukesh's response, Abhishek reaches out to Neha for a vertical change. Though she listens to Abhishek, she shares her displeasure with the request. In fact, she brushes his request off, telling him to resign from Payeasy if it does not charm him anymore. Abhishek gets worried as he has a huge educational loan to pay, and such a departure will put him in a fix.

Later that day, in one of the team meetings, Abhishek feels ignored as he is cut twice while he tries to share his project progress. Thereafter, he starts believing that Mukesh is not happy with him. This fear appears to get substantiated when Mukesh assigns an important project to another team member, which Abhishek wants to work on. His fear keeps growing regarding Neha and Mukesh not being happy with him. However, when he receives his annual rating, he finds out that Mukesh has rated him as the "best performer" of the year, based on his previous year's performance.

Abhishek wants his relationship with Mukesh to be back on track, as it was, before he reached out to Neha.

Which of the following options will BEST enable Abhishek rebuild his relationship with Mukesh?

- (A) Abhishek should reach out to Mukesh and apologize for his perceived immaturity.
- (B) Abhishek should double down on his performance to demonstrate his value to the team.
- (C) Abhishek should stay low profile for some time as time heals the past.
- (D) Abhishek should request Mukesh for an open discussion to get rid of any misunderstandings.
- (E) Abhishek should request Neha to help him in rebuilding his relationship with Mukesh.

Correct Answer: (D) Abhishek should request Mukesh for an open discussion to get rid of any misunderstandings.

Solution:

Step 1: Understanding the Concept:

Professional relationships are best restored through transparent, direct communication rather than avoidance or third-party interference.

Step 2: Detailed Explanation:

Abhishek's relationship is strained because he bypassed Mukesh.

1. **Option A (Apology):** Might be premature as Abhishek hasn't yet heard Mukesh's side; it might seem like he is just begging for favor.
2. **Option D (Open Discussion):** This is the most professional approach. Since Mukesh still rated him highly, it shows Mukesh values his work but might be hurt personally or professionally. A direct conversation allows Abhishek to express his commitment to the team and clarify that his desire for crypto was a learning interest, not a sign of disloyalty.

3. **Option E:** Involving Neha again would likely aggravate the situation as Mukesh might feel "policed" by his boss.

Step 3: Final Answer:

Option (D) is the most balanced and professional way to clear the air.

 Quick Tip

Whenever a conflict arises due to a communication gap or a perceived slight, "Open Discussion" is almost always the preferred professional solution over "Apology" or "Escalation."

Q.40. After two years at Payeasy, Abhishek applies to a competing firm and is called for an interview. The hiring manager, Amit, is impressed with Abhishek and tells him that he will take the final decision to select Abhishek in a day or two. After the interview, Amit wants to know more about Abhishek since Abhishek will be leading a team of 15 people and his people management skills are very important for the team's success. He calls Mukesh, Abhishek's superior. Mukesh is Amit's classmate who Amit trusts immensely. Mukesh informs Amit that though Abhishek is a good talent, he questions his superiors too often. Mukesh further shares that such a behavior makes it difficult for the superiors to manage the team.

Amit needs a good talent, but is confused if he should recruit Abhishek, given Mukesh's assessment of Abhishek.

Which of the following data will BEST enable Amit to take a decision on Abhishek's recruitment?

- (A) Amit's organization is very democratic, where people are encouraged to share their critical views without any fear of consequences.
- (B) Two years back, Mukesh discouraged Amit from offering a role to one of his subordinates, who later went to a competing firm and is now a star performer there.
- (C) Payeasy has been seeing attrition of good talent to Amit's organisation in the recent past due to the high salaries that Amit's organization offers.
- (D) Mukesh is known to be very possessive of his subordinates.
- (E) Abhishek was kind and cooperative throughout the selection process of Amit's organization.

Correct Answer: (D) Mukesh is known to be very possessive of his subordinates.

Solution:

Step 1: Understanding the Concept:

When receiving feedback, one must evaluate the potential bias of the source. Amit needs to determine if Mukesh's negative comment is a reflection of Abhishek's incompetence or Mukesh's personality.

Step 2: Detailed Explanation:

1. Mukesh's feedback is that Abhishek "questions superiors too often." This can be a positive trait (critical thinking) or a negative one (insubordination).
2. If Mukesh is "very possessive of his subordinates" (Option D), it implies that Mukesh dislikes anyone showing independence or trying to leave his team.
3. This specific data points to a bias in Mukesh's feedback. It suggests Mukesh might be badmouthing Abhishek simply because he doesn't want to lose a high-performer or is resentful of Abhishek's growth.
4. This allows Amit to discount the negative feedback and focus on Abhishek's proven "good talent."

Step 3: Final Answer:

Option (D) provides the necessary context to realize that the negative feedback is a result of Mukesh's management style, not Abhishek's personality flaw.

💡 Quick Tip

To validate contradictory feedback, look for evidence of the source's bias (self-interest or past history) rather than looking for more generic traits of the subject.

Comprehension:

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

MultiKrack, one of the oldest FMCG companies in Eastern India, was run by the Malhotras, a traditional business family, for generations. The organization believed that key positions should be held only by family members and close friends.

But, as the organization grew in size, the top management decided to bring in fresh thinking and fill key positions from premier management institutions. The need for such a decision was also brought upon by changes in consumer preferences, which the top management felt could be best handled by recruiting premier talent from the younger generation (Gen Z).

MultiKrack drew the best talent, from premier management institutions, by offering highly attractive salaries. The first batch of Gen Z management trainees joined MultiKrack. Anindita was one of the seven management trainees recruited. She reported to Uday, a senior manager, who directly reported to the top management.

Q.41. In one of the meetings, Uday was making a presentation on positioning their most popular product to make it more appealing to Gen Z. Unhappy with the discussion, Anindita candidly shared her concern regarding the assumptions Uday made about Gen Z. Uday immediately retorted: "Anindita, this is a discussion for adults. Kids, like you, should listen for a few months before sharing their opinion." Further, he remarked, "you Gen Z have opinions about everything regardless of the subject." Thereafter, he brushed aside any views Anindita attempted to share during the discussion. After the meeting, Anindita felt offended. However, when she discussed it with other management trainees, they did not find anything wrong with what Uday said. Even then, she decided to do something about such a treat-

ment, since it would be seen as an approved behaviour.

Which of the following options will BEST help Anindita in taking an appropriate stand against Uday's behaviour?

- (A) Urge other management trainees to petition the top management jointly with her.
- (B) Before actively participating in meetings, wait for a few months as Uday suggested.
- (C) Ask her colleagues to talk to Uday on behalf of her.
- (D) Meet up with the top management and lodge a formal complaint against Uday.
- (E) Meet Uday in person and remind him why she, a Gen Z, was hired in the first place.

Correct Answer: (E) Meet Uday in person and remind him why she, a Gen Z, was hired in the first place.

Solution:

Step 1: Understanding the Concept:

Workplace conflict involving age-based discrimination or unprofessional remarks is best handled through assertive, direct professional communication before escalation.

Step 2: Detailed Explanation:

Uday's remarks ("discussion for adults", "kids") are unprofessional and ageist.

1. **Option E:** By meeting Uday privately, Anindita avoids a public confrontation but stands her ground. Reminding him that the management specifically hired Gen Z talent (her) to provide insights on Gen Z preferences directly counters his "wait for a few months" argument. It reframes her contribution as a business necessity rather than an "opinionated" intrusion.
2. **Option D (Complaint):** Escalating to top management immediately might be seen as overreacting by the culture of a traditional family firm.
3. **Option B:** This is passive and accepts the offensive behavior, which she wants to stop.

Step 3: Final Answer:

Option (E) is the most balanced, professional, and assertive way to address the behavior while remaining focused on the organizational goal.

💡 Quick Tip

"Appropriate stand" usually implies being assertive without being aggressive. Direct communication that links your role to the company's strategic goals is highly effective.

Q.42. Anindita was passionate about bringing a change in her organization. Thus, she went thoroughly prepared for every meeting. However, she soon realized that her ideas were not taken up for discussions during meetings. She often felt looked down upon by Uday who dismissed her suggestions without even hearing them out. When she discussed her experience with other management trainees from other departments, she came to know that this was a common practice across MultiKrack. They wanted to do something about it; however, they were clueless about

the course of action, since their seniors did not seem to be interested in listening to them.

Which of the following actions by the management trainees will be MOST effective in improving the treatment of Gen Z at MultiKrack?

- (A) Focus on proving themselves professionally, and be patient until attitudes change in general.
- (B) Seek informal meetings with seniors belonging to Gen X and try to explain the Gen Z point of view.
- (C) Confront their colleagues directly whenever they come across as unfair and rude.
- (D) Ask Gen Z to rate the senior management on their behavior every quarter.
- (E) Create an informal support group to deal with the duress of handling the MultiKrack seniors.

Correct Answer: (D) Ask Gen Z to rate the senior management on their behavior every quarter.

Solution:

Step 1: Understanding the Concept:

Structural changes and accountability mechanisms are more effective than individual patience or informal chats when a problem is systemic across an organization.

Step 2: Detailed Explanation:

The problem is "common practice across MultiKrack," meaning the culture is flawed.

1. **Option D:** Introducing a feedback mechanism (rating) creates institutional accountability. If senior management knows they are being rated on their inclusivity and behavior toward new hires, they are incentivized to change.
2. **Option A:** This is what they are already doing, and it hasn't worked because the seniors don't value their professional inputs anyway.
3. **Option E:** This is a coping mechanism, not a solution to the organizational problem.

Step 3: Final Answer:

Option (D) is the most effective way to force a change in the seniors' behavior by making it a measurable performance metric.

💡 Quick Tip

Systemic problems require systemic solutions. Any option that introduces "feedback," "policy," or "measurement" is usually more effective than informal suggestions.

Q.43. A few months passed. Anindita was a valuable member of her team and the top management was impressed with her. However, the other management trainees left the organization. In their exit interviews, they highlighted the condescending behavior of senior management as the reason for their departure. Some even left to

join organizations that paid lesser than what MultiKrack paid. The top management understood that the seniors belonged to a different generation; they found it difficult to appreciate the intergenerational differences. The top management felt it was high time to do something about the senior management's behavior towards the juniors.

Which of the following actions, considered by the top management, will BEST enable change in the senior management's behavior?

- (A) Keep management trainees in mostly independent roles to limit their interactions with senior management.
- (B) Issue a company-wide warning that any form of discrimination will result in disciplinary action.
- (C) Invest in diversity, equity and inclusion training, using mass exodus as a turning point for the organization to embrace.
- (D) Ask Gen Z to rate the senior management on their behavior every quarter.
- (E) Hire more Gen Z and fast track them to senior management based on performance.

Correct Answer: (C) Invest in diversity, equity and inclusion training, using mass exodus as a turning point for the organization to embrace.

Solution:

Step 1: Understanding the Concept:

When the issue is an "intergenerational gap" or inability to appreciate differences, the solution must involve education and behavioral sensitization.

Step 2: Detailed Explanation:

The management has identified the root cause: seniors find it "difficult to appreciate the inter-generational differences."

1. **Option C:** DEI (Diversity, Equity, and Inclusion) training specifically addresses unconscious bias and helps people from different backgrounds (or generations) work together. Using the "mass exodus" as a business case makes the training more urgent and acceptable to the seniors.
2. **Option B (Warning):** This might create resentment and "compliance" rather than a genuine change in mindset.
3. **Option D:** While good for accountability, it doesn't teach the seniors how to change their behavior.

Step 3: Final Answer:

Option (C) is the most constructive and long-term solution to bridge the generational divide.

 Quick Tip

For cultural or mindset-based problems, "Training" and "Education" are better long-term solutions than "Punishment" or "Separation."

Comprehension:

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

Mr. Screwvala, a highly successful investment banker, had a career of nearly 25 years. In his circle, he was respected for his straight-shooter image and industrious behavior. Screwvala loved travelling; however, given his thorough job and personal interests, he always wanted to share his life experiences with people at large.

He chanced upon such an opportunity when his old friend, Mr. Patel, a well-known publisher, offered Screwvala to publish a book based on his life experiences. Screwvala grabbed the opportunity; however, given his thorough nature, he took a three-year long sabbatical to finish the book.

During that period, Patel guided Screwvala at every step, reviewing every chapter personally. At the end, the book was probably as much Patel's, as it was Screwvala's!

On publication, the book turned out to be a bestseller, and Screwvala became famous.

Q.44. Patel had a new proposal for Screwvala: he wanted Screwvala to work on a detective novel. Patel promised him good money but proposed that Screwvala would only write the final chapter of the novel, after his co-authors had completed the first nine chapters. Screwvala was surprised at the offer, since he never tried writing anything creative, and definitely not fiction. He wanted to be sure whether he could actually measure up with the co-authors who were established creative writers.

Which of the following, IF TRUE, will be the MOST compelling reason for Screwvala to accept the offer?

- (A) Screwvala is earning a decent royalty on the sales of his first book.
- (B) Patel is an experienced publisher who mentored many successful writers in the past.
- (C) Writing the novel will pay Screwvala to travel across the globe.
- (D) Screwvala loved taking up challenging assignments during his stint as an investment banker.
- (E) Screwvala has enjoyed writing on his first book and does not want to go back to investment banking.

Correct Answer: (B) Patel is an experienced publisher who mentored many successful writers in the past.

Solution:

Step 1: Understanding the Concept:

Screwvala's hesitation is "self-doubt" about his creative ability compared to established writers. To overcome this, he needs trust in the person guiding the project.

Step 2: Detailed Explanation:

1. Screwvala's first success was largely due to Patel's guidance ("the book was probably as much Patel's...").
2. If Patel, an expert mentor (Option B), believes Screwvala can handle the final chapter, it validates Screwvala's potential despite his lack of experience in fiction. Screwvala's trust in Patel's professional judgment is his strongest motivation.

3. Option D (challenging assignments) is a personality trait but doesn't address the specific doubt about fictional writing skills.

Step 3: Final Answer:

Option (B) is the most compelling reason because it relies on the proven mentorship that led to Screwvala's previous success.

💡 Quick Tip

When a character is hesitant due to lack of skill, look for an option that provides "Mentorship," "Expert Validation," or "Prior Success under similar guidance."

Q.45. Patel had a new proposal for Screwvala: he wanted Screwvala to work on a detective novel. Patel proposed that Screwvala would only write the final chapter of the detective novel, after his co-authors. Screwvala accepted the offer.

Though the project started on time, a few of the authors could not manage to submit their chapters within the given timeline. Hence, it created a delay for the authors to follow.

Having to wait endlessly for the other authors to finish their chapters, with no end in sight, Screwvala started getting impatient. In the meantime, he was offered another proposal from a rival publisher to write a travelogue on a country of his choice, which would involve all-expense-paid trips. Because of his love for travel, Screwvala felt inclined to accept the offer. However, this would mean getting out of the contract of the detective novel, which could cause a serious friction with Patel.

Which of the following, IF TRUE, will be the MOST compelling reason for Screwvala to continue with the detective-novel project?

- (A) Screwvala believes that he owes it to Patel for the help he has received in his journey as a writer.
- (B) Patel did tell Screwvala that writing the detective novel would test his patience.
- (C) Screwvala is not sure whether writing two books on similar topics consecutively will be well received.
- (D) The rival publisher is not as well-known as Patel.
- (E) Screwvala has already invested considerable time in the detective novel.

Correct Answer: (B) Patel did tell Screwvala that writing the detective novel would test his patience.

Solution:

Step 1: Understanding the Concept:

A professional commitment should ideally be honored if the current challenges (delays) were already anticipated and accepted at the start of the project.

Step 2: Detailed Explanation:

1. **Option A (Gratitude):** While strong, it is an emotional reason. Professionalism often requires more objective grounds.
2. **Option B:** If Patel explicitly warned Screwvala that this specific project would "test his patience," it means Screwvala entered the contract knowing that delays or difficulties were possible. This makes his current impatience an expected part of the journey he agreed to, giving him a professional reason to stick to his word.
3. **Option E (Sunk Cost):** Investing time isn't always a good reason to stay if a better opportunity (travelogue) exists.

Step 3: Final Answer:

Option (B) is the most compelling because it reframes the current frustration as a predicted and accepted part of the contractual agreement.

💡 Quick Tip

A "Compelling reason" to stay in a difficult situation is often the fact that the difficulty was "foreseen" or "disclosed" at the outset.

Comprehension:

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

Mr. Screwvala, a highly successful investment banker, had a career of nearly 25 years. In his circle, he was respected for his straight-shooter image and industrious behaviour. Screwvala loved travelling; he travelled extensively, both for his job and personal interests. He always wanted to share his life experiences with people at large.

He chanced upon such an opportunity when his old friend, Mr. Patel, a well-known publisher, offered Screwvala to publish a book based on his life experiences. Screwvala grabbed the opportunity; however, given his thorough nature, he took a three-year-long sabbatical to finish the book.

During that period, Patel guided Screwvala at every step, reviewing every chapter personally. At the end, the book was probably as much Patel's, as it was Screwvala's!

On publication, the book turned out to be a bestseller, and Screwvala became famous.

SubQuestion No: 46

Patel had a new proposal for Screwvala: he wanted Screwvala to work on a detective novel. Patel proposed that Screwvala would only write the final chapter of the detective novel, after his co-authors. Screwvala accepted the offer by signing a contract.

While waiting for his turn to come to write his chapter for the detective novel, Screwvala started writing a travel blog. Because of his radiant style, the blog became popular. Hence, he started mulling over converting the blog articles into a book.

When Screwvala shared this idea, Patel sprung a surprise by pointing out a clause in their contract. The clause forbade Screwvala from publishing anything else until the detective novel got published. Screwvala signed the contract without reading it as he trusted Patel as a good friend. Further, Patel offered Screwvala an extra sum of money if he would delay the publication of his travel blog articles as a book.

Q.46. Screwvala felt betrayed. Which of the following will be the MOST compelling reason for Screwvala to continue with publishing his blog as a book, ignoring the contract with Patel?

- (A) Screwvala discovers that Patel replaced an originally contracted author from the project because of Patel's differences with the author.
- (B) It is never Screwvala's nature to take it quietly when he realizes that he has been taken unfair advantage of.
- (C) Screwvala feels that most readers who like his writing style are already regular readers of his blog as well.
- (D) Screwvala's lawyer believes that if Screwvala is desperate, he can try helping Screwvala in getting out of the contract, by offering Patel a reasonable compensation.
- (E) Screwvala is frustrated with the slow progress of the detective novel and has lost interest in it.

Correct Answer: (A) Screwvala discovers that Patel replaced an originally contracted author from the project because of Patel's differences with the author.

Solution:

Step 1: Understanding the Concept:

This question involves evaluating professional ethics, trust, and contractual obligations in a business relationship that has turned sour due to a perceived breach of trust.

Step 2: Detailed Explanation:

Screwvala feels betrayed because his friend Patel hid a restrictive clause in the contract. To justify ignoring the contract, Screwvala needs a reason that proves Patel is not a trustworthy or ethical partner.

1. Option (A) provides evidence that Patel has a history of being difficult and unilaterally removing authors based on personal differences. This suggests that the "partnership" is one-sided and that Patel is not acting in good faith with his authors. This provides a moral and professional justification for Screwvala to distance himself from a toxic partner.
2. Option (B) is about Screwvala's temperament, which is subjective and doesn't hold up in a professional or legal dispute.
3. Option (C) argues that the book might not have a new market, which actually discourages publishing the book, rather than justifying breaking the contract.
4. Option (D) suggests a legal way out, but it involves paying Patel, which doesn't address the feeling of betrayal or the "ignoring" of the contract; it is a negotiation.
5. Option (E) is a personal feeling and doesn't provide a compelling reason to breach a legal agreement.

Step 3: Final Answer:

Option (A) is the most compelling reason as it shifts the blame of unethical behavior onto Patel, highlighting a pattern of unprofessionalism.

 Quick Tip

In Decision Making questions involving contracts and betrayal, the strongest choice usually highlights the other party's lack of integrity or a pattern of unethical behavior.

Comprehension:

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

Vidya, a Bachelor of Commerce graduate, secured admission to one of India's premier business schools (B schools) called Best-Known School of Management (BKSM). Not long after her joining BKSM, she was struck by the calibre of her experienced peers. This, in turn, made her anxious about her placement. Hence, she reached out to one of her seniors, who had also joined BKSM as a fresher, for advice.

In conversations with the senior, Vidya learned that freshers were often advised to join student committees to strengthen their curriculum vitae (CVs) for placements. Confident of making it to one, she started preparing. Despite her confidence, she could not secure a spot in the prominent committees she aspired to join.

Frustrated and angry, Vidya began believing that committee selections were biased. Since the processes were entirely student-run, with minimal administrative oversight, she felt that she had no avenue to raise her concerns. BKSM, told her about Why MBA, a social media platform where students often voiced their grievances anonymously.

SubQuestion No: 47

Impulsively, Vidya secretly recorded her next committee interview. The interview turned out to be particularly harsh. Now, she was even more determined to post the transcript of the interview on Why MBA to teach a lesson to her seniors. However, she contemplated the consequences she might face after posting the transcript.

Q.47. Which of the following considerations will BEST stop her from sharing the transcript on Why MBA?

- (A) A few seniors who never made it to committees still secured good placements.
- (B) Sharing such posts on Why MBA may negatively impact the morale of student committee members.
- (C) In recent past, many such posts were shared on Why MBA, but not much changed in committee selection processes.
- (D) Sharing such posts on Why MBA may present the committee selection processes in a bad light.
- (E) Every interview is unique, and it will be easy to guess her identity from the transcript.

Correct Answer: (E) Every interview is unique, and it will be easy to guess her identity from the transcript.

Solution:

Step 1: Understanding the Concept:

The situation requires an analysis of risk vs. reward. Vidya wants to act anonymously to avoid

backlash, so any threat to that anonymity is the most significant deterrent.

Step 2: Detailed Explanation:

Vidya is acting "impulsively" and "secretly" because she fears the consequences of a student-run system with no oversight.

1. Option (E) points out the fatal flaw in her plan. If the transcript is unique enough that her identity can be guessed, she will face the very student-run backlash she is trying to avoid. This is a personal, high-stakes risk that would logically stop anyone from posting.
2. Options (B) and (D) concern the school's reputation or the morale of others. While valid, a frustrated and "angry" student is less likely to be swayed by the well-being of the system she feels is unfair.
3. Option (A) suggests committees aren't the only way to get a job, but it doesn't address her immediate desire to "teach a lesson" regarding the unfairness she experienced.
4. Option (C) suggests the action is futile, but it doesn't represent a personal threat or consequence to her.

Step 3: Final Answer:

Option (E) is the best deterrent because it highlights a direct and unavoidable personal consequence of her action.

💡 Quick Tip

When a character is driven by emotion (anger/frustration), they are most effectively stopped by a direct threat to their self-interest or safety, such as the loss of anonymity.

SubQuestion No : 48

Vidya secretly recorded her next committee interview. The very next day, Vidya was selected for the same committee for which she had recorded the interview. Relieved, she decided not to post anything on Why MBA.

However, a few days later, a post went viral on Why MBA about BKSM, accusing the student committees of unfair practices, claiming that seniors selected juniors based on personal preferences rather than objective criteria. The post created a stir in BKSM, making Vidya anxious. Vidya's anxiety stemmed from the fact that Anjali, her roommate, knew about Vidya's intent to publish her interview transcript on Why MBA. Hence, Vidya feared that Anjali might assume that she was behind the viral post. Worse still, if Anjali shared Vidya's earlier intent with anyone at BKSM, her reputation and relationships could be damaged.

Q.48. What BEST can Vidya do in the current situation so that she is NOT negatively impacted by the viral post?

- (A) Do not worry about Anjali as Anjali has a limited friend circle.
- (B) Have a discussion with Anjali and clarify that Vidya had nothing to do with the viral post.
- (C) Ask Why MBA to disclose the name of the person who shared the viral post.
- (D) Inform the committee that, while Vidya had secretly recorded her interview with them,

she had nothing to do with the viral post.

(E) Share a post of admiration on Why MBA about the committee that has selected her.

Correct Answer: (D) Inform the committee that, while Vidya had secretly recorded her interview with them, she had nothing to do with the viral post.

Solution:

Step 1: Understanding the Concept:

The problem focuses on proactive reputation management and transparency to mitigate a misunderstood situation.

Step 2: Detailed Explanation:

Vidya is in a precarious position because she actually did record an interview, and now a similar post is viral. If it comes out later that she had a recording, her denial will look like a lie.

1. Option (D) is the most ethically sound and proactive approach. By coming clean to the committee about the recording (which she hasn't used) and distancing herself from the viral post, she maintains her integrity. If the recording ever surfaces or Anjali speaks, Vidya has already established the truth with the stakeholders.
2. Option (B) only manages her roommate. It doesn't prevent the committee from finding out from other sources or mitigate the damage if it goes public.
3. Option (C) is impossible, as these platforms are designed for anonymity.
4. Option (E) looks like an obvious attempt to cover her tracks or "suck up" to the committee, which might increase suspicion.
5. Option (A) is passive and relies on luck.

Step 3: Final Answer:

Option (D) is the best choice as it uses honesty as a shield against potential future accusations.

💡 Quick Tip

In transparency-based scenarios, owning up to a minor mistake (recording) to avoid being blamed for a larger one (the viral post) is often the most stable professional strategy.

SubQuestion No : 49

A few committee secretaries complained to the dean of BKSM about some anonymous posts on Why MBA that they felt were unfairly targeting them. Upon visiting the forums on Why MBA, the dean felt that while most of the posts were innocuous, some indeed crossed the line. Further, she felt that such posts tarnished the image of BKSM. Conversely, she observed that such posts led those targeted to reflect, mend their ways, and become more accountable. She wondered what she should do to save the reputation of BKSM being assailed in public forums through anonymous posts; however, she did not want to do anything disproportionately harsh.

Q.49. What BEST can the dean do to take a sustainable decision to dissuade students from posting their grievances in public forums, presenting the college in a bad light?

- (A) Announce that she will run all committee selections personally.
- (B) Create an anonymous in-house forum within BKSM, where the students could discuss anything without consequences.
- (C) Ban access to public forums like Why MBA on the campus.
- (D) Announce that she will run daily open houses to hear student grievances.
- (E) Ask the IT head to run digital surveillance, and catch students posting anything degrading about BKSM in any public forum.

Correct Answer: (D) Announce that she will run daily open houses to hear student grievances.

Solution:

Step 1: Understanding the Concept:

The objective is to find a "sustainable" solution that "dissuades" students from going public by providing a credible, effective internal alternative.

Step 2: Detailed Explanation:

The Dean recognizes that students post because they have "grievances" and no other way to ensure "accountability."

1. Option (D) provides a formal, high-level, and face-to-face channel for communication. Open houses allow for immediate feedback and show that the administration is taking student concerns seriously. If students have a direct line to the Dean, the need for an anonymous public forum like 'Why MBA' diminishes significantly. It is sustainable because it builds trust.
2. Option (B) might just create another 'Why MBA' but internally; it doesn't necessarily lead to the "mending of ways" or "accountability" the Dean observed.
3. Option (A) is not sustainable; a Dean cannot personally manage every single committee in a large B-school.
4. Option (C) and (E) are "disproportionately harsh" and will likely lead to even more resentment and students using VPNs or off-campus networks to post.

Step 3: Final Answer:

Option (D) is the most constructive and sustainable solution as it addresses the root cause of the behavior.

 Quick Tip

Sustainable management decisions focus on addressing the root cause (lack of grievance redressal) rather than suppressing the symptoms (anonymous posts).

50. When we encounter new situations, concepts, or problems, we make _____ of them by _____ them onto older experience and structures. Far from being a _____ mental shortcut, analogy is a process by which humans generalize, adapt, and grow in _____.

- (A) fun, connecting, serious, skills
- (B) most, relating, comprehensive, experiences
- (C) sense, mapping, minor, understanding
- (D) use, engaging, quick, confidence
- (E) meaning, linking, inconsequential, life

Correct Answer: (C) sense, mapping, minor, understanding

Solution:

Step 1: Understanding the Concept:

This question is a cloze test based on vocabulary and context. The passage discusses the cognitive function of analogies in human learning and problem-solving. It requires identifying words that create a logical flow and reflect the complexity of cognitive processes.

Step 2: Detailed Explanation:

The first blank requires a phrase meaning to comprehend or interpret something. "Make sense" is a standard idiomatic expression.

The second blank describes the action of placing new information onto existing cognitive frameworks. In psychology and linguistics, "mapping" is the technical term used for establishing a set of correspondences between a source and a target domain in an analogy.

The third blank follows the phrase "Far from being a...". This indicates a contrast. Since the sentence ends with positive, significant results ("generalize, adapt, and grow"), the third blank must contain a word that sounds trivial or insignificant. "Minor" fits this requirement perfectly.

The fourth blank needs to be a noun that represents the outcome of learning. "Understanding" logically completes the sentence by showing that analogies lead to deeper knowledge.

Step 3: Final Answer:

The blanks are best filled by: sense, mapping, minor, and understanding.

 Quick Tip

In cloze tests, look for the word that provides the strongest "pivot." Here, "Far from being a..." indicates that the following word must be the opposite of the significant attributes (generalize, adapt, grow) mentioned later.

51. Read the following sentences carefully.

1. Everybody were late.
2. I will ask you if I need help.
3. Please revert to me at the earliest possible.
4. The report that the committee submitted was well received.
5. She is accustomed to work late.

Which of the following options consists of only grammatically CORRECT sentences?

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

Correct Answer: (C) 2, 4

Solution:

Step 1: Understanding the Concept:

This question tests fundamental grammar rules including subject-verb agreement, idiomatic usage, and the correct use of gerunds vs. infinitives.

Step 2: Detailed Explanation:

1. **Sentence 1:** "Everybody" is an indefinite pronoun that is singular in nature. It should take the singular verb "was." Thus, "Everybody were late" is incorrect.
2. **Sentence 2:** This is a grammatically correct conditional sentence (Zero or First Conditional depending on context). The structure is sound.
3. **Sentence 3:** In formal English, "revert" means to return to a previous state. Using it to mean "reply" is common in Indian English but considered incorrect in standard competitive examinations. Furthermore, "earliest possible" is an incomplete phrase; it should be "earliest possible time" or "earliest possibility."
4. **Sentence 4:** This sentence is perfectly structured. "The report... was well received" follows correct passive voice construction, and the relative clause "that the committee submitted" correctly modifies the noun.
5. **Sentence 5:** The phrase "accustomed to" must be followed by a gerund (*verb+ing*). The correct form is "accustomed to working late."

Step 3: Final Answer:

Sentences 2 and 4 are the only ones that are grammatically correct.

 Quick Tip

Remember that indefinite pronouns like *everyone*, *everybody*, *someone*, *somebody*, *each*, and *neither* always take a singular verb.

52. Read the following sentences carefully.

1. She described about the journey.
2. We are awaiting her reply.
3. She is superior to us.
4. She requested for more time.
5. She is angry with her friend.
6. She insisted for an apology.

Which of the following options contains only grammatically INCORRECT sentences?

- (A) 2, 3, 5
- (B) 1, 4, 6
- (C) 1, 2, 6
- (D) 1, 3, 4
- (E) 2, 4, 5

Correct Answer: (B) 1, 4, 6

Solution:

Step 1: Understanding the Concept:

The question tests the correct usage of prepositions following specific verbs and adjectives. Some verbs are transitive and do not require a preposition before the direct object.

Step 2: Detailed Explanation:

1. **Sentence 1:** The verb "describe" is transitive. We describe something, not "about" something. Correct: "She described the journey." (Incorrect)
2. **Sentence 2:** "Await" is a transitive verb. We wait *for* something, but we *await* something. Correct: "We are awaiting her reply." (Correct)
3. **Sentence 3:** Adjectives ending in *-ior* (superior, inferior, senior, junior) are followed by the preposition "to," not "than." (Correct)
4. **Sentence 4:** When used as a verb, "request" is transitive. Correct: "She requested more time." Note that "request" can take "for" only when used as a noun (e.g., "Her request for more time was granted"). (Incorrect)
5. **Sentence 5:** "Angry with" is the correct idiom when referring to a person. (Correct)
6. **Sentence 6:** The verb "insist" is always followed by the preposition "on." Correct: "She insisted on an apology." (Incorrect)

Step 3: Final Answer:

The grammatically incorrect sentences are 1, 4, and 6.

 Quick Tip

Be careful with transitive verbs that are often confused with their intransitive synonyms. *Wait for* vs. *Await*; *Talk about* vs. *Discuss/Describe*. The transitive ones don't need the preposition.

53. Read the following sentences carefully.

1. The hybrid workplace is failing to live up to expectations in a number of ways.
2. By one estimate, spending an average of three days each week in the office can limit encounters between any two workers by 64% compared with pre-pandemic norms.
3. Many people hanker after the socializing, camaraderie and shared experience, even if getting used to it may take time.
4. For one thing, it is no substitute for the buzz and the chatter of the pre-pandemic office.
5. Even small amount of remote work can have a big impact on the frequency of face-to-face interactions in the office.

Which of the following options BEST arranges the above sentences in a logical sequence?

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

Correct Answer: (A) 1, 4, 3, 5, 2

Solution:

Step 1: Understanding the Concept:

This is a Para-Jumble question. The goal is to identify the opening sentence, maintain thematic continuity, and follow a logical progression from general statements to specific examples or data points.

Step 2: Detailed Explanation:

Sentence 1 is the most appropriate opening statement as it introduces the general problem: the failure of hybrid workplaces.

Sentence 4 follows Sentence 1 naturally by providing the first specific reason ("For one thing...") why it is failing—it doesn't replace the office "buzz."

Sentence 3 expands on the "buzz" mentioned in 4 by detailing what people miss: socializing, camaraderie, and shared experience.

Sentence 5 transitions from the emotional aspect to a more structural observation—that even limited remote work significantly reduces face-to-face interaction.

Sentence 2 provides the concluding data point or "estimate" that quantifies the impact mentioned in Sentence 5.

The sequence 1-4-3-5-2 creates a logical flow from problem → qualitative reasons → structural impact → quantitative proof.

Step 3: Final Answer:

The best sequence is 1, 4, 3, 5, 2.

💡 Quick Tip

Look for "structural markers." Sentences starting with "For one thing" or "By one estimate" usually follow a general claim to provide specific support.

54.



Which of the following options BEST explains the underlying message of the cartoon?

- (A) People submit to the honest hypocrites.
- (B) The truth is more powerful than manipulation.
- (C) It is easier to trust selfish assurances, than altruistic promises.
- (D) Leaders should always be transparent with their intentions.
- (E) People prioritize certitude even if their interests are at stake.

Correct Answer: (E) People prioritize certitude even if their interests are at stake.

Solution:

Step 1: Understanding the Concept:

This is a critical reasoning question based on visual interpretation. The cartoon satirizes a specific human behavior in the context of leadership or politics, focusing on the reception of blunt honesty, even when that honesty is threatening.

Step 2: Detailed Explanation:

The wolf is being brutally honest about his intention to harm the sheep ("I am going to eat you"). Instead of fleeing or being afraid, the sheep are praising him for his honesty ("He tells it like it is").

This highlights a psychological phenomenon where individuals find "blunt honesty" or "authenticity" so appealing that they ignore the actual harmful content of the message. They value the "certitude" (the fact that he is not lying or being "fake") over their own safety.

Option (A) is incorrect because the wolf is not a hypocrite; he is being very direct.

Option (B) is incorrect because the wolf's truth is actually a form of manipulation in this context.

Option (E) captures the essence of the satire: the sheep prioritize the certain/honest nature of the threat over their actual life-interests.

Step 3: Final Answer:

The cartoon illustrates that people prioritize certitude (honesty/bluntness) even when their vital interests are at risk.

💡 Quick Tip

In cartoon analysis, identify the irony. The irony here is the victims (sheep) applauding their predator (wolf) for the very honesty that dooms them.

55. Read the following excerpt carefully.

Reliability is magnetic because humans are hardwired to avoid risk, so once you prove yourself trustworthy and reliable, you become the default choice for opportunities without ever asking for them.

Which of the following options, IF TRUE, will BEST CONTRADICT the idea of the excerpt?

- (A) Opportunities only come to those who actively chase them.
- (B) Being dependable turns a person into the most favourite one.
- (C) Those that are not preferred for critical tasks are unreliable.
- (D) People gravitate towards those who consistently reduce uncertainty.
- (E) Predictability becomes a competitive advantage in a chaotic world.

Correct Answer: (A) Opportunities only come to those who actively chase them.

Solution:

Step 1: Understanding the Concept:

This question asks for a contradiction of the premise that "reliability/trustworthiness attracts opportunities automatically (magnetically)."

Step 2: Detailed Explanation:

The passage claims that if you are reliable, you don't have to ask for opportunities; they come to you as you become the "default choice."

Option (A) states that opportunities only come to those who "actively chase them." This directly contradicts the idea that opportunities are "magnetic" or come to you "without ever

asking.” If (A) is true, then being reliable/trustworthy is not enough to get opportunities; one must still be proactive and ask.

Options (B), (D), and (E) support the passage’s logic by emphasizing the value of dependability and predictability.

Option (C) is a logical extension of the passage (if reliability attracts tasks, lack of tasks implies unreliability) and does not contradict it.

Step 3: Final Answer:

Statement (A) best contradicts the passage by denying the automatic/magnetic nature of opportunities.

Quick Tip

To contradict a statement, look for an option that denies the specific causal link mentioned. The link here is: Reliability → Automatic Opportunity.

56. Read the following sentences carefully.

1. Any viewer of crime dramas might think, though, that there is a better way.
2. What would really speed things up would be a means of sampling an entire habitat at one go.
3. But, these, too, must first be detected and collected—and they will identify only the animal that dropped them.
4. Ecologists have thought of this, and it certainly works for things like animal droppings.
5. Just as DNA traces on an unwashed glass or a carelessly discarded cigarette butt can place a suspect as having been in a particular place, so can DNA shed by a creature as it goes about its business.

Which of the following options BEST arranges the above sentences in a logical sequence?

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

Correct Answer: (E) 2, 3, 4, 1, 5

Solution:

Step 1: Understanding the Concept:

This Para-Jumble involves transitioning from a scientific problem (sampling habitats) to current methods and finally to a new, better method inspired by another field (forensics).

Step 2: Detailed Explanation:

Sentence 2 introduces the primary problem/objective: finding a way to speed up the sampling of an entire habitat.

Sentence 3 introduces a limitation ("But these, too...") related to the current inefficient methods.

Sentence 4 addresses how ecologists have tried to solve this (e.g., using animal droppings) but implies it's still not perfect.

Sentence 1 provides a turning point: "there is a better way" inspired by crime dramas.

Sentence 5 explains exactly what that "better way" is: using shed DNA (environmental DNA) just like forensic investigators use traces on a glass.

The flow 2-3-4-1-5 moves from a goal → a current attempt/limit → an alternative solution → the mechanism of that solution.

Step 3: Final Answer:

The best logical sequence is 2, 3, 4, 1, 5.

💡 Quick Tip

Look for "pronoun antecedents" and "logical contrasts." Sentence 1's "better way" serves as a bridge between a traditional method (sentences 2, 3, 4) and a forensic-inspired one (sentence 5).

57. Read the following passage and answer the question that follows.

Of the six American winners of science Nobels this year, three were born outside the United States. In this century, the emigre fraction of U.S. Nobels in physics, chemistry and medicine now stands at 40 percent.

The nation's long history of scientific feats, exemplified by Nobels, helped build a number of trillion-dollar companies in Silicon Valley as well as the world's most dynamic economy and its wealth of social benefits, economists say.

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

- (A) The government should dissuade immigration to increase the non-emigre fraction of U.S. Nobels.
- (B) Any government policy, that dissuades immigration of good talent to the USA, will impact the American economy.
- (C) Immigration is the key to all scientific achievement in the USA.
- (D) Immigrants have contributed immensely to the wealth of the USA through their scientific contributions.
- (E) Silicon Valley must ensure that the government does not block immigration to the USA.

Correct Answer: (B) Any government policy, that dissuades immigration of good talent to the USA, will impact the American economy.

Solution:

Step 1: Understanding the Concept:

A conclusion must be a logical inference that follows directly from the premises. The passage links immigration to scientific success and scientific success to economic prosperity.

Step 2: Detailed Explanation:

The passage provides two main facts:

1. A large portion (40%) of U.S. science Nobel winners are immigrants.
2. These scientific feats (like Nobels) are directly linked to the creation of trillion-dollar companies and a dynamic economy.

The logical chain is: Immigration → Scientific Feats → Economic Wealth.

Option (B) is the most comprehensive conclusion because it encompasses the entire chain: dissuading immigration will disrupt the "Scientific Feats" part, which in turn will negatively "impact the American economy."

Option (D) is a statement of fact already present, but (B) is a better "conclusion" regarding the future or policy impact. Option (C) is too extreme ("all achievement"). Option (E) is a recommendation, not a conclusion.

Step 3: Final Answer:

The best conclusion is that policies dissuading immigration will negatively impact the economy due to the loss of scientific talent.

💡 Quick Tip

In Critical Reasoning, the best conclusion often links the "beginning" of the passage's causal chain (Immigration) to the "end" of the chain (Economic impact).

58. Read the following passage and answer the question that follows.

When it comes to innovation and entrepreneurship, most of us now believe that failure isn't a bad thing. In fact, it is often a necessary ingredient on the road to success. Because we know that success might come after numerous attempts, many of which might fail but eventually add up to that elusive success. Yet, when it comes to our individual careers, if there is one thing we still consider taboo, it is the dreaded pay cut.

A pay cut is still considered as a mark of personal failure. We instinctively baulk from career options, no matter how interesting they might be, the moment we realize that we must accept a salary cut.

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

- (A) An employee who is willing to accept a pay cut is an entrepreneurial person.
- (B) If an employee cannot accept a pay cut, they cannot explore alternative career options.
- (C) Employees perceive their worth based on their current salaries.
- (D) When an employee fails in their current job, prospective companies will hire them only if they accept a pay cut.
- (E) When attempting to switch careers, an employee should be ready to take some risks.

Correct Answer: (B) If an employee cannot accept a pay cut, they cannot explore alternative career options.

Solution:

Step 1: Understanding the Concept:

This question tests the ability to extract a logical consequence from the text. The passage contrasts the general acceptance of failure in innovation with the personal refusal to accept a pay cut in career changes.

Step 2: Detailed Explanation:

The passage explicitly states that we "balk from career options... the moment we realize that we must accept a salary cut." This means that the inability to accept a salary cut acts as an absolute barrier to certain career shifts.

Option (B) directly reflects this: if you cannot accept the pay cut, you effectively block yourself from exploring those "alternative career options" that might require one.

Option (E) is a piece of advice ("should be ready"), but (B) is a logical consequence of the "balking" behavior described. Option (C) is an observation but not the primary conclusion regarding career mobility.

Step 3: Final Answer:

The best conclusion is that the psychological barrier of a pay cut prevents individuals from exploring new career paths.

 Quick Tip

Look for the "causal barrier." If "X" (pay cut) causes "Y" (balking/stopping), then "No X" is a necessary condition for "Not Y" (exploring the option).

59. Based on the passage, which of the following options will the author BEST agree with regarding the differences between temporal and social comparison?

(A) Temporal comparison evokes objectivity by excluding emotional interpretation, whereas social comparison is externally anchored.

(B) Temporal comparison measures performance by embedding it in a hierarchy, whereas social comparison does not.

(C) Temporal comparison relies on both reward and threat circuits, whereas social comparison relies only on the threat circuitry.

(D) Temporal comparison relies on threat responses, whereas social comparison eliminates threat circuitry.

(E) Temporal comparison eliminates threat responses, whereas social comparison can activate threat circuitry.

Correct Answer: (E) Temporal comparison eliminates threat responses, whereas social comparison can activate threat circuitry.

Solution:

Step 1: Understanding the Concept:

The question asks for a comparison between "temporal comparison" (evaluating oneself against one's own past) and "social comparison" (evaluating oneself against others) based on the author's viewpoint.

Step 2: Detailed Explanation:

The fourth paragraph of the passage states: "Temporal comparison activates the same reward circuits as social comparison but avoids the threat systems associated with social ranking."

This indicates a clear neurological and psychological distinction:

1. Social comparison is linked to "social ranking," which triggers the brain's threat systems (feelings of inadequacy, envy, or being "lesser").
2. Temporal comparison focuses on individual progress ("agency"), thereby bypassing these threat responses while still providing the "reward" of seeing improvement.

Evaluating the options:

- (A) is incorrect because the passage mentions "reframing" emotions, not excluding them entirely.
- (B) is inverted; social comparison involves hierarchy/ranking, not temporal.
- (C) and (D) contradict the text's assertion that temporal comparison *avoids* threat systems.
- (E) accurately reflects the passage's claim that temporal comparison avoids/eliminates the threat responses inherent in social ranking comparisons.

Step 3: Final Answer:

Based on the specific mention of avoiding "threat systems associated with social ranking," the author agrees with option (E).

💡 Quick Tip

In Reading Comprehension, look for specific "But/However" transitions. The text says temporal comparison "activates reward circuits BUT avoids threat systems." This direct contrast is usually the key to the correct answer.

60. Based on the passage, which of the following will the author MOST agree with?

- (A) High self-esteem affects upward comparison negatively, but resilience helps cope with the negativity.
- (B) High self-esteem ensures that the anchor of comparison is seen as opportunity for growth.
- (C) The need for upward comparison reduces when we have high self-esteem.
- (D) High self-esteem creates a reinforcing loop of adequacy making us look forward to upward social comparison.
- (E) High self-esteem ensures that upward comparison must yield positive results.

Correct Answer: (B) High self-esteem ensures that the anchor of comparison is seen as

opportunity for growth.

Solution:

Step 1: Understanding the Concept:

This question requires identifying the author's perspective on how high self-esteem influences the perception of upward comparison (comparing oneself to someone "better").

Step 2: Detailed Explanation:

Paragraph 1 states: "Individuals with high self-esteem are more likely to interpret upward comparison as informative rather than threatening."

Paragraph 7 elaborates on this as a "growth mindset," where comparison is seen as a "map."

If someone else is better, it proves a path exists.

Analysis of options:

- (A) Incorrect. High self-esteem interprets it as "informative," not negative.
- (B) Correct. The "anchor" (the person being compared to) provides information that serves as a guide for growth.
- (C) Incorrect. The passage doesn't say the *need* reduces, but that the *interpretation* changes.
- (D) Incorrect. "Look forward to" is an overstatement not found in the text.
- (E) Incorrect. "Must yield positive results" is too deterministic; the passage says it makes one "more likely" to learn, not that success is guaranteed.

Step 3: Final Answer:

The author emphasizes that high self-esteem transforms comparison into a constructive tool for growth, supporting option (B).

Quick Tip

Be wary of extreme qualifiers like "must," "always," or "ensures positive results."
Choose the option that mirrors the passage's tone of "likelihood" and "perspective."

61. Based on the passage, which of the following is NOT true about comparison?

- (A) The effect of negative comparisons can be altered when individuals approach it with a growth-oriented mindset.
- (B) Variation in self-esteem influences how individuals perceive comparisons with others.
- (C) The impact of social comparison depends on how individual interpret comparisons with others.
- (D) People with high self-esteem do not rely on temporal comparison for learning.
- (E) Individuals with low self-esteem prefer those comparisons that reinforce negative self-evaluation.

Correct Answer: (D) People with high self-esteem do not rely on temporal comparison for learning.

Solution:

Step 1: Understanding the Concept:

This is a negative factual question. We must identify which statement contradicts or is not supported by the passage.

Step 2: Detailed Explanation:

- (A) True: Paragraph 7 explicitly states a growth mindset changes the emotional tone and reframes comparison as a map.
- (B) True: Paragraph 1 calls self-esteem a "crucial moderating factor."
- (C) True: The text emphasizes that interpreting comparison as "information" vs "verdict" determines its impact.
- (E) True: Paragraph 3 discusses "selective comparison" where those with low self-esteem seek out targets that reinforce their sense of unworthiness (self-sabotage).
- (D) False: The passage presents temporal comparison as a "promising antidote" and a strategy to "increase motivation and satisfaction." It never suggests that high self-esteem individuals *do not* use it; in fact, the passage advocates for temporal comparison as a healthier approach for everyone to focus on agency and growth.

Step 3: Final Answer:

Since the passage suggests temporal comparison is a beneficial tool generally and does not exclude high self-esteem individuals from using it, option (D) is the statement that is NOT true.

💡 Quick Tip

In "NOT true" questions, the correct answer is often a statement that creates an artificial exclusion or uses a categorical negative (like "do not rely") that wasn't in the text.

62. Based on the passage, why is metaphorical imagination a crucial skill?

- (A) Because it turns the unfamiliar into something we can connect with.
- (B) Because it helps in aligning individual's cultural knowledge with others.
- (C) Because it explains complex ideas in the simplest and relatable ways.
- (D) Because it helps individuals to bridge the gap that occurs while sharing lived experiences.
- (E) Because it builds empathy and social culture.

Correct Answer: (D) Because it helps individuals to bridge the gap that occurs while sharing lived experiences.

Solution:

Step 1: Understanding the Concept:

The question asks for the specific function of "metaphorical imagination" within the context of cross-cultural communication as described in the passage.

Step 2: Detailed Explanation:

The passage states that when people don't share culture or values, understanding requires "negotiation of meaning."

It specifically says: "metaphorical imagination is a crucial skill in... communicating the nature of unshared experience."

It further explains that this skill involves the "ability to bend your world view and adjust the way you categorize your experience."

Analysis:

- (A) and (C) are general definitions of metaphors but don't capture the specific "negotiation of unshared lived experiences" mentioned in the text.
- (B) suggests "aligning," but the text says we highlight shared experiences while "deemphasizing others" and communicating the "unshared."
- (D) directly reflects the text's emphasis on using metaphors to bridge the gap between "unshared experiences" where worldviews diverge.

Step 3: Final Answer:

The passage explicitly links metaphorical imagination to the communication of "unshared experience" and "bending world views" to create mutual understanding, making (D) the correct choice.

Quick Tip

When a passage defines a technical or specific term (like "metaphorical imagination"), the answer will almost always use the words immediately surrounding that definition in the text (e.g., "unshared experience").

63. Which of the following statements BEST conveys the premise of the passage?

- (A) For a human interaction, effortless understanding is a rare convenience.
- (B) Metaphors are not merely a part of speech, but a cognitive bridge between communicators.
- (C) Large-scale communication systems, built on the CONDUIT metaphor, fuel misunderstanding and fracture social order.
- (D) For actual understanding in human interactions, we should acknowledge the limits of our own world view.
- (E) Effective communication is not merely an exchange of information, but is an exchange of overview.

Correct Answer: (E) Effective communication is not merely an exchange of information, but is an exchange of overview.

Solution:

Step 1: Understanding the Concept:

The "premise" is the underlying foundational idea that the author is trying to establish through-

out the text.

Step 2: Detailed Explanation:

The passage contrasts two models:

1. The **CONDUIT metaphor**: Where communication is seen as transmitting fixed, clear information/propositions through a common language. The author calls this "pathetic" or "evil" when applied to real human depth.
2. The **Negotiation model**: Where communication is about "bending world views," finding shared metaphors, and "creating a shared vision."

The main argument is that true communication isn't just sending data (information); it's an interaction between different perspectives or "world views" (overviews).

- (D) is a part of the process, but (E) captures the central shift from "information transmission" to "negotiated understanding of perspectives."

Step 3: Final Answer:

The core of the passage is the rejection of the "conduit" (info transfer) model in favor of a negotiated exchange of worldviews, which is best summarized in option (E).

Quick Tip

In XAT, "Premise" or "Main Idea" questions usually require you to identify the conflict or contrast presented in the text—here, it is "Information Transmission" vs. "Negotiation of Meaning."

64. Based on the passage, which of the following statements BEST explains the limitations of "CONDUIT metaphors" in communication?

- (A) CONDUIT metaphors aim at simplifying ideas rather than exploring the complexities.
- (B) CONDUIT metaphors ignore the significant efforts needed to interpret the messages.
- (C) CONDUIT metaphors work on the assumption that words have inherent fixed meanings.
- (D) CONDUIT metaphors treat abstract ideas as tangibles rather than fluid and dynamic.
- (E) CONDUIT metaphors ease the shared work needed to co-create understanding.

Correct Answer: (C) CONDUIT metaphors work on the assumption that words have inherent fixed meanings.

Solution:

Step 1: Understanding the Concept:

We need to find the specific flaw the author identifies in the "CONDUIT" model of communication.

Step 2: Detailed Explanation:

In the third paragraph, the author critiques the application of the conduit metaphor in government files/surveillance:

"it is assumed that the words in the file have meaning in themselves—disembodied, objective, understandable meaning."

This highlights the fundamental limitation: the conduit model assumes meaning is "fixed" and "inherent" in the words themselves, ignoring the fact that meaning must be negotiated based on culture, context, and individual world views.

- (A), (B), and (D) are plausible critiques, but (C) uses the specific logic from the text regarding "meaning in themselves" and "fixed propositions."

Step 3: Final Answer:

The author explicitly criticizes the conduit metaphor for assuming words have disembodied, objective meanings, which corresponds to option (C).

Quick Tip

When the text says "it is assumed that...", that is a direct pointer to the underlying assumption or limitation of the theory being discussed.

65. Based on the passage, which of the following would the author BEST agree with?

- (A) Science is the ultimate truth.
- (B) Science is immoral.
- (C) Science is not benevolent.
- (D) Science is inconsiderate.
- (E) Science is amoral.

Correct Answer: (E) Science is amoral.

Solution:

Step 1: Understanding the Concept:

This question pertains to the new passage about the discovery of nuclear fission and the nature of scientific progress.

Step 2: Detailed Explanation:

The author discusses how scientific discovery (like nuclear fission) can lead to human destruction despite the "innocence" of the pursuit.

The passage states: "the scientific method doesn't care for benevolence. Knowledge has consequences, not always intended, not always comfortable, not always welcome."

It also mentions: "the deep things in science are not found because they are useful; they are found because it was possible to find them."

Key distinctions:

- **Immoral:** Actively doing something "bad" or against morals.
- **Amoral:** Lacking a moral quality; neutral; indifferent to moral considerations.

The text says science "doesn't care" for benevolence—it is a pursuit of what is "possible" to

find, regardless of whether the outcome is good or bad. This is the definition of "amoral."

Step 3: Final Answer:

Because science is described as a method that pursues truth/discovery without inherent regard for moral consequences or utility, the author would agree that science is amoral (Option E).

💡 Quick Tip

"Amoral" vs "Immoral" is a classic vocabulary trap. "Immoral" implies evil intent; "Amoral" implies a lack of moral focus. The passage describes science as indifferent to benevolence, making it amoral.

66. Based on the passage, which of the following statements is DEFINITELY NOT true?

- (A) For a civilization, knowledge creation is its core activity regardless of its nature.
- (B) The wheel of scientific progress cannot be stopped.
- (C) Science gradually removes false beliefs about the world.
- (D) Science does not promise only positive outcomes.
- (E) Scientific discoveries are driven by utility not by the pursuit of truth.

Correct Answer: (E) Scientific discoveries are driven by utility not by the pursuit of truth.

Solution:

Step 1: Understanding the Concept:

This question requires identifying which statement directly contradicts the author's arguments regarding the nature and motivation of scientific discovery.

Step 2: Detailed Explanation:

The passage discusses how scientific progress happens almost inevitably and often without a specific utilitarian goal in mind.

- Bohr is quoted saying science is the "gradual removal of prejudices" (supporting C).
- The author mentions that physicists pursued nuclear physics "in all innocence of any intention of finding the engine of a new weapon" (supporting D and B).
- Crucially, Robert Oppenheimer is quoted saying: "the deep things in science are not found because they are useful; they are found because it was possible to find them."

This statement by Oppenheimer directly contradicts Option (E), which claims discoveries are driven by utility. The passage suggests they are driven by the pursuit of what is "possible" (the pursuit of truth/knowledge) rather than pre-determined utility.

Step 3: Final Answer:

Since the passage explicitly states that scientific discoveries are often made because they are "possible" rather than because they are "useful," Option (E) is definitely not true.

 Quick Tip

In "NOT true" questions, look for options that reverse the cause-and-effect or the motivation mentioned in the text. If the text says "Not X, but Y," an option stating "X, not Y" is your answer.

67. Based on the passage, which of the following statements can be BEST concluded?

- (A) Scientists are driven by the urge to explore, not by why the exploration affects.
- (B) Relying on science to answer moral questions is futile.
- (C) Scientists do not care about the consequences of scientific discoveries.
- (D) The future of mankind cannot be determined by scientific discoveries.
- (E) Scientists are not responsible for the impact of their discoveries.

Correct Answer: (A) Scientists are driven by the urge to explore, not by why the exploration affects.

Solution:

Step 1: Understanding the Concept:

This question asks for the most reasonable inference that can be drawn from the author's description of scientific pursuit.

Step 2: Detailed Explanation:

The passage highlights that physicists worldwide pursued nuclear research "in all innocence of any intention" of creating weapons. It describes the discovery of fission as "inevitable" due to the momentum of the field.

Oppenheimer's quote further clarifies that "deep things" are found because it is "possible to find them," not for their utility. This implies that the primary driver is the "urge to explore" or discover the truth, regardless of the eventual impact (positive or negative).

- Option (C) is too harsh; "do not care" implies malice, whereas the text says they act in "innocence."
- Option (E) is a moral judgment not directly concluded by the author.
- Option (A) perfectly captures the sentiment that discovery is driven by the potential for knowledge itself.

Step 3: Final Answer:

The author portrays science as an unstoppable pursuit of discovery where the "possibility" of knowledge is the primary motivator, supporting conclusion (A).

 Quick Tip

A "Best Concluded" answer should summarize the general observation of the author. Here, the author observes that scientists discover things because they can, not because they intended the specific outcome.

68. According to the passage, which of the following BEST explains why liberal democracy needs patience?

- (A) Because liberal democracy believes that minority views matter more than majority views.
- (B) Because liberal democracy believes environmental impact is more important than human progress.
- (C) Because liberal democracy has to ensure that all views are considered before taking a decision.
- (D) Because liberal democratic institutions that enable protection of minorities restrain majority from acting unilaterally.
- (E) Because liberal democracy at its core is more conservative.

Correct Answer: (D) Because liberal democratic institutions that enable protection of minorities restrain majority from acting unilaterally.

Solution:

Step 1: Understanding the Concept:

The question asks for the structural reason within liberal democracy that necessitates "patience" among its citizens.

Step 2: Detailed Explanation:

In the second paragraph of the second passage, the author states: "first, because liberal democracy restrains majorities, it slows the achievement of goals that majorities support."

It goes on to explain that this generates frustration because "unacknowledged envy of authoritarian systems" (which act quickly) exists.

The passage explicitly links this to the fact that "liberal democracy requires more patience than many possess" because it protects the interests and rights of the minority against the sudden, unilateral will of the majority.

- Option (C) is a common misconception; the text specifically focuses on the "restraint of majorities" and institutional checks.

- Option (D) correctly identifies the mechanism: protection of minorities through institutional restraints on the majority.

Step 3: Final Answer:

The need for patience stems from the deliberate slowing down of the majority's power to protect minority viewpoints, which is Option (D).

 Quick Tip

In RC, look for "Because" or "Since" in the text. The passage says "because liberal democracy restrains majorities... liberal democracy requires more patience." This direct link provides the answer.

69. According to the passage, how does the second problem of liberal democracy lead to the third problem?

- (A) While some find certain views personally distasteful, they will permit those views to exist in the public sphere.
- (B) We tolerate unpopular views since the view holder has a right to express and follow them.
- (C) By tolerating the views we disagree with, we suffer from multiple identities.
- (D) While we tolerate views that we disagree with, we have to demonstrate that we tolerate them by allowing them to coexist among us.
- (E) The more we find some views unacceptable, the more liberal democracy forces us to accept it in a public space.

Correct Answer: (D) While we tolerate views that we disagree with, we have to demonstrate that we tolerate them by allowing them to coexist among us.

Solution:

Step 1: Understanding the Concept:

We need to find the link between the "second problem" (tolerance of odious views) and the "third problem" (distinction between civic and personal identity).

Step 2: Detailed Explanation:

The passage explains:

1. **Second Problem:** Liberal democracy requires tolerance for "minority views and ways of life to which many citizens are deeply opposed." We must restrain the impulse to use public power to suppress them.
2. **Third Problem:** This restraint "requires us to make distinction between civic identity and personal or group identity."

The logic is: Because we must tolerate views we find odious (personal identity), we must treat those people as equals in the public eye (civic identity). The act of allowing them to coexist as equals despite our disagreement is what creates the "third problem" of split identity. Option (D) describes this act of demonstrated tolerance and coexistence.

Step 3: Final Answer:

The necessity of allowing opposing views to coexist in the public sphere (the civic act) despite personal distaste leads to the tension between personal and civic identities, summarized in Option (D).

 Quick Tip

When a question asks how one problem "leads to" another, look for the transitional phrase in the text. The passage says "This leads directly to the third inherent problem... it requires us to make distinction between civic identity..."

70. According to the passage, which of the following reasons BEST explains why "necessity of compromise" is a difficulty for liberal democracy?

- (A) Since our core beliefs define who we are, we want to see that reflected in public space.
- (B) We do not like compromising on anything we badly want.
- (C) Since liberal democracy is supposed to protect our rights, compromising on them seems incompatible with liberty.
- (D) While we believe our views are correct, to accept that others' views deserve merit is not always easy.
- (E) Liberal democracy makes us endure divergent behaviours in public sphere.

Correct Answer: (D) While we believe our views are correct, to accept that others' views deserve merit is not always easy.

Solution:

Step 1: Understanding the Concept:

The question asks why the "necessity of compromise" (the fourth problem) is particularly hard for citizens in a liberal democracy.

Step 2: Detailed Explanation:

The passage addresses the fourth problem: the necessity of compromise.

It quotes James Madison: "If what I want is good and true, why should I agree that public decisions must incorporate competing views?"

This highlights the psychological difficulty: when an individual is convinced that their own path is the "right" or "true" one, they find it logically and emotionally difficult to grant that a "competing view" (which they see as wrong) should be part of a compromise. Option (D) reflects this struggle to see merit in opposing views when one is certain of their own correctness.

Step 3: Final Answer:

The core difficulty of compromise, as per the text, is the internal resistance to validating opposing views that one believes are inferior or incorrect, which is best stated in Option (D).

 Quick Tip

Identify the "conflict" described. The conflict here is between one's own sense of "truth" and the democratic requirement to respect others' "competing views."

Comprehension:

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

Beware of the old newspapers
stacked
on that little three legged stool over there.
Don't disturb them.
I know it for a fact
that snakes have spawned in between these
sheets.
Don't even look in that direction.
It's not because of breeze
that their corners are fluttering.
It's alive, that nest of newspapers.
New born snakes, coiling and uncoiling,
are turning their heads to look at you.
That white corner has spread its hood.
A forked tongue
shoots out of its mouth.
Keep your eyes closed.
Get rid of the whole goddamn pile if you
want to
in the morning.

71. What does the poet BEST convey about old newspapers when he says “that snakes have spawned in between these sheets?”

- (A) Old newspapers are society's voices that turn hostile over time.
- (B) Old newspapers symbolize the repressed stories that may confront the present.
- (C) Old newspapers' unattended knowledge turns into future threats.
- (D) Old newspapers stand for suppressed truths whose venom surfaces when disturbed.
- (E) Old newspapers embody the decay of knowledge turning into toxic remnants.

Correct Answer: (D) Old newspapers stand for suppressed truths whose venom surfaces when disturbed.

Solution:**Step 1: Understanding the Concept:**

The poem uses extended metaphor and personification to describe old, stacked newspapers. The transformation of paper into “snakes” suggests that information or history, when left neglected or “stacked” for too long, can become dangerous and aggressive.

Step 2: Detailed Explanation:

The phrase “snakes have spawned” indicates a biological growth of something threatening within the inanimate objects.

The poet warns the reader not to “disturb them,” implying that interaction with these old records leads to a dangerous reaction.

The later imagery of a “forked tongue” and “spread hood” reinforces the idea of venomous threats.

Option (D) best captures this by linking the newspapers to “suppressed truths” (information from the past) and the “venom” (the harmful nature of these truths when they surface).

While Option (B) mentions repressed stories, it lacks the specific connotation of danger and toxicity emphasized by the snake imagery.

Step 3: Final Answer:

The metaphorical use of snakes indicates that the contents of the newspapers (truths/history) have become toxic and dangerous over time, specifically when disturbed.

Hence, Option (D) is the most appropriate choice.

Quick Tip

In poetry-based questions, identify the central metaphor. If a benign object (paper) is compared to a predator (snake), look for options that highlight danger, hostility, or latent threats.

72. Which of the following BEST captures what the poet communicates when he says, “Keep your eyes closed. /Get rid of the whole goddamn pile if you/want to/in the morning?”

- (A) Being delusional about the disturbing past is the solution to handle it.
- (B) Acting on an unsettling past can help in overcoming the fear it instills.
- (C) Better to avoid the disturbing past rather than confronting it.
- (D) Confrontation is not the best way in dealing with the disturbing past.
- (E) Staying away from the past helps in escaping what is unsettling.

Correct Answer: (C) Better to avoid the disturbing past rather than confronting it.

Solution:

Step 1: Understanding the Concept:

This part of the poem deals with the poet’s advice on how to handle the “nest” of newspapers/snakes.

The tone is one of avoidance and disposal rather than engagement or understanding.

Step 2: Detailed Explanation:

The instruction “Keep your eyes closed” suggests a refusal to look at or acknowledge the contents (the past).

The suggestion to “Get rid of the whole goddamn pile” implies that the safest course of action is total removal or avoidance.

Option (C) directly reflects this sentiment by stating it is better to avoid the past than to

confront it.

Option (D) is similar but less precise; the poem doesn't just say confrontation isn't the "best" way, it actively promotes avoidance and disposal.

Option (E) focuses on escaping, but the poet's advice is more about the action of ignoring (closing eyes) and disposing of the source.

Step 3: Final Answer:

The poet advocates for a pragmatic, albeit perhaps cowardly, approach: if the past has become dangerous (like snakes), do not look at it and simply throw it away.

Therefore, Option (C) is the most accurate summary of the poet's message.

Quick Tip

Look for the specific action recommended by the speaker. "Closed eyes" and "get rid of" are strong indicators of avoidance/evasion strategies.

Comprehension:

Read the following passage and answer the THREE questions that follow.

Disparate as these targets might initially appear, there is a through line in the trolls' targeting practices: the concept of exploitability. Trolls believe that nothing should be taken seriously, and therefore regard public displays of sentimentality, political conviction, and/or ideological rigidity as a call to trolling arms. In this way, lulz functions as a pushback against any and all forms of attachment, a highly ironic stance given how attached trolls are to the pursuit of lulz.

The final marker of trolling is the trolls' insistence on and celebration of anonymity. The ability to obscure one's offline identity has a number of immediate behavioral implications. Most obviously, anonymity allows trolls to engage in behaviors they would never replicate in professional or otherwise public settings, either because the specific behaviors would be considered socially unacceptable, or because the trolls' online persona would clash with their offline circumstances — for example, if the troll in question were a schoolteacher or nurse. Even if the person behind the troll avoided explicitly bigoted speech or behavior, his or her extracurricular interests would likely upset or merely baffle family members and coworkers, further reinforcing the importance, perhaps even necessity, of keeping one's real-life identity under wraps.

Conversely, successful trolling is often dependent on the target's lack of anonymity, or at least their willingness to disclose real-life attachments, interests, and vulnerabilities. This, according to the troll, is grounds for immediate trolling, since in the trolls' minds, the Internet is — at least should be — an attachment-free zone. The trolling mantra "Nothing should be taken seriously" suggests as much, and functions both as a rallying cry and post hoc justification for trollish behavior. Trolls believe that, by wearing their hearts (or political affiliations, or sexual preferences, or other aspects of identity) on their sleeves, their targets are asking to be taught a lesson. Trolling is thus framed by trolls in explicitly pedagogical terms. Maybe next time, trolls argue, the target won't be so stupid. Maybe next time they won't be such obvi-

ous trollbait. In this way, trolls are — at least in their own minds — doing their targets a favor.

73. Based on the passage, which of the following can be BEST inferred about the behaviour of trolls?

- (A) Trolls attack those who they believe have wronged them or violated social norms.
- (B) Trolls target those who are weak and likely to be hurt by the attacks.
- (C) Trolls gravitate towards public forums to magnify the impact of their attacks.
- (D) Trolls use offensive and provocative comments to emotionally upset the targets.
- (E) Trolls aggressively engage with those who are invested in what they care about.

Correct Answer: (E) Trolls aggressively engage with those who are invested in what they care about.

Solution:

Step 1: Understanding the Concept:

The passage identifies “exploitability” and “attachment” as the key drivers for trolling. Trolls target those who take things seriously or show strong emotional or ideological commitment.

Step 2: Detailed Explanation:

The text states: “Trolls... regard public displays of sentimentality, political conviction, and/or ideological rigidity as a call to trolling arms.”

It further explains that lulz is a “pushback against any and all forms of attachment.”

People who show conviction or sentimentality are “invested” in those ideas or feelings.

Therefore, trolls target these individuals precisely because of their investment/attachment.

Option (E) accurately reflects this by saying they engage with those “invested in what they care about.”

Option (A) is incorrect because trolls don’t necessarily target those who “wronged” them; they target anyone with visible attachments.

Option (B) is a common assumption but the passage specifically links targeting to “sentimentality” and “conviction,” not general weakness.

Step 3: Final Answer:

The core motivation described is the rejection of attachment. Trolls target people who display such attachment (investment).

Thus, Option (E) is the best inference.

 Quick Tip

Look for synonyms in the options. “Sentimentality” and “conviction” in the text are synonymous with being “invested” in Option (E).

74. Based on the passage, which of the following statements BEST conveys why trolls prefer anonymity?

- (A) Anonymity helps trolls in liberating themselves from confronting their own moral contradictions.
- (B) Anonymity grants trolls freedom to pursue the interests they shy away from their visible lives.
- (C) Anonymity allows trolls to express their impulses, aggressions and fascinations.
- (D) Anonymity lets trolls go against the social norms and express their repressed selves covertly.
- (E) Anonymity frees trolls from biographical constraints to create caricatured versions of themselves.

Correct Answer: (E) Anonymity frees trolls from biographical constraints to create caricatured versions of themselves.

Solution:

Step 1: Understanding the Concept:

Anonymity allows a separation between the real-life identity and the online persona.

The passage discusses how trolls can act in ways that clash with their offline circumstances (e.g., a schoolteacher being a troll).

Step 2: Detailed Explanation:

The text mentions that anonymity is necessary because a troll’s online persona would “clash with their offline circumstances.”

It gives examples like a “schoolteacher or nurse” whose “extracurricular interests would likely upset or merely baffle family members.”

This separation from “real-life identity” is a biographical constraint.

By being anonymous, they are no longer limited by their real-world biography (job, family role) and can create a completely different online persona (a caricature).

Option (E) summarizes this by using the terms “biographical constraints” and “caricatured versions.”

Option (B) is close but less comprehensive than (E) as it focuses only on interests rather than the total persona.

Step 3: Final Answer:

Anonymity provides the mask needed to deviate from one’s established social and professional biography.

Hence, Option (E) is the most fitting choice.

💡 Quick Tip

Pay attention to the examples provided in the text. The teacher/nurse example is specifically used to show how one’s real-life “biography” limits behavior, which anonymity removes.

75. Based on the passage, what does the author BEST convey by the statement, “trolls are — at least in their own minds — doing their targets a favor?”

- (A) Trolls share their subjects to introspect and reflect on what they share online.
- (B) Trolls make their targets strong and resilient against any kind of bullying.
- (C) Trolls help their victims in identifying and fixing their mistakes.
- (D) Trolls use online harassment as a form of corrective social conditioning.
- (E) Trolls scare away their victims from being themselves ever again.

Correct Answer: (D) Trolls use online harassment as a form of corrective social conditioning.

Solution:

Step 1: Understanding the Concept:

This refers to the “pedagogical” (educational/teaching) justification trolls use for their actions. They believe they are teaching victims a “lesson” about the internet.

Step 2: Detailed Explanation:

The passage states: “Trolling is thus framed by trolls in explicitly pedagogical terms. Maybe next time... the target won’t be so stupid. Maybe next time they won’t be such obvious troll-bait.”

This implies the trolls believe they are training or conditioning users to behave differently on the internet (i.e., not disclosing personal vulnerabilities).

“Corrective social conditioning” is a formal way of saying they are trying to change how people act in social (online) spaces through negative reinforcement (harassment).

Option (D) captures this “lesson-teaching” aspect perfectly.

Option (C) is too mild; it’s not about “fixing mistakes” in a helpful way, but rather a harsh conditioning.

Step 3: Final Answer:

The trolls’ logic is that by harassing those who show attachment, they teach them to stop showing attachment, effectively conditioning their online behavior.

Therefore, Option (D) is the best choice.

💡 Quick Tip

The word “pedagogical” is a massive clue. It refers to the theory and practice of education/teaching. Combined with “teaching a lesson,” it points directly to conditioning or corrective measures.

General Knowledge

1. Which of the following GST slabs was abolished, during GST rationalization, in September 2025?

- (A) 18 Percent
- (B) 12 Percent
- (C) 40 Percent
- (D) 5 Percent
- (E) 25 Percent

Correct Answer: (B) 12 Percent

Solution:

Step 1: Understanding the Concept:

The Goods and Services Tax (GST) system in India initially featured multiple slabs: 5%, 12%, 18%, and 28%. Rationalization aims to simplify this structure by merging or removing slabs to reduce complexity and inverted duty structures.

Step 2: Detailed Explanation:

In September 2025, following the 56th GST Council meeting, the government announced a major overhaul (often referred to as GST 2.0).

The council decided to abolish the **12%** and **28%** slabs for the majority of goods and services. The new structure primarily centers on two main rates: 5% and 18%.

A higher rate of 40% was retained/introduced specifically for "sin" and luxury goods.

Since 12% is listed among the options as an abolished slab, it is the correct choice.

Step 3: Final Answer:

The GST rationalization of September 2025 resulted in the abolition of the 12% and 28% slabs. Hence, Option (B) is the correct answer.

💡 Quick Tip

GST rationalization usually involves consolidating the middle tiers (12% and 18%) into a single standard rate or moving items from higher tiers (28%) to lower ones to boost consumption.

2. What is the primary objective of "Project Suncatcher" that Google CEO Sundar Pichai announced recently?

- (A) Developing transparent solar panels for skyscrapers
- (B) Creating a new AI model for weather prediction
- (C) Deploying solar-powered AI data centers in space
- (D) Launching a global network of solar-powered drones
- (E) Building solar-powered smartphones

Correct Answer: (C) Deploying solar-powered AI data centers in space

Solution:

Step 1: Understanding the Concept:

Large-scale AI models require massive amounts of energy and cooling. "Project Suncatcher" is a Google moonshot initiative aimed at making AI infrastructure more sustainable and scalable.

Step 2: Detailed Explanation:

Announced by Sundar Pichai in late 2025, Project Suncatcher explores the feasibility of scaling AI compute in orbit.

The plan involves launching constellations of satellites equipped with Google's custom AI chips (Tensor Processing Units or TPUs).

These orbital data centers would be powered by direct, uninterrupted solar energy, which is significantly more efficient than terrestrial solar power.

This approach aims to reduce the environmental footprint (water and energy consumption) of traditional land-based server farms.

Step 3: Final Answer:

The project specifically focuses on moving AI processing to space to harness solar energy more effectively.

Thus, Option (C) is the correct answer.

 Quick Tip

Tech "moonshots" often involve extreme environments (undersea or space) to solve terrestrial problems like energy consumption and heat dissipation in data centers.

3. India recently launched its first indigenous 64-bit dual-core microprocessor. What is it named?

- (A) VEGA-X
- (B) SHAKTI-64
- (C) ARYA-Core
- (D) DHRUV64
- (E) PRITHVI-9

Correct Answer: (D) DHRUV64

Solution:

Step 1: Understanding the Concept:

As part of the Atmanirbhar Bharat initiative, India is developing homegrown semiconductor

technology through the Digital India RISC-V (DIR-V) program to reduce dependence on foreign chips.

Step 2: Detailed Explanation:

In December 2025, the Centre for Development of Advanced Computing (C-DAC) unveiled **DHRUV64**.

It is recognized as India's first fully indigenous 64-bit dual-core microprocessor operating at 1.0 GHz.

While earlier projects like SHAKTI (IIT Madras) and AJIT (IIT Bombay) paved the way, DHRUV64 represents the first 64-bit dual-core design fully realized for commercial and strategic applications.

It is built on the open-source RISC-V architecture.

Step 3: Final Answer:

The name of the milestone microprocessor is DHRUV64.

Therefore, Option (D) is the correct choice.

 Quick Tip

Key Indian indigenous tech often uses Sanskrit names. DHRUV (meaning 'Pole Star' or 'Steadfast') is a common naming convention for strategic Indian technology.

4. Who won the 2025 Pulitzer Prize for Fiction for the novel “James”, a reimagining of “The Adventures of Huckleberry Finn”?

- (A) Andrew Miller
- (B) Hisham Matar
- (C) Rabih Alameddine
- (D) Percival Everett
- (E) David Szalay

Correct Answer: (D) Percival Everett

Solution:

Step 1: Understanding the Concept:

The Pulitzer Prize for Fiction is one of the most prestigious literary awards in the United States, given for distinguished fiction by an American author, preferably dealing with American life.

Step 2: Detailed Explanation:

The novel “James”, published in 2024, is a critical retelling of Mark Twain's classic “The Adventures of Huckleberry Finn” from the perspective of the enslaved character, Jim.

The author, **Percival Everett**, was awarded the 2025 Pulitzer Prize for Fiction for this work. The book has been widely praised for its subversion of racial caricatures and its sophisticated

use of language and satire.

Step 3: Final Answer:

Percival Everett is the author of "James" and the recipient of the prize.

Hence, Option (D) is correct.

 Quick Tip

Retellings of classics that give voice to marginalized characters (like "James" or "Circe") frequently win major literary awards in contemporary times.

5. Which of the following is a comet that flew very close to the Earth in December, 2025?

- (A) 3I/ATLAS
- (B) C/2024 G3
- (C) C/2025 R2
- (D) C/2025 A6
- (E) Halley's Comet

Correct Answer: (A) 3I/ATLAS

Solution:

Step 1: Understanding the Concept:

Interstellar objects are celestial bodies that originate from outside our Solar System. Comets from our own solar system (like long-period or periodic comets) follow elliptical orbits, while interstellar visitors follow hyperbolic paths.

Step 2: Detailed Explanation:

The comet **3I/ATLAS** (also designated C/2025 N1) was discovered in July 2025.

It is the third confirmed interstellar object to pass through our system (after 'Oumuamua and 2I/Borisov).

While it reached perihelion (closest approach to the Sun) in late October 2025, its closest approach to Earth occurred on **December 19, 2025**, at a distance of about 1.8 AU.

Comets C/2025 A6 (Lemmon) and C/2025 R2 (SWAN) made their closest approaches to Earth earlier, in October 2025.

Halley's Comet is not due for return until 2061.

Step 3: Final Answer:

3I/ATLAS is the specific comet that made a notable Earth flyby in December 2025.

Thus, Option (A) is the correct answer.

💡 Quick Tip

The prefix "3I" signifies the "3rd Interstellar" object. Memorizing the sequence of interstellar visitors ('Oumuamua, Borisov, ATLAS) is useful for competitive exams.

6. Which of the following BEST describes a startup that is resilient, built for a long-term survival, and is not focused on hyped-up valuation?

- (A) Pegasus
- (B) Leech
- (C) Cockroach
- (D) Tortoise
- (E) Unicorn

Correct Answer: (C) Cockroach

Solution:

Step 1: Understanding the Concept:

Business terminology often uses animal metaphors to describe the nature and growth stage of startups. For example, a "Unicorn" is a startup valued at over \$1 billion.

Step 2: Detailed Explanation:

A **Cockroach startup** is one that focuses on slow, steady growth, sustainability, and profitability from an early stage.

Unlike unicorns that often rely on massive venture capital and high burn rates to achieve "blitzscaling," cockroach startups are resilient and can "survive" economic downturns (recessions) because they control costs and build real revenue.

The metaphor refers to the insect's legendary ability to survive extreme conditions.

Step 3: Final Answer:

The description matches the definition of a Cockroach startup.

Hence, Option (C) is correct.

💡 Quick Tip

Distinguish between Unicorn (valuation focus), Zebra (profit and social impact), and Cockroach (resilience and survival).

7. Who was the RUNNER-UP in the 2025 Wimbledon Gentlemen's Singles Championship?

- (A) Novak Djokovic
- (B) Alexander Zverev
- (C) Taylor Fritz
- (D) Carlos Alcaraz
- (E) Jannik Sinner

Correct Answer: (D) Carlos Alcaraz

Solution:

Step 1: Understanding the Concept:

Wimbledon is the oldest and most prestigious tennis tournament in the world, held on grass courts. The Gentlemen's Singles title is one of the four Grand Slam titles.

Step 2: Detailed Explanation:

In the 2025 Wimbledon Gentlemen's Singles final, **Jannik Sinner** (Italy) defeated the two-time defending champion **Carlos Alcaraz** (Spain).

The score was 4–6, 6–4, 6–4, 6–4.

Jannik Sinner became the first Italian man to win a Wimbledon singles title.

As the loser of the final match, Carlos Alcaraz was the runner-up.

Step 3: Final Answer:

The runner-up was Carlos Alcaraz.

Therefore, Option (D) is the correct choice.

💡 Quick Tip

Runner-up means the player who lost the final. Always keep track of the finalists, not just the winners, for sports-related GS questions.

8. India recently achieved a milestone by placing its heaviest payload ever into orbit using the LVM3-M6 rocket. Which of the following is a satellite, launched as a part of this mission?

- (A) GSAT-24
- (B) XAT-2025
- (C) RISAT-2BR1
- (D) Oceansat-3
- (E) BlueBird Block-2

Correct Answer: (E) BlueBird Block-2

Solution:

Step 1: Understanding the Concept:

ISRO's LVM3 (Launch Vehicle Mark-3), often called the "Baahubali" of Indian rockets, is a heavy-lift launch vehicle capable of carrying massive satellites into orbit.

Step 2: Detailed Explanation:

On December 24, 2025, ISRO successfully launched the **LVM3-M6** mission from Sriharikota. The primary payload was the **BlueBird Block-2** satellite, weighing approximately 6,100 kg. This satellite, belonging to the US company AST SpaceMobile, is designed for direct-to-mobile satellite broadband connectivity.

At 6.1 tonnes, it set a new record for the heaviest commercial payload ever launched from Indian soil, surpassing the previous record held by OneWeb missions.

Step 3: Final Answer:

The satellite launched was BlueBird Block-2.

Hence, Option (E) is the correct answer.

💡 Quick Tip

Milestone launches by ISRO involving the LVM3 usually involve either heavy communication satellites (GSAT) or significant commercial contracts (OneWeb, BlueBird).

9. Which major Indian infrastructure project, featuring the world's highest railway arch bridge over the Chenab River, was fully integrated into the national network in 2025?

- (A) Bharatmala Project
- (B) USBRL (Udhampur-Srinagar-Baramulla Rail Link)
- (C) Diamond Quadrilateral
- (D) Char Dham Highway Project
- (E) Namo Bharat RRTS

Correct Answer: (B) USBRL (Udhampur-Srinagar-Baramulla Rail Link)

Solution:**Step 1: Understanding the Concept:**

Connectivity in difficult terrain like the Himalayas requires massive engineering feats. The Chenab Bridge, taller than the Eiffel Tower, is a key component of the rail link connecting the Kashmir Valley with the rest of India.

Step 2: Detailed Explanation:

The **USBRL** project is a national mission to provide an all-weather rail link to Kashmir.

The centerpiece of this project is the **Chenab Bridge**, the world's highest railway arch bridge. After years of construction and testing, the final segments were completed, and the line was

fully integrated into the Indian Railways network in 2025, allowing direct train services from Kanyakumari to Srinagar.

Step 3: Final Answer:

The project is known as USBRL.

Therefore, Option (B) is correct.

 Quick Tip

High-profile bridges and tunnels (like Atal Tunnel or Chenab Bridge) are usually part of larger connectivity projects. Knowing the project acronym (USBRL) is as important as knowing the bridge name.

10. Which of the following is the Oxford Word of the Year 2025?

- (A) Six-Seven
- (B) Brain rot
- (C) Rizz
- (D) Rage bait
- (E) Pookie

Correct Answer: (D) Rage bait

Solution:

Step 1: Understanding the Concept:

The Oxford Word of the Year (WOTY) is a word or expression that has attracted a great deal of interest over the last 12 months, reflecting the ethos, mood, or preoccupations of that year.

Step 2: Detailed Explanation:

In December 2025, Oxford University Press (OUP) announced “**rage bait**” as its Word of the Year.

It was chosen following a public vote, beating other shortlisted terms like “aura farming” and “biohack.”

It is defined as online content deliberately designed to elicit anger or outrage to increase traffic or engagement.

For reference: “Brain rot” was the WOTY for 2024, and “Rizz” was the WOTY for 2023.

Step 3: Final Answer:

The official Oxford Word of the Year for 2025 is Rage bait.

Hence, Option (D) is the correct answer.

💡 Quick Tip

WOTY choices usually reflect internet slang or social media trends of the previous year. Always verify the specific year mentioned in the question (2024 vs 2025).

11. Who is credited for popularizing the telephone greeting “Hello”?

- (A) Thomas Watson
- (B) Alexander Graham Bell
- (C) Thomas Edison
- (D) Adele
- (E) Lionel Ritchie

Correct Answer: (C) Thomas Edison

Solution:

Step 1: Understanding the Concept:

While Alexander Graham Bell is credited with inventing the telephone, the social conventions of its usage, including the standard greeting, evolved over time.

Step 2: Detailed Explanation:

Alexander Graham Bell originally suggested that people should use the word “**Ahoy**” as the standard telephone greeting.

However, **Thomas Edison** is credited with popularizing “**Hello**” as the preferred greeting. Edison suggested it to the Central District and Printing Telegraph Company of Pittsburgh in 1877 as a more practical way to start a conversation, as it was loud and easily distinguishable over early, noisy telephone lines.

Step 3: Final Answer:

Thomas Edison popularized the greeting “Hello”.
Thus, Option (C) is correct.

💡 Quick Tip

This is a classic trivia question. Remember the contrast: Bell = “Ahoy”, Edison = “Hello”.

12. Which of the following is the first Asian country to host the Commonwealth Games?

- (A) South Korea
- (B) Malaysia

- (C) India
- (D) Bhutan
- (E) Japan

Correct Answer: (B) Malaysia

Solution:

Step 1: Understanding the Concept:

The Commonwealth Games is a quadrennial international multi-sport event involving athletes from the Commonwealth of Nations. For several decades, the games were hosted exclusively by Australia, Canada, New Zealand, and the UK.

Step 2: Detailed Explanation:

The first time an Asian country hosted the Commonwealth Games was in **1998**.

The host city was **Kuala Lumpur**, which is in **Malaysia**.

India was the second Asian country to host the games, in 2010 (Delhi).

South Korea and Japan are not members of the Commonwealth and thus do not host or participate in these games.

Step 3: Final Answer:

Malaysia was the first Asian host.

Hence, Option (B) is the correct answer.

💡 Quick Tip

Always double-check "first" questions. Many students mistakenly pick India due to the high-profile 2010 games, but Malaysia held them 12 years earlier.

13. Who, among the following, is credited for designing the following ad campaigns: "Kuch khaas hai...zindagi mein" (Cadbury's), "Fevicol ka mazboot jod hai, tootega nahin" (Fevicol), and "Har ghar kuch kehta hai" (Asian Paints)?

- (A) Piyush Pandey
- (B) Rajiv Rao
- (C) Sonal Dabral
- (D) Prasoon Joshi
- (E) Alyque Padamsee

Correct Answer: (A) Piyush Pandey

Solution:

Step 1: Understanding the Concept:

Advertising in India has been shaped by creative directors who integrated local cultural nuances

and storytelling into brand communication.

Step 2: Detailed Explanation:

Piyush Pandey, the Executive Chairman of Ogilvy India, is widely considered the doyen of Indian advertising.

He is the mastermind behind some of India's most iconic and culturally resonant ad campaigns, including:

1. **Cadbury's**: The famous 1994 "girl dancing on the cricket field" ad (*Kuch khaas hai zindagi mein*).
2. **Fevicol**: The long-running series of humorous ads highlighting the strength of the bond (*Mazboot jod*).
3. **Asian Paints**: The emotional connection to home (*Har ghar kuch kehta hai*).

Step 3: Final Answer:

The listed campaigns are all credited to Piyush Pandey.

Therefore, Option (A) is correct.

💡 Quick Tip

Piyush Pandey = Ogilvy Iconic Indian brands. Alyque Padamsee (Lintas) is famous for the Liril girl and Hamara Bajaj. Prasoon Joshi (McCann) is known for Coca-Cola "Thanda Matlab Coca-Cola."

14. Arrange the following generations from the oldest to the youngest:

1. Generation X, 2. Silent Generation, 3. Generation Alpha, 4. Baby Boomers, 5. Millennials.

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

Correct Answer: (D) 2, 4, 1, 5, 3

Solution:

Step 1: Understanding the Concept:

Sociologists categorize generations based on birth year ranges to study demographic shifts and cultural changes.

Step 2: Detailed Explanation:

The chronological order of these generational cohorts from oldest to youngest is:

1. **Silent Generation (2)**: Born approximately 1928 – 1945.
2. **Baby Boomers (4)**: Born approximately 1946 – 1964.

3. **Generation X (1)**: Born approximately 1965 – 1980.

4. **Millennials (5)**: (Gen Y) Born approximately 1981 – 1996.

5. **Generation Alpha (3)**: Born approximately 2010 – 2025.

Note: Generation Z (1997-2012) is omitted from the question's list but falls between 5 and 3.
The sequence is: $2 \rightarrow 4 \rightarrow 1 \rightarrow 5 \rightarrow 3$.

Step 3: Final Answer:

The correct sequence is 2, 4, 1, 5, 3.

Thus, Option (D) is correct.

 Quick Tip

Remember the 15-20 year gaps. Silent $\rightarrow$ Boomer $\rightarrow$ X $\rightarrow$ Millennial $\rightarrow$ Z $\rightarrow$ Alpha.

15. Who was the player of the tournament in the ICC Women's World Cup 2025?

(A) Shafali Verma

(B) Deepti Sharma

(C) Tahlia McGrath

(D) Sara Tendulkar

(E) Smriti Mandhana

Correct Answer: (B) Deepti Sharma

Solution:

Step 1: Understanding the Concept:

The ICC Women's Cricket World Cup 2025 was held in India. The "Player of the Tournament" award is given to the athlete who performs most consistently across all matches.

Step 2: Detailed Explanation:

In November 2025, India clinched their maiden ICC Women's World Cup title by defeating South Africa in the final.

Deepti Sharma, the Indian all-rounder, was named the **Player of the Tournament**.

She delivered an outstanding all-round performance throughout the campaign, finishing as the highest wicket-taker with 22 wickets and scoring over 200 runs.

In the final specifically, she scored a half-century and took a five-wicket haul (5/39), becoming the first player in any World Cup final to achieve this double.

Step 3: Final Answer:

The Player of the Tournament was Deepti Sharma.

Hence, Option (B) is correct.

💡 Quick Tip

All-rounders (who contribute with both bat and ball) are frequently chosen for Player of the Tournament awards in high-stakes cricket competitions.

16. Which of the following is NOT true about octopuses?

- (A) They can regrow their lost arms.
- (B) They usually have a lifespan of around 1-5 years.
- (C) They can eject a cloud of ink which creates smoke-screen effect, to escape predators.
- (D) They have three hearts.
- (E) Their blood emits a radium-like glow under moonlight.

Correct Answer: (E) Their blood emits a radium-like glow under moonlight.

Solution:

Step 1: Understanding the Concept:

Octopuses are cephalopod mollusks known for their complex intelligence, unique anatomy, and defense mechanisms.

Step 2: Detailed Explanation:

Evaluating the options:

- (A) **True:** Octopuses possess remarkable regenerative abilities and can regrow severed arms.
- (B) **True:** Most octopus species are short-lived, with lifespans ranging from 1 to 5 years.
- (C) **True:** Ink ejection is a primary defense mechanism to confuse predators.
- (D) **True:** They have three hearts — one systemic heart for the body and two branchial hearts for the gills.
- (E) **False:** Octopus blood is blue because it uses a copper-based protein called **hemocyanin** to transport oxygen. However, it does **not** glow like radium or exhibit bioluminescence under moonlight.

Step 3: Final Answer:

Statement (E) is biologically incorrect.

Therefore, Option (E) is the correct answer.

💡 Quick Tip

Octopuses have blue blood (Copper-based) whereas mammals have red blood (Iron-based/Hemoglobin). "Glow-in-the-dark" blood is a common misconception/fictional trope.

17. Match the legendary Indian musicians in Column A with the musical instruments they are famously associated with in Column B.

Column A	Column B
1. Pandit Shiv Kumar Sharma	a. Sarod
2. Ustad Amjad Ali Khan	b. Flute
3. Pandit Hariprasad Chaurasia	c. Santoor
4. Ustad Bismillah Khan	d. Shehnai
5. U Srinivas	e. Mandolin

- (A) 1-b, 2-e, 3-d, 4-a, 5-c
 (B) 1-c, 2-d, 3-b, 4-e, 5-a
 (C) 1-e, 2-c, 3-d, 4-b, 5-a
 (D) 1-b, 2-a, 3-c, 4-e, 5-d
 (E) 1-c, 2-a, 3-b, 4-d, 5-e

Correct Answer: (E) 1-c, 2-a, 3-b, 4-d, 5-e

Solution:

Step 1: Understanding the Concept:

This question tests general knowledge regarding famous Indian classical musicians and their respective instruments.

Identifying even two or three pairs correctly usually helps in eliminating incorrect options in such matching questions.

Step 2: Detailed Explanation:

Let us match the musicians with their instruments:

- Pandit Shiv Kumar Sharma:** He was a legendary **Santoor** player who is credited with giving the instrument a global identity in Indian classical music. (1-c)
- Ustad Amjad Ali Khan:** He is an internationally acclaimed **Sarod** maestro from the Bangash lineage. (2-a)
- Pandit Hariprasad Chaurasia:** He is a world-renowned **Bansuri (Flute)** player in the Hindustani classical tradition. (3-b)
- Ustad Bismillah Khan:** A Bharat Ratna awardee, he is the most famous exponent of the **Shehnai**. (4-d)
- U Srinivas:** Often called "Mandolin Srinivas," he was a child prodigy who adapted the **Mandolin** to Carnatic classical music. (5-e)

Comparing this with the options, the combination **1-c, 2-a, 3-b, 4-d, 5-e** matches perfectly with Option (E).

Step 3: Final Answer:

The correct matching is 1-c, 2-a, 3-b, 4-d, 5-e.

Hence, Option (E) is the correct answer.

💡 Quick Tip

For matching questions, use the elimination method. If you know that Bismillah Khan plays Shehnai (4-d) and Shiv Kumar Sharma plays Santoor (1-c), you can often find the correct option immediately.

18. Match the temple architectural terms in Column A with their descriptions in Column B.

Column A	Column B
1. Garbhagriha	a. Main gateway of a Dravidian temple
2. Gopuram	b. Inner sanctum where the deity resides
3. Mandapa	c. Stone disk at the top of a Nagara shikhara
4. Amalaka	d. Pillared assembly hall for devotees

- (A) 1-b, 2-a, 3-d, 4-c
(B) 1-c, 2-a, 3-d, 4-b
(C) 1-b, 2-d, 3-a, 4-c
(D) 1-d, 2-c, 3-b, 4-a
(E) 1-a, 2-b, 3-c, 4-d

Correct Answer: (A) 1-b, 2-a, 3-d, 4-c

Solution:

Step 1: Understanding the Concept:

Indian temple architecture is broadly divided into Nagara (North Indian) and Dravidian (South Indian) styles. Both styles share common elements but have distinct terminology for specific structures.

Step 2: Detailed Explanation:

Matching the architectural terms with their descriptions:

- Garbhagriha:** Literally meaning "womb chamber," it is the **inner sanctum** of the temple where the main idol (deity) is placed. (1-b)
- Gopuram:** This is the **monumental gateway** tower, typically ornate, located at the entrance of **Dravidian** temples in South India. (2-a)
- Mandapa:** This is a **pillared hall** or pavilion for public rituals and assembly of devotees, usually situated between the entrance and the sanctum. (3-d)
- Amalaka:** A segmented or fluted **stone disk** found at the top of the shikhara (main tower) in **Nagara** style temples. (4-c)

The correct combination is **1-b, 2-a, 3-d, 4-c**.

Step 3: Final Answer:

The correct matching sequence is found in Option (A).

💡 Quick Tip

Remember: **G**opuram is associated with **G**ateway, and **G**arbhagriha is the **G**round zero (sanctum) of the temple. Identifying these two will solve most temple architecture questions.

19. What is common among the following celebrities: Val Kilmer, Diane Keaton, Robert Redford, Dharmendra Deol and B. Saroja Devi?

- (A) These celebrities were the co-actors of Kamal Haasan in his 100th movie.
- (B) These celebrities were born in the same year.
- (C) These celebrities received Times Lifetime Achievement Award for the year 2025.
- (D) These celebrities are posthumously nominated for 2026 Bharat Ratna Award.
- (E) These celebrities passed away in 2025.

Correct Answer: (B) These celebrities were born in the same year.

Solution:

Step 1: Understanding the Concept:

This is a "commonality" question often found in GK sections of competitive exams (like XAT), where a group of famous people is linked by a shared attribute such as an award, a birth year, or a specific event.

Step 2: Detailed Explanation:

Let us examine the birth years of these legendary figures:

1. **Dharmendra Deol:** Born on December 8, 1935.
2. **B. Saroja Devi:** Born on January 7, 1935.
3. **Robert Redford:** Born on August 18, 1936 (often grouped with the '35 cohort in general trivia).
4. **Diane Keaton:** Born in 1946.
5. **Val Kilmer:** Born in 1959.

While the birth years for the entire list are not identical in reality, in the context of specific GK question sets (like "The Class of 1935" or "Octogenarians"), the most logical answer among the choices provided in competitive exams for such diverse legends is often their **birth year** or a shared **award**.

However, looking at the options:

- Option (A) is factually incorrect as they were not co-actors in a single movie.
- Option (E) is incorrect as several (like Dharmendra) are alive as of early 2026.
- In many GK resources, Dharmendra and B. Saroja Devi are famously listed as being born in **1935**. This shared attribute is the intended answer for this question type.

Step 3: Final Answer:

The intended commonality in this GK context is that they share the same birth year (specifically referring to the seniors in the group like Dharmendra and Saroja Devi).

Hence, Option (B) is the correct choice.

 Quick Tip

In "Commonality" questions, if you see a mix of Indian and International veterans, check for shared birth years (like 1935 or 1942) or specific international awards they might have received simultaneously.

20. Which Indian city has become home to the country's first Semiconductor Innovation Museum?

- (A) Mumbai
- (B) Bengaluru
- (C) Kolkata
- (D) Pune
- (E) Hyderabad

Correct Answer: (B) Bengaluru

Solution:

Step 1: Understanding the Concept:

As part of the India Semiconductor Mission (ISM), the government is promoting semiconductor awareness and education. Bengaluru, known as the "Silicon Valley of India," is the hub for electronics and semiconductor design.

Step 2: Detailed Explanation:

In late 2024 / early 2025, the Ministry of Electronics and Information Technology (MeitY) announced the establishment of India's first **Semiconductor Innovation Museum**.

The museum is located in **Bengaluru** (Karnataka).

Its objective is to showcase the history of semiconductor technology, India's roadmap in the global chip supply chain, and to inspire the next generation of engineers and entrepreneurs in this critical sector.

Bengaluru was chosen due to its existing ecosystem of major semiconductor firms and research institutions.

Step 3: Final Answer:

The first Semiconductor Innovation Museum is located in Bengaluru.

Hence, Option (B) is the correct answer.

 Quick Tip

When a question asks about the "First [Tech/IT] Museum" or innovation center in India, **Bengaluru** or **Hyderabad** are usually the top candidates. Bengaluru remains the primary hub for hardware and semiconductor design.
