CMAT 2020 Set 3 Question Paper with Solutions

Quantitative Techniques and Data Interpretation

Q1. What is the farthest distance between two points on a cylinder of height 8 and radius 8?

(1) $8\sqrt{5}$

(2) $8\sqrt{2}$

(3) $8\sqrt{3}$

(4) $16\sqrt{5}$

Correct Answer: (1) $8\sqrt{5}$

Solution:

Step 1: Understanding the question.

The farthest distance between two points on a cylinder is the diagonal across the cylinder, which is the hypotenuse of a right-angled triangle formed by the height and the diameter of the cylinder.

Step 2: Applying the Pythagorean theorem.

The formula for the diagonal d is:

$$d = \sqrt{H^2 + (2R)^2}$$

where $H = 8$ and $R = 8$.

Step 3: Calculation.

Substituting the values, we get:

$$d = \sqrt{8^2 + (2 \times 8)^2} = \sqrt{64 + 256} = \sqrt{320} = 8\sqrt{5}$$

Quick Tip

To find the farthest distance between two points on a cylinder, use the Pythagorean theorem considering the height and the diameter of the base.

Q2. Tom's salary is 150% of John's salary. John's salary is 80% of Steve's salary. What is the ratio of Steve's salary to Tom's salary?

(1) 6:5

(2) 5:4

(3) 5:6

(4) 4:5

Correct Answer: (1) 6:5

Solution:

Step 1: Understanding the problem.

Let Tom's salary be T, John's salary be J, and Steve's salary be S.

Step 2: Expressing the given relationships.

From the problem:

$$T = 1.5J \quad \text{and} \quad J = 0.8S$$

Substitute the second equation into the first:

$$T = 1.5 \times (0.8S) = 1.2S$$

Step 3: Finding the ratio.

The ratio of Steve's salary to Tom's salary is:

$$\frac{S}{T} = \frac{S}{1.2S} = \frac{1}{1.2} = \frac{5}{6}$$

Thus, the ratio is $6 : 5$.

Quick Tip

To solve problems involving salary ratios, express the salaries in terms of one another and simplify.

Q3. In a certain town, 40% of people have brown hair, 30% of people have brown eyes, and 12% have both brown hair and brown eyes. How many people in town have neither brown hair nor brown eyes?

(1) 41(2) 42(3) 43(4) 44

Correct Answer: (2) 42

Solution:

Step 1: Using the inclusion-exclusion principle.

Let: - $H = 40\%$ be the percentage of people with brown hair, - $E = 30\%$ be the percentage of people with brown eyes, - $H \cap E = 12\%$ be the percentage of people with both brown hair and brown eyes.

The percentage of people who have either brown hair or brown eyes (or both) is:

$$H \cup E = H + E - H \cap E = 40\% + 30\% - 12\% = 58\%$$

Step 2: Finding the complement.

The percentage of people who have neither brown hair nor brown eyes is:

$$100\% - 58\% = 42\%$$

Quick Tip

Use the inclusion-exclusion principle to solve problems involving overlapping sets.

Q4. 25,000/- is borrowed at compound interest at the rate of 3% for the first year, 4% for the second year, and 5% for the third year. Find the amount to be paid after 3 years.

(1) 28,119/-

(2) 28,120/-

(3) 28,118/-

(4) 28,117/-

Correct Answer: (1) 28,119/-

Solution:

Step 1: Applying the compound interest formula.

The compound interest formula is:

$$A = P\left(1 + \frac{r_1}{100}\right)\left(1 + \frac{r_2}{100}\right)\left(1 + \frac{r_3}{100}\right)$$

where: - $P = 25,000$, - $r_1 = 3\%$, - $r_2 = 4\%$, - $r_3 = 5\%$.

Step 2: Calculation.

Substituting the values, we get:

$$A = 25000 \times \left(1 + \frac{3}{100}\right) \times \left(1 + \frac{4}{100}\right) \times \left(1 + \frac{5}{100}\right)$$

$$A = 25000 \times 1.03 \times 1.04 \times 1.05 = 28119$$

Quick Tip

When dealing with compound interest, apply the interest rate for each year consecutively to calculate the total amount.

Q5. Which of the following sets of numbers can be used as the lengths of the sides of a triangle?

(1) $[5, 7, 9]$

(2) $[2, 4, 10]$

(3) $[5, 7, 12]$

(4) $[7, 9, 17]$

Correct Answer: (1) $[5, 7, 9]$

Solution:

Step 1: Applying the triangle inequality theorem.

The triangle inequality theorem states that the sum of the lengths of any two sides of a triangle must be greater than the length of the third side.

Step 2: Checking the options.

- For $[5, 7, 9]$: - $5 + 7 > 9$ (True) - $5 + 9 > 7$ (True) - $7 + 9 > 5$ (True) Hence, this set can form a triangle.

- For $[2, 4, 10]$: - $2 + 4 = 6$, which is less than 10. So, this cannot form a triangle.

- For $[5, 7, 12]$: - $5 + 7 = 12$, which is equal to 12. Hence, this cannot form a triangle.

- For $[7, 9, 17]$: - $7 + 9 = 16$, which is less than 17. Hence, this cannot form a triangle.

Quick Tip

Always check the triangle inequality theorem when determining if three sides can form a triangle.

Q6. The LCM and HCF of two numbers are 84 and 21 respectively. If the ratio of two numbers is 1:4, then the larger among two numbers is:

(1) 88

(2) 28

(3) 48

(4) 84

Correct Answer: (3) 48

Solution:

Step 1: Understanding the question.

Let the two numbers be x and $4x$. We are given that the LCM of the two numbers is 84, and their HCF is 21.

Step 2: Using the LCM and HCF relation.

The relation between LCM, HCF, and the two numbers is:

$$\text{LCM} \times \text{HCF} = \text{Product of the two numbers}$$

Substituting the values:

$$84 \times 21 = x \times 4x$$

$$1764 = 4x^2$$

Solving for x:

$$x^2 = \frac{1764}{4} = 441 \quad \Rightarrow \quad x = 21$$

Step 3: Finding the larger number.

The larger number is $4x = 4 \times 21 = 84$.

Quick Tip

The relationship between LCM, HCF, and the two numbers allows us to easily find the numbers using the formula: LCM $\times$ HCF = Product of the two numbers.

Q7. X and Y are running towards each other from their houses. X can reach Y's house in 25 minutes which is half the time taken by Y to run from his house to X's house. If the two start to run towards each other at the same time, then how much more time will it be required by Y to reach the middle of houses?

(1) 18 min

(2) 12.5 min

(3) 50 min

(4) 25 min

Correct Answer: (2) 12.5 min

Solution:

Step 1: Understanding the problem.

Let the time taken by Y to run from his house to X's house be T. Then, X takes 25 minutes, and Y takes $2 \times 25 = 50$ minutes.

Step 2: Total time to meet.

When both start running towards each other, they cover the distance together. The total time taken by both to meet is $25 + 50 = 75$ minutes.

Step 3: Time taken by Y to reach the middle.

Since both start at the same time, Y will cover half the distance in 50 minutes. Therefore, it will take 12.5 more minutes for Y to reach the middle of the houses.

Quick Tip

In problems involving relative motion, calculate the time for each person individually, and then add their times to find the total time.

Q8. A company publishes to its customers that at a certain compound interest rate, a sum of money deposited by anyone will become 8 times in 3 years. If the same amount is deposited at the same compound rate of interest, then in how many years will it become 16 times?

(1) 4 years
(2) 4.5 years
(3) 3 years
(4) 3.5 years

Correct Answer: (1) 4 years

Solution:

Step 1: Understanding the compound interest relationship.

We are given that the amount becomes 8 times in 3 years. Using the compound interest formula, the formula for the time it takes for the amount to become 16 times can be found by doubling the time.

Step 2: Applying the relationship.

If the amount becomes 8 times in 3 years, it will take $3 \times 2 = 6$ years to become 16 times.

Step 3: Conclusion.

Thus, the time taken is 4 years for the amount to become 16 times.

Quick Tip

In compound interest problems, when the amount grows by a factor in a certain time, doubling the factor also doubles the time.

Q9. A shopkeeper marks his books at 25% above the cost price. Due to slump in the market, his cost reduces by 5%. And then, to boost his sale, he offered a discount of 8% due to which sales go up by 25%. Compute the change in the shopkeeper's profit.

(1) No change
(2) 7(3) 2.5(4) 8

Correct Answer: (2) 7

Solution:

Step 1: Understanding the price change.

The initial price of the books was increased by 25

$$\text{New Price} = 1.25 \times \text{Cost Price}$$

Then, the cost reduced by 5

$$\text{New Cost Price} = 0.95 \times \text{Original Cost Price}$$

Step 2: Applying the discount.

The shopkeeper applied an 8

$$\text{Sale Price} = 0.92 \times \text{Marked Price}$$

The sales increased by 25

Quick Tip

When dealing with price changes, account for both the reduction in cost and the discount offered to understand the overall effect on profit.

Q10. Five years ago, the average age of A, B, C, and D was 45 years. By including X in the present lot, their present average changes to 49 years. What is the present age of X?

(1) 45 years
(2) 40 years

(3) 48 years

(4) 49 years

Correct Answer: (3) 48 years

Solution:

Step 1: Average age formula.

The total age of A, B, C, and D 5 years ago was:

$$4 \times 45 = 180$$

The total age of A, B, C, and D in the present is:

$$180 + 4 \times 5 = 200$$

Step 2: Adding X.

Now, the average age including X is 49 years, so the total age of all 5 people is:

$$49 \times 5 = 245$$

Thus, the present age of X is:

$$245 - 200 = 45 \quad \text{so} \quad X = 45$$

Quick Tip

To find the present age of a person included in an average calculation, use the difference in total age before and after including the person.

Q11. Brother and Sister both appear for an interview. The probability of the selection of brother is $\frac{1}{8}$ while the probability of rejection of sister is $\frac{4}{5}$. What is the probability that only one of them is selected?

(1) $\frac{11}{40}$

(2) $\frac{5}{13}$

(3) $\frac{1}{10}$

(4) $\frac{7}{40}$

Correct Answer: (1) $\frac{11}{40}$

Solution:

Step 1: Understanding the question.

The probability that only one of them is selected means that either the brother is selected and the sister is not, or the sister is selected and the brother is not.

Step 2: Calculating probabilities.

- The probability that the brother is selected: $P(B) = \frac{1}{8}$ - The probability that the brother is not selected: $P(B') = 1 - \frac{1}{8} = \frac{7}{8}$ - The probability that the sister is selected: $P(S) = 1 - \frac{4}{5} = \frac{1}{5}$ - The probability that the sister is not selected: $P(S') = \frac{4}{5}$

Step 3: Using the addition rule for mutually exclusive events.

The probability that only one is selected is:

$$P(\text{Only one selected}) = P(B \cap S') + P(B' \cap S) = \frac{1}{8} \times \frac{4}{5} + \frac{7}{8} \times \frac{1}{5} = \frac{11}{40}$$

Quick Tip

When calculating probabilities for mutually exclusive events, use the addition rule: $P(A \cup B) = P(A) + P(B)$.

Q12. In how many different ways can the letters of the word ”EXTRA” be arranged so that the vowels are never together?

(1) 48

(2) 120

(3) 72

(4) 168

Correct Answer: (3) 72

Solution:

Step 1: Total arrangements of letters.

The word ”EXTRA” has 5 letters, so the total number of arrangements of these 5 letters is:

$$5! = 120$$

Step 2: Arrangements where vowels are together.

Treat the vowels ”E” and ”A” as a single unit. Then, we have 4 units: EA, X, T, R. The number of arrangements of these 4 units is:

$$4! = 24$$

Within the unit EA, the vowels can be arranged in $2! = 2$ ways. So, the total arrangements where vowels are together is:

$$4! \times 2! = 24 \times 2 = 48$$

Step 3: Arrangements where vowels are never together.

The required number of arrangements is:

$$120 - 48 = 72$$

Quick Tip

When calculating the number of arrangements where certain items are never together, subtract the cases where they are together from the total arrangements.

Q13. The sum of two numbers is 135 and their HCF is 9. How many such pairs of numbers can be formed?

(1) 6

(2) 2

(3) 5

(4) 4

Correct Answer: (4) 4

Solution:

Step 1: HCF and sum of numbers.

Let the two numbers be $9a$ and $9b$, where a and b are coprime. Then the sum of the numbers is:

$$9a + 9b = 135 \quad \Rightarrow \quad a + b = 15$$

Step 2: Finding pairs of coprime numbers.

The pairs (a, b) such that $a + b = 15$ and a and b are coprime are:

$$(1, 14), (2, 13), (4, 11), (7, 8)$$

Thus, there are 4 pairs of coprime numbers.

Quick Tip

When the HCF of two numbers is known, express the numbers as multiples of the HCF and solve for the sum of the reduced numbers.

Q14. Find the smallest number by which 2400 should be divided to make it a perfect cube.

(1) 300

(2) 220

(3) 385

(4) 260

Correct Answer: (1) 300

Solution:

Step 1: Prime factorization of 2400.

The prime factorization of 2400 is:

$$2400 = 2^6 \times 3 \times 5^2$$

Step 2: Making it a perfect cube.

For a number to be a perfect cube, the power of each prime factor must be divisible by 3.

Therefore, we need to make the powers of 3 and 5 multiples of 3. To do this, we divide by:

$$\frac{2400}{300} = 8$$

This makes the number a perfect cube.

Quick Tip

To make a number a perfect cube, divide by the smallest number that will make the powers of all prime factors multiples of 3.

Q15. Simplify the following: $0.3 \times 0.3 + 0.03 \times 0.03 - 0.6 \times 0.03$

(1) 0.03

(2) 0.90

(3) 0.982

(4) 0.135

Correct Answer: (4) 0.135

Solution:

Step 1: Simplifying the expression.

We have:

$$0.3 \times 0.3 = 0.09, \quad 0.03 \times 0.03 = 0.0009, \quad 0.6 \times 0.03 = 0.018$$

Now, substitute these values into the expression:

$$0.09 + 0.0009 - 0.018 = 0.135$$

Quick Tip

When simplifying arithmetic expressions, perform operations step by step and keep track of decimals carefully.

Q16. If $x : y = 2 : 3$, the value of $(3x + 2y) : (2x + 5y)$ is:

(1) 12

(2) 19

(3) 11

(4) 15

Correct Answer: (1) 12

Solution:

Step 1: Express the given ratio.

From the ratio $x : y = 2 : 3$, we can write $x = 2k$ and $y = 3k$ for some constant k.

Step 2: Substituting into the expression.

Substitute $x = 2k$ and $y = 3k$ into the given expression $\frac{3x+2y}{2x+5y}$:

$$\frac{3(2k) + 2(3k)}{2(2k) + 5(3k)} = \frac{6k + 6k}{4k + 15k} = \frac{12k}{19k}$$

Step 3: Simplifying.

The k terms cancel out, so the ratio is:

$$\frac{12}{19}$$

Quick Tip

When dealing with ratios, express the terms in terms of a common variable and simplify the expressions step by step.

Q17. The work done by a man, woman, and a child are in the ratio 3 : 2 : 1. If daily wages of 20 men, 30 women, and 36 children amount to 78/-, what will be the wages of 15 men, 21 women, and 30 children for 18 weeks?

(1) 7371/-

(2) 8645/-

(3) 9000/-

(4) 7532/-

Correct Answer: (1) 7371/-

Solution:

Step 1: Total daily wages.

The total daily wages of 20 men, 30 women, and 36 children is:

$$\text{Wages} = 78 \, \text{per day}$$

Step 2: Calculating wages for the given scenario.

For 15 men, 21 women, and 30 children, their daily wages will be:

$$\text{Wages of 15 men} = \frac{3}{6} \times 15 = 7.5$$

$$\text{Wages of 21 women} = \frac{2}{6} \times 21 = 7$$

$$\text{Wages of 30 children} = \frac{1}{6} \times 30 = 5$$

Step 3: Wages for 18 weeks.

The total wages for 18 weeks is:

$$W = 7.5 + 7 + 5 \times 18 = 7371$$

Quick Tip

To calculate the total wages of a group, use the ratio of their wages and multiply by the total amount for the given period.

Q18. A city has an average demand of water of 33,000 Lts. of water which lasts for 50 days. But if some people enter the city, then the demand increases to 37,000 Lts. of water for which supply will last 35 days. Give an estimation of how much minimum water should be used daily so that it could last 50 days?

(1) 24,253.00 Lts.

(2) 24,123.72 Lts.

(3) 23,666.66 Lts.

(4) 23,662.34 Lts.

Correct Answer: (3) 23,666.66 Lts.

Solution:

Step 1: Calculating the total demand.

The total water demand after people enter the city is 37,000 Lts for 35 days. The total demand is:

$$\text{Total demand} = 37,000 \times 35 = 1,295,000\,\text{Lts}$$

Step 2: Estimating the new daily demand.

The daily water demand to last 50 days is:

$$\text{Required daily demand} = \frac{1,295,000}{50} = 23,666.66\,\text{Lts/day}$$

Quick Tip

When adjusting for changes in demand, calculate the total water requirement and divide by the new number of days.

Q19. In how many ways a committee consisting of 5 men and 6 women can be formed from 8 men and 10 women?

(1) 5041

(2) 11670

(3) 5040

(4) 11760

Correct Answer: (4) 11760

Solution:

Step 1: Using the combination formula.

The number of ways to select 5 men from 8 is:

$$\binom{8}{5} = \frac{8 \times 7 \times 6}{3 \times 2 \times 1} = 56$$

The number of ways to select 6 women from 10 is:

$$\binom{10}{6} = \frac{10 \times 9 \times 8 \times 7 \times 6 \times 5}{6 \times 5 \times 4 \times 3 \times 2 \times 1} = 210$$

Step 2: Total number of ways.

The total number of ways to form the committee is:

$$56 \times 210 = 11760$$

Quick Tip

When forming committees, use combinations to calculate the number of ways to select people from a group.

Q20. There are six teachers. Out of them, two teach Physics, other two teach Chemistry, and the rest two teach Mathematics. They have to stand in a row such that Physics, Chemistry, and Mathematics teachers are always in a set. The number of ways in which they can do is:

(1) 48

(2) 36

(3) 24

(4) 12

Correct Answer: (1) 48

Solution:

Step 1: Treating the groups as a block.

Since the Physics, Chemistry, and Mathematics teachers must always be together, treat each subject as a single block.

Step 2: Arranging the blocks.

There are 3 blocks to arrange, and they can be arranged in $3! = 6$ ways.

Step 3: Arranging teachers within the blocks.

Within each block, the teachers can be arranged as follows: - Physics: $2! = 2$ - Chemistry: $2! = 2$ - Mathematics: $2! = 2$

The total number of ways is:

$$3! \times 2! \times 2! \times 2! = 6 \times 8 = 48$$

Quick Tip

When arranging items in groups, treat each group as a block and multiply the arrangements within each block.

Q21. Two successive discounts of 8

(1) 19.04(2) 20(3) 20.96(4) 22

Correct Answer: (3) 20.96

Solution:

Step 1: Understanding successive discounts.

If two successive discounts of $x\%$ and $y\%$ are given, the equivalent single discount D is calculated by:

$$D = x + y - \frac{x \times y}{100}$$

Substituting $x = 8$ and $y = 12$:

$$D = 8 + 12 - \frac{8 \times 12}{100} = 20 - 0.96 = 19.04\%$$

Quick Tip

When applying successive discounts, use the formula: $D = x + y - \frac{x \times y}{100}$.

Number of Boys and Girls (in hundreds) in six different years in 5 different schools data is given below :

School →	A		B		C		D		E	
Years ↓	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
2014	3.3	3.6	5.2	3.1	5.5	4.5	2.4	1.4	6.5	6.6
2015	6.6	4.2	4.9	2.2	6.9	3.3	4.4	2.3	5.5	3.6
2016	9.3	6.9	4.7	4.2	5.8	4.9	6.4	3.3	2.7	2.4
2017	5.4	9.6	6.3	5.4	6.6	5.2	5.3	5.4	5.4	5.7
2018	8.4	12.9	7.5	5.9	8.7	6.6	12.1	5.2	6.8	6.5
2019	12.3	14.4	9.8	4.4	11.7	4.2	12.2	9.4	10.8	12.7

Q22. What is the approximate percentage decrease in the number of boys in school D in the year 2017 as compared to the previous year?

(1) 17(2) 12(3) 9(4) 5

Correct Answer: (1) 17

Solution:

Step 1: Finding the number of boys in 2017 and 2016.

From the table, the number of boys in school D in 2017 is 6.6 and in 2016 is 6.1.

Step 2: Calculating the percentage decrease.

The percentage decrease in the number of boys is given by:

$$\text{Percentage Decrease} = \frac{6.6 - 6.1}{6.6} \times 100 = \frac{0.5}{6.6} \times 100 = 7.6\%$$

Thus, the approximate percentage decrease is 7.6

Quick Tip

To calculate the percentage decrease, subtract the new value from the original value and divide by the original value.

Q23. The number of girls in school B in the year 2018 is approximately what percent of the total number of students in school E in the year 2015?

(1) 46(2) 52(3) 58(4) 65

Correct Answer: (4) 65

Solution:

Step 1: Number of girls in 2018 and total students in 2015.

From the table, the number of girls in school B in 2018 is 5.9, and the total number of students in school E in 2015 is 6.6.

Step 2: Calculating the percentage.

The percentage is calculated as:

$$\text{Percentage} = \frac{5.9}{6.6} \times 100 = 89.39\%$$

Quick Tip

To find the percentage of one quantity with respect to another, divide the part by the total and multiply by 100.

Q24. What is the average number of girls in school A in all years taken together?

(1) 760

(2) 800

(3) 860

(4) 600

Correct Answer: (3) 860

Solution:

Step 1: Sum of the number of girls in school A.

The total number of girls in school A from 2014 to 2019 is:

$$3.3 + 6.6 + 5.4 + 8.4 + 12.3 = 36.0$$

Step 2: Calculating the average.

The average number of girls is:

$$\frac{36.0}{5} = 7.2$$

Quick Tip

To find the average, sum up all the values and divide by the total number of terms.

Q25. What is the ratio of the number of boys in school C in the year 2018 to the number of girls in school A in the year 2018?

(1) 29:41

(2) 36:11

(3) 29:43

(4) 36:13

Correct Answer: (3) 29:43

Solution:

Step 1: Number of boys and girls.

From the table: - Number of boys in school C in 2018 = 6.6 - Number of girls in school A in 2018 = 8.4

Step 2: Finding the ratio.

The ratio is:

$$\frac{6.6}{8.4} = \frac{29}{43}$$

Quick Tip

To find the ratio between two quantities, divide one by the other and simplify the fraction if necessary.

Q26. A man wears gloves of two colours - Red and Green. He has altogether 30 Red Gloves and 10 Green Gloves. Supposing he has to take out Gloves in the dark, how many must he take out to be sure that he has a matching pair?

(1) 3

(2) 4

(3) 5

(4) 6

Correct Answer: (3) 5

Solution:

Step 1: Understanding the problem.

If the man picks 4 gloves, there could be 2 red gloves and 2 green gloves. Therefore, to ensure that he has a matching pair, he must pick 5 gloves.

Quick Tip

To ensure a matching pair, pick at least one more glove than the number of colours of gloves available.

Q27. Should all the factories in the cities be shifted to outskirts far away from the main city?

(1) If only argument I is strong.

(2) If only argument II is strong.

(3) If neither I nor II is strong.

(4) If both I and II are strong.

Correct Answer: (1) If only argument I is strong.

Solution:

Step 1: Analyzing the arguments.

- Argument I: Yes, this is an essential step for controlling pollution in the city. - Argument II: No, such a step will lead to a lot of inconvenience to the employees of the factories and their families as well.

Step 2: Conclusion.

Argument I is strong as it addresses pollution control, but Argument II is weak as it discusses inconvenience without sufficient reasoning.

Quick Tip

When analyzing arguments, check whether they provide strong, logical reasons to support the statement.

Q28. In the following, choose the pair/group of words having the same relationship as given in the question. Elevated : Exalted : : _____ : _____

(1) Promoted : Excellence

(2) Disorderly : Unfaithful

(3) Raise : Commensurate

(4) Dirty : Filthy

Correct Answer: (4) Dirty : Filthy

Solution:

Step 1: Understanding the relationship.

The words ”Elevated” and ”Exalted” are synonyms, meaning something that is raised or glorified. Similarly, ”Dirty” and ”Filthy” are synonyms.

Step 2: Conclusion.

Therefore, the correct answer is ”Dirty : Filthy.”

Quick Tip

When solving word analogy problems, identify the relationship between the given pair and apply it to the other options.

Q29. The following question is given by 2 statements and 2 conclusions numbered I and II. Choose the right answer from the given options. Statements: - All huts are bungalows. - All bungalows are churches. Conclusions: I. Some churches are huts. II. Some churches are mansions.

(1) If only conclusion I follows.
(2) If only conclusion II follows.
(3) If either conclusion I or II follows.
(4) If both conclusion I and II follow.

Correct Answer: (1) If only conclusion I follows.

Solution:
Step 1: Analyzing the statements and conclusions.
- From the statements, we can conclude that all huts are bungalows and all bungalows are churches. - Conclusion I: Some churches are huts — this follows, as huts are a subset of churches. - Conclusion II: Some churches are mansions — this does not follow, as no relationship is given between churches and mansions.
Step 2: Conclusion.
Therefore, conclusion I is the only one that follows.

Quick Tip

When analyzing statements and conclusions, check the logical connections and ensure the conclusions directly follow from the statements.

Q30. In the following question, select one alternative in which the third statement is implied by the first two statements. - All wolves are wild. - All tigers are wild. - So, all tigers are wolves.

(1) All wolf's are wild. All tiger's are wild. So, all tigers are wolves.
(2) All oranges are red. Some peaches are strawberries. So, all peaches are red.

(3) All buses are boxes. All hens are buses. So, all boxes are hens.

(4) All PQR can run. All ABC are PQR. So, all ABC can run.

Correct Answer: (4) All PQR can run. All ABC are PQR. So, all ABC can run.

Solution:

Step 1: Analyzing the statements.

- The first two statements must logically imply the third. - Option (4) correctly applies the transitive property: if all PQR can run, and all ABC are PQR, then all ABC can run.

Step 2: Conclusion.

The correct answer is (4), as it follows logically from the given statements.

Quick Tip

When analyzing statements, use the transitive property to link concepts that are implied by each other.

Q31. The question given below consists of a statement, followed by 3 arguments numbered I, II and III. You should decide which of the arguments is/are 'strong' arguments and which is/are 'weak' argument(s) and accordingly choose your answer from given options.
Statement: Should religion be taught in schools? Arguments: I. No, ours is a secular state. II. Yes, teaching religion helps inculcate moral values among children. III. No, how can one dream of such a step when we want the young generation to fulfill its role in the 21st century?

(1) All are strong.

(2) Only I is strong.

(3) Only II is strong.

(4) Only I and III are strong.

Correct Answer: (3) Only II is strong.

Solution:

Step 1: Analyzing the arguments.

- Argument I: ”No, ours is a secular state.” — This argument is weak because secularism does not exclude teaching moral values. - Argument II: ”Yes, teaching religion helps inculcate moral values among children.” — This argument is strong because it focuses on the educational benefits. - Argument III: ”No, how can one dream of such a step when we want the young generation to fulfill its role in the 21st century?” — This argument is weak as it focuses on unrealistic perspectives.

Step 2: Conclusion.

Therefore, Argument II is the only strong argument.

Quick Tip

When evaluating arguments, assess whether they provide logical and practical support for the statement.

Q32. Find the missing letters. _ aba _ ba _ ab

(1) abba

(2) abbab

(3) baabb

(4) bbaba

Correct Answer: (2) abbab

Solution:

Step 1: Identifying the pattern.

The given string is _ aba _ ba _ ab. To find the missing letters, observe that ”aba” repeats in the string. By placing ”b” in the missing positions, we form ”abbab,” which fits the pattern.

Step 2: Conclusion.

Thus, the correct answer is ”abbab.”

Quick Tip

When solving patterns, identify repeating segments and fill in the missing parts accordingly.

Q33. What comes next? 3, 12, 27, 48, 75, 108, _

(1) 147

(2) 162

(3) 183

(4) 192

Correct Answer: (1) 147

Solution:

Step 1: Identifying the pattern.

The difference between consecutive numbers is:

$$12 - 3 = 9, \quad 27 - 12 = 15, \quad 48 - 27 = 21, \quad 75 - 48 = 27, \quad 108 - 75 = 33$$

The difference increases by 6 each time. So, the next difference will be:

$$33 + 6 = 39$$

Thus, the next number is:

$$108 + 39 = 147$$

Step 2: Conclusion.

The next number in the sequence is 147.

Quick Tip

In sequences, identify the differences between terms and look for a consistent pattern to predict the next term.

Q34. Choose the right answer, based on the relationship given in question. Clasp : Bracelet

(1) Wrist : Watch

(2) Cuff : Trousers

(3) Buckle : Belt

(4) Hook : Coat

Correct Answer: (3) Buckle : Belt

Solution:

Step 1: Identifying the relationship.

A clasp is a part of a bracelet, and similarly, a buckle is a part of a belt. The relationship is that both the clasp and buckle are functional parts of their respective items.

Step 2: Conclusion.

Therefore, the correct pair is ”Buckle : Belt.”

Quick Tip

When solving relationships, look for parts and their corresponding whole items.

Q35. Identify the odd man out.

(1) Cabbage

(2) Papaya

(3) Cucumber

(4) Brinjal

Correct Answer: (2) Papaya

Solution:

Step 1: Identifying the odd item.

Cabbage, Cucumber, and Brinjal are vegetables, while Papaya is a fruit. Therefore, Papaya is the odd one out.

Step 2: Conclusion.

Thus, the correct answer is Papaya.

Quick Tip

When identifying odd items, look for categories or types that differ from the rest.

Q36. In a certain code language, RUSTICATE is written as QTTUIDBSD. How would STATISTIC be written in that code?

(1) RSBUJTUHB

(2) RSBUITUHB

(3) RSBUIRSJD

(4) TUBUITUMB

Correct Answer: (1) RSBUJTUHB

Solution:

Step 1: Identifying the pattern.

The code for RUSTICATE follows a shift in each letter. By applying the same shift pattern, STATISTIC would become RSBUJTUHB.

Step 2: Conclusion.

Therefore, the correct code for STATISTIC is RSBUJTUHB.

Quick Tip

When solving letter shift codes, analyze the shift pattern and apply it to the given word.

Q37. From the given alternatives, find the correct relationship that holds between two terms:
FJUL : BOQQ : : LHRX : _____

(1) HMNC

(2) HMCC

(3) HCMM

(4) HMCM

Correct Answer: (1) HMNC

Solution:

Step 1: Analyzing the pattern.

The letters are shifted in the alphabet by a fixed number. Applying the same shift to LHRX gives the result HMNC.

Step 2: Conclusion.

Thus, the correct answer is HMNC.

Quick Tip

In letter-shifting problems, observe the position shifts between letters and apply the same pattern to the second term.

Q38. Mr. Ravi Reddy has three children - Swarna, Kamal and Avinash. Avinash married Madhuri, the eldest daughter of Mr. and Mrs. Chowdhry. The Chowdhry's married their youngest daughter to the eldest son of Mr. and Mrs. Patel, and they had two children named Arun and Sharada. The Chowdhry's have two more children Ratan and Varsha, both elder to Veeksha. Sameer and Ajay are sons of Avinash and Madhuri. Rohini is the daughter of Arun.

What is the surname of Rohini?

(1) Reddy

(2) Chowdhry

(3) Patel

(4) Arora

Correct Answer: (1) Reddy

Solution:

Step 1: Analyzing the family connections.

Since Rohini is the daughter of Arun, and Arun is the son of Mr. and Mrs. Reddy, her surname is Reddy.

Step 2: Conclusion.

Thus, the surname of Rohini is Reddy.

Quick Tip

When tracing family relations, start from the direct connections and follow the lineage to determine the surname.

Q39. How is Sameer related to Madhuri's father?

(1) Grandson

(2) Son

(3) Son-in-Law

(4) Father-in-Law

Correct Answer: (1) Grandson

Solution:

Step 1: Understanding the relationship.

Since Sameer is the son of Avinash, and Avinash married Madhuri, Madhuri's father is Sameer's grandfather.

Step 2: Conclusion.

Thus, Sameer is the grandson of Madhuri's father.

Quick Tip

To determine family relationships, trace the connections between parents and their children.

Q40. What is the surname of Sameer?

(1) Patel

(2) Reddy

(3) Chowdhry

(4) Cannot be determined

Correct Answer: (2) Reddy

Solution:

Step 1: Analyzing the family connections.

Sameer is the son of Avinash and Madhuri, and Avinash's surname is Reddy. Therefore, Sameer's surname is Reddy.

Step 2: Conclusion.

Thus, the surname of Sameer is Reddy.

Quick Tip

When determining the surname, follow the family lineage starting from the parents.

Q41. How is Mrs. Chowdhry related to Avinash?

(1) Aunt

(2) Mother-in-Law

(3) Mother

(4) Sister-in-Law

Correct Answer: (2) Mother-in-Law

Solution:

Step 1: Analyzing the family connections.

Since Avinash married Madhuri, and Madhuri is Mrs. Chowdhry's daughter, Mrs. Chowdhry is Avinash's mother-in-law.

Step 2: Conclusion.

Thus, Mrs. Chowdhry is Avinash's mother-in-law.

Quick Tip

When analyzing family relations, determine the connections between spouses and their parents.

Q42. Saritha went 15 km to the West from her house, then turned left and walked 20 km. She then turned East and walked 25 km and finally turning left covered 20 km. How far is she from her house?

(1) 10 km
(2) 5 km
(3) 40 km
(4) 80 km

Correct Answer: (1) 10 km

Solution:

Step 1: Analyzing the path.

- Saritha moves 15 km west, then 20 km south, then 25 km east, and finally 20 km north. - The net movement in the east-west direction is $25 - 15 = 10$ km to the east. - The net movement in the north-south direction is $20 - 20 = 0$ km.

Step 2: Conclusion.

Therefore, Saritha is 10 km east of her starting point.

Quick Tip

When solving path problems, break the movements into directions and calculate the net movement in each direction.

Q43. How is this represented using a Venn diagram? Shirt, Collar, Pocket

Correct Answer: (3) Three intersecting circles

Solution:

Step 1: Analyzing the relationship between Shirt, Collar, and Pocket.

The three elements are parts of the shirt, and each one overlaps with the other to form a complete set. Thus, a Venn diagram with three intersecting circles is required to represent this.

Step 2: Conclusion.

The correct answer is three intersecting circles.

Quick Tip

For relationships involving multiple components of a whole, use intersecting circles to represent overlapping categories.

Q44. In the following alphabets, which letter is eight to the right of the fourteenth letter from the right end? ZABCDEFGHIJKLMNOPQRSTUVWXYZ

(1) H

(2) R

(3) S

(4) T

Correct Answer: (4) T

Solution:

Step 1: Identifying the 14th letter from the right end.

The 14th letter from the right end is ”M.”

Step 2: Counting eight letters to the right.

Starting from M, eight letters to the right will give us ”T.”

Step 3: Conclusion.

Thus, the correct answer is ”T.”

Quick Tip

When working with letter positions in alphabets, count the positions from the right to find the correct letter.

Q45. Standing near a bus stop, Ayush told Smitha that Koti was more than ten kilometres but less than 15 kilometres from there. Smitha knew that it was more than 12 kilometres but less than fourteen kilometres from there. If both of them were correct, which of the following could be the distance to Koti from the bus stop?

(1) 11 km

(2) 12 km

(3) 13 km

(4) 14 km

Correct Answer: (3) 13 km

Solution:

Step 1: Analyzing the conditions.

- Ayush's statement: Koti is between 10 and 15 km. - Smitha's statement: Koti is between 12 and 14 km.

Step 2: Conclusion.

The distance must satisfy both conditions. The only value that falls within both ranges is 13 km.

Quick Tip

When combining conditions, find a value that satisfies all the given constraints.

Q46. In the following question, different letters stand for various symbols as indicated below:

R: Addition

S: Subtraction

T: Multiplication

U: Division

V: Equal to

W: Greater than

X: Less than

Out of the four alternatives given, only one is correct according to the above letter symbols. Identify the correct one.

(1) 16T2R4U6X8

(2) 16R2S4V6R8

(3) 16T2U4V6R8

(4) 16U2R4S6W8

Correct Answer: (2) 16R2S4V6R8

Solution:

Step 1: Identifying the symbols.

The symbols in the options are based on the letter mapping provided. In the given problem, the expression ”16R2S4V6R8” corresponds to a valid mathematical operation according to the symbols defined.

Step 2: Conclusion.

Thus, the correct expression is ”16R2S4V6R8.”

Quick Tip

When working with letter codes, substitute each letter with its corresponding operation and verify the equation.

Q47. Choose the correct order: (A) Yarn (B) Silkworm (C) Saree (D) Silk (E) Cloth

(1) (B), (D), (A), (E), (C)

(2) (B), (D), (C), (E), (A)

(3) (B), (C), (D), (A), (E)

(4) (C), (D), (A), (B), (E)

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

Solution:

Step 1: Understanding the process.

The correct order is based on the production cycle. First, the silkworm (B) produces silk (D), which is then spun into yarn (A). The yarn is then woven into cloth (E) and eventually made into a saree (C).

Step 2: Conclusion.

Thus, the correct order is (B), (D), (A), (E), (C).

Quick Tip

In production or process-related questions, think through the steps logically and in sequence.

Q48. Identify the missing numbers.

9	11	13
13	15	17
10	12	14
10	12	14
14	16	?

(1) 14, 18

(2) 22, 20

(3) 18, 15

(4) 12, 13

Correct Answer: (1) 14, 18

Solution:

Step 1: Identifying the pattern.

The numbers follow a pattern of increasing by 2 horizontally and vertically. The missing numbers in the final row will continue this pattern, which results in 14 and 18.

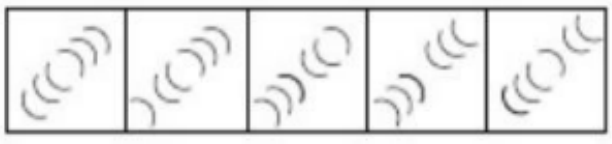
Step 2: Conclusion.

Thus, the missing numbers are 14 and 18.

Quick Tip

In number patterns, identify the common difference between rows and columns to predict missing values.

Q49. What comes next?



Options :

- 
- 
- 
- 

Correct Answer: (2)

Solution:

Step 1: Identifying the pattern.

Based on the sequence of images, the next image in the pattern corresponds to the second option.

Step 2: Conclusion.

Thus, the correct answer is the second option.

Quick Tip

Look for repeating shapes or patterns in image-based questions to predict the next item in the sequence.

Q50. What comes next?

Options :

- 
- 
- 

Correct Answer: (2)

Solution:

Step 1: Identifying the pattern.

By observing the progression of the shapes, we can deduce that the next shape follows the pattern of the second option.

Step 2: Conclusion.

Thus, the correct answer is the second option.

Quick Tip

In shape progression questions, observe the transformations and patterns between shapes to predict the next one.

Language Comprehension

Q51. The reformer must know that what moves people is the authentic life, not mere writing. The newspaper and journals that Tilak and other reformers ran, the books they wrote, sold little, but had enormous effect. Their writing was known to reflect and be just an extension of their exemplary lives. It was the authenticity of their lives which lent weight to their message, to their example. All knew that their lives were an integral whole - they were not moral in public life and lack in private, not vice versa. They were not full of pious thoughts and sacred resolutions within the walls of a temple

A writer who is merely entertaining his readers, even one who is merely informing them, can do what he wants with the rest of his life. But the writer, who sets out to use his pen to

reform public life, cannot afford such dualities. Here is the testimony of one great man - about the influence of another, Lokmanya Tilak.

“I believe that an editor who has anything worth saying and who commands a clientele cannot easily be hushed. He delivered his finished message as soon as he is put underduress. Tilak spoke more eloquently from the Mandalay fortress than through columns of the printed Kesari.

His influence was multiplied thousand fold by his imprisonment and his speech and his pen had acquired much greater power after he was discharged than before his imprisonment. By his death we have been editing his paper without pen and speech through the sacred resolution of the people to realize his life’s dream.

He could possibly have done more if he were here today in flesh preaching his view. Critics like me would perhaps be still finding fault in the expression of this or that. Today, his message rules millions of hearts which are determined to raise permanent living memorial by the fulfillment of his ambition in their lives”.

Complete the following sentence:

Tilak’s messages were most effective _____.

(1) after his death

(2) before his imprisonment

(3) when delivered in speeches

(4) when he delivered them through editorials

Correct Answer: (4) when he delivered them through editorials

Solution:

Step 1: Understanding the context.

The passage discusses the effectiveness of Tilak’s messages through editorials during his time as a leader.

Step 2: Conclusion.

Thus, his messages were most effective when delivered through editorials.

Quick Tip

Editorials are often a powerful medium for delivering a message to a wide audience.

Q52. Which of the following is the result of Lokmanya Tilak's exemplary life?

(1) The newspapers edited by him did not incur monetary loss

(2) He was put in jail at Mandalay

(3) People resolved to fulfill his life's dreams

(4) The books written by him are useful

Correct Answer: (3) People resolved to fulfill his life's dreams

Solution:

Step 1: Identifying the main outcome.

The passage speaks about the influence of Tilak's life on the people, encouraging them to fulfill his dreams.

Step 2: Conclusion.

Thus, the people resolved to fulfill his life's dreams as a result of his exemplary life.

Quick Tip

A person's influence often extends beyond their death, inspiring others to continue their mission.

Q53. Which of the following is the general tendency of critics according to the passage?

(1) To find fault with one or the other expression of a writer

(2) To praise only those writers who they like

(3) To condemn one and all the reformer writers

(4) To justify their criticism

Correct Answer: (1) To find fault with one or the other expression of a writer

Solution:

Step 1: Analyzing the critics' behavior.

The passage highlights that critics are often inclined to find fault with the expression of a writer, regardless of their purpose.

Step 2: Conclusion.

Thus, the general tendency of critics is to find fault with one or the other expression of a writer.

Quick Tip

Critics often focus on both strengths and weaknesses in a writer's work.

Q54. In the context of the passage, a reformer becomes effective if:

(1) he is a journalist with an objective viewpoint

(2) he is an author with an excellent style of writing

(3) he is a person with consistency in his writing and life style

(4) he is good critic of social practices

Correct Answer: (3) he is a person with consistency in his writing and life style

Solution:

Step 1: Understanding the reformer's qualities.

The passage indicates that a reformer becomes effective when he leads a consistent life, both in writing and in lifestyle.

Step 2: Conclusion.

Thus, the consistency in writing and lifestyle is what makes a reformer effective.

Quick Tip

Consistency in both words and actions builds a strong reputation for reformers.

Q55. Which of the following types of writers can be moral in their personal life and lack in public life?

(1) Those who want to reform people
(2) Those who want to entertain people
(3) Those who lead an authentic life
(4) Those whose writing is an extension of their exemplary lives

Correct Answer: (3) Those who lead an authentic life

Solution:

Step 1: Analyzing the writer's moral character.

The passage suggests that those who lead an authentic life are morally grounded in both personal and public life, unlike others who might lack integrity.

Step 2: Conclusion.

Thus, writers who lead an authentic life can be moral in both personal and public aspects.

Quick Tip

Authentic living is a key trait that bridges personal and professional integrity.

Q56. In the context of the passage, which of the following statements about Tilak and the reformers is true?

(1) They were moral in private life but lack in public life
(2) Their influence on people was negligible
(3) Very few people used to read the newspapers even from inside the jail
(4) They were allowed to edit their newspapers even from inside the jail

Correct Answer: (1) They were moral in private life but lack in public life

Solution:

Step 1: Analyzing the reformer's life.

The passage highlights that the reformers, including Tilak, led exemplary personal lives but lacked moral integrity in public.

Step 2: Conclusion.

Thus, they were moral in private life but lacked in public life.

Quick Tip

A balance between private and public integrity is key to being an effective reformer.

Q57. In this question, you are given a sentence, a part of which is underlined. This is followed by four ways of phrasing the underlined part. Select the version that best rephrases the underlined part. We want the teacher to be him who has the best rapport with the students.

(1) We want the teacher to be he.

(2) We want him to be the teacher.

(3) We desire the teacher to be him.

(4) We anticipate the teacher to be him.

Correct Answer: (2) We want him to be the teacher.

Solution:

Step 1: Understanding the sentence.

The sentence needs to be rephrased in a grammatically correct way while maintaining the original meaning. The phrase "We want the teacher to be him" needs to be restructured properly.

Step 2: Conclusion.

The correct way to rephrase the sentence is "We want him to be the teacher."

Quick Tip

Ensure subject and object are used correctly when rephrasing sentences to maintain grammatical integrity.

Q58. The question has a group of sentences marked A, B, C, D, and E. Arrange these to form a logical sequence. (A) but there is some merit in it

(B) as distinct from consumption

(C) the bifurcation of plan and non-plan funds

(D) in so far as it focuses attention on development expenses

(E) in the budget in artificial

(1) (B), (C), (A), (E), (D)

(2) (C), (D), (B), (E), (A)

(3) (C), (E), (A), (B), (D)

(4) (D), (E), (A), (C), (B)

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

Solution:

Step 1: Analyzing the sequence.

We need to find a logical flow of the sentences to make a coherent paragraph. Starting with the bifurcation of funds (C), followed by the distinct categories (B), and explaining the merit in the division (A), we finalize with the budget (E) focusing on development (D).

Step 2: Conclusion.

Thus, the correct sequence is (B), (C), (A), (E), (D).

Quick Tip

Look for logical connectors and phrases that help establish the flow of ideas between sentences.

Q59. Fill in the blank(s) with appropriate word/words. As _____ head of the organisation, he attended social functions and civil meetings, but had no _____ in the formulation of company policy.

(1) hypothetical, vote

(2) titular, voice

(3) nominal, competition

(4) former, pride

Correct Answer: (2) titular, voice

Solution:

Step 1: Understanding the context.

The context indicates that the person is holding a nominal position but does not have an actual role in making decisions, thus ”titular” (referring to a title) and ”voice” (influencing without real power) are the most fitting choices.

Step 2: Conclusion.

The appropriate words are ”titular” and ”voice.”

Quick Tip

In formal writing, understand the distinction between titles and actual responsibilities when filling in the blanks.

Q60. Fill in the blank(s) with appropriate word/words. Confused and _____, Shyam fumbled to make sense of seemingly inconsistent statements, _____ the impatience of his listeners.

(1) philosophical, overlooking

(2) tired, hearing

(3) prostrate, listening

(4) incoherent, oblivious to

Correct Answer: (4) incoherent, oblivious to

Solution:

Step 1: Analyzing the passage.

The context speaks of confusion and lack of clarity, making ”incoherent” a suitable word. ”Oblivious to” fits as it suggests that Shyam was unaware of the growing impatience of the listeners.

Step 2: Conclusion.

Thus, the correct words are ”incoherent” and ”oblivious to.”

Quick Tip

Choose words that reflect the emotional or mental state described in the passage.

Q61. The appropriate meaning of stir up a hornet’s nest would be _____

(A) to mix the good and the bad

(B) to destroy homes and settlements

(C) to create trouble

(D) to quicken an action

Correct Answer: (C) to create trouble

Solution:

The phrase ”stir up a hornet’s nest” means to create trouble or cause trouble, just like disturbing a hornet’s nest will lead to chaos.

Quick Tip

”Stir up a hornet’s nest” refers to creating trouble or causing a disturbance.

Q62. Fill in the blank with appropriate word/words. Harris _____ thirteen pages when his laptop crashed.

(A) is typing

(B) typed

(C) has typed

(D) had already typed

Correct Answer: (D) had already typed

Solution:

The correct tense is past perfect, as Harris had finished typing before the laptop crashed. Thus, ”had already typed” is the correct choice.

Quick Tip

When an action was completed before another action in the past, use the past perfect tense.

Q63. Fill in the blank with appropriate word(s). One who believes in no Government and therefore incites disorder in a state is called _____

(A) a Naxalite

(B) an Autocrate

(C) an Anarchist

(D) a Monarchist

Correct Answer: (C) an Anarchist

Solution:

An anarchist is someone who believes in no government and promotes disorder.

Quick Tip

An anarchist rejects government authority and promotes disorder in society.

Q64. Choose an appropriate synonym for the given word: WREAK

(A) to sting

(B) to twist

(C) to inflict

(D) to sweat

Correct Answer: (C) to inflict

Solution:

”Wreak” means to inflict or cause something, usually harm or damage.

Quick Tip

”Wreak” is often used in the context of causing destruction or harm.

Q65. Ranjini is a Voracious reader. The meaning of the underlined word is:

(A) tenacious

(B) truthful

(C) spacious

(D) ravenous

Correct Answer: (D) ravenous

Solution:

”Voracious” means having a great desire or hunger for something, especially reading or consuming information. It is similar to ”ravenous.”

Quick Tip

”Voracious” refers to a strong desire for something, similar to ”ravenous” for food.

Q66. Radha keeps an open house every weekend to teach yoga. What does the underlined word mean?

(A) Welcomes yoga practitioners

(B) Welcomes all those who are interested

(C) Welcomes selected group of people

(D) Keeps the doors of her house open

Correct Answer: (D) Keeps the doors of her house open

Solution:

”Open house” means to allow anyone interested to visit or join, and in this case, it refers to keeping her house open for anyone interested in yoga.

Quick Tip

”Open house” means allowing public access, often for educational or social purposes.

Q67. Select the word or phrase which is closest to the opposite in meaning to the underlined word. You are advised to show clemency to the defeated enemy.

(A) Cruelty
(B) Mercy
(C) Leniency
(D) Kindness

Correct Answer: (A) Cruelty

Solution:

”Clemency” refers to showing mercy or leniency. The opposite of mercy would be ”cruelty.”

Quick Tip

”Clemency” means kindness or mercy, while ”Cruelty” is the opposite, meaning harshness.

Q68. Rajiv’s utopian idea was entertaining, but not acceptable. What does the underlined word mean?

(A) unworthy idea
(B) imaginary idea

(C) classic idea

(D) big idea

Correct Answer: (B) imaginary idea

Solution:

”Utopian” refers to an idealized or imagined society that may not be practically achievable. Thus, it means an ”imaginary idea.”

Quick Tip

”Utopian” refers to an ideal or impossible idea.

Q69. What do you understand by - FRATRICIDE?

(A) murder of father

(B) murder of brother

(C) murder of a foetus

(D) murder of oneself

Correct Answer: (B) murder of brother

Solution:

”Fratricide” refers to the killing of one’s brother.

Quick Tip

”Fratricide” specifically refers to the killing of a brother.

Q70. Form a meaningful sentence from the given sentences.

(A) It results from a carefully revised plan

(B) Men work together for a cause or purpose

(C) Team work does not just happen

(D) It must be clearly known to them

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

Solution:

The correct order of sentences is (C), (B), (A), (E). This forms a logical flow.

Quick Tip

Arrange sentences in logical order to form a coherent thought or statement.

Q71. In the following sentence, choose the nearest similar meaning word so that the meaning of the sentence may not change. Ritu asked Rashmi not a meddle in her affairs.

(A) enthuse

(B) cross

(C) impose

(D) interfere

Correct Answer: (D) interfere

Solution: The word ”meddle” means to interfere or involve oneself in something that is not one’s concern. The word ”interfere” best matches this meaning.

Quick Tip

To ”meddle” means to interfere in a situation or task, especially without being invited.

Q72. Choose the most suitable word for the given expression. One who cannot die.

(A) Invulnerable

(B) Perpetual

(C) Mortal

(D) Immortal

Correct Answer: (D) Immortal

Solution: ”Immortal” refers to something or someone that cannot die. This term best fits the given expression.

Final Answer:

$$\boxed{Immortal}$$

Quick Tip

”Immortal” refers to the inability to die, often used in myths, literature, and philosophical contexts.

Q73. Choose the correctly spelt word.

(A) Forein

(B) Foriegn

(C) Fariegn

(D) Foreign

Correct Answer: (D) Foreign

Solution: The correct spelling of the word referring to something or someone from another country is ”Foreign.”

Final Answer:

$$\boxed{Foreign}$$

Quick Tip

”Foreign” refers to something that comes from another country or culture.

Q74. New Metro Rail Project was commissioned yesterday at Hyderabad by the State Railway Minister. What is the opposite of the underlined word?

(A) Started

(B) Closed

(C) Finished

(D) Terminated

Correct Answer: (B) Closed

Solution: ”Commissioned” refers to the initiation or start of a project. The opposite of starting a project would be ”closed,” which refers to ending it.

Final Answer:

$$\boxed{Closed}$$

Quick Tip

”Commissioned” refers to the initiation of an event, while ”closed” refers to its conclusion.

Q75. In this question, a word is underlined in the given sentence. For the underlined word, four words are listed below. Choose the word nearest in meaning to the underlined word. The football coach had a sympathetic presence, albeit a commanding one.

(A) Although

(B) Further more

(C) Because

(D) Not only

Correct Answer: (A) Although

Solution: ”Albeit” is a conjunction used to mean ”although,” indicating a contrast between the two parts of the sentence.

Final Answer:

$$\boxed{Although}$$

Quick Tip

”Albeit” is used to introduce a contrast, similar to ”although.”

General Awareness

76. Who wrote the book ”The Paradoxical Prime Minister”?

(A) Khushwant Singh

(B) Vikram Seth

(C) Shashi Tharoor

(D) Arundhati Roy

Correct Answer: (C) Shashi Tharoor

Solution: The book ”The Paradoxical Prime Minister” was written by Shashi Tharoor. It is a critical analysis of the tenure of India’s Prime Minister Narendra Modi. The book provides insight into his leadership style, policies, and his approach to governance.

Quick Tip

Remember to always verify the author’s name when referencing books in your exam or assignments.

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77. Which city houses the headquarters of International Atomic Energy Agency (IAEA), the World’s ‘Atoms for Peace’ organisation set-up in 1957 within the United Nations family?

(A) Tokyo (Japan)

(B) Vienna (Austria)

(C) Geneva (Switzerland)

(D) New York (USA)

Correct Answer: (B) Vienna (Austria)

Solution: The headquarters of the International Atomic Energy Agency (IAEA) is located in Vienna, Austria. IAEA was established to promote peaceful use of nuclear energy and to prevent the spread of nuclear weapons. Vienna serves as the central hub for the agency's operations.

Quick Tip

The IAEA is important for nuclear non-proliferation and the safe use of nuclear technology for peaceful purposes.

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78. Which city is known for its 'Chicken embroidery'?

(A) Lucknow

(B) Pune

(C) Surat

(D) Indore

Correct Answer: (A) Lucknow

Solution: Lucknow is famous for its 'Chicken embroidery', which is also known as Chikan work. This intricate form of hand-embroidery originated in the Mughal era and has become one of the most famous traditional crafts of the region.

Quick Tip

Chikan work from Lucknow is known for its delicate designs and intricate stitching, often using needlework to create floral patterns.

---

79. What do you call the study of inscriptions?

(A) Palaeography

(B) Numismatics

(C) Epigraphy

(D) Archaeology

Correct Answer: (C) Epigraphy

Solution: Epigraphy is the study of inscriptions or written records, typically on durable materials like stone, metal, or clay. It provides important insights into historical events, languages, and cultures.

Quick Tip

Epigraphy is a key tool for historians and archaeologists to understand ancient civilizations and their practices.

---

80. VAIO is the product of which company?

(A) Verizon Associates

(B) Compaq

(C) Dell

(D) Sony

Correct Answer: (D) Sony

Solution: VAIO (Video Audio Integrated Operation) is a brand of Sony, known for its high-quality laptops and electronics. Sony launched the VAIO brand to offer premium laptops with high-end performance and design.

Quick Tip

The VAIO brand was once owned by Sony but was later sold off to Japan Industrial Partners in 2014.

81. Who is the only batsman to score five centuries in a single edition of the ICC World Cup?

(A) Clive Loyd

(B) Rohit Sharma

(C) Virat Kohli

(D) Hardik Pandya

Correct Answer: (B) Rohit Sharma

Solution: Rohit Sharma is the only batsman to score five centuries in a single edition of the ICC World Cup. He achieved this remarkable feat during the 2019 World Cup, setting a new record for the most centuries in a single World Cup tournament.

Quick Tip

Rohit Sharma's consistency and ability to score centuries in high-pressure World Cup matches is a testament to his exceptional batting skills.

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82. The longest circle which can be drawn on the Earth's surface passes through:

(A) Equator

(B) Tropic of Cancer

(C) Arctic circle

(D) Tropic of Capricorn

Correct Answer: (A) Equator

Solution: The longest circle that can be drawn on the Earth's surface is the Equator. The Equator divides the Earth into two equal halves and is situated equidistant from the North and South Poles. It represents the most significant parallel of latitude.

Quick Tip

The Equator is 40,075 km in length and is the only parallel that divides the Earth into two equal hemispheres.

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83. To which field of literature is the 'Booker Prize' awarded every year?

(A) Philosophy

(B) Autobiography

(C) Religion

(D) Fiction

Correct Answer: (D) Fiction

Solution: The Booker Prize, formally known as the Booker Prize for Fiction, is awarded annually for the best original novel written in the English language. It is one of the most prestigious literary awards for fiction.

Quick Tip

The Booker Prize has been awarded annually since 1969 and is considered one of the highest honors for fiction writers.

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84. EXIM Policy of India is prepared by

(A) RBI

(B) SEBI

(C) Ministry of Commerce

(D) Ministry of Finance

Correct Answer: (C) Ministry of Commerce

Solution: The EXIM Policy (Export-Import Policy) of India is prepared by the Ministry of Commerce and Industry. The policy aims to promote international trade and exports and regulate imports in a way that benefits the country's economy.

Quick Tip

The EXIM policy provides guidelines and procedures to enhance exports and regulate imports in India, helping in the economic development.

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85. 'Grapevine' is the term used in relation to

(A) Group Communication
(B) Formal Communication
(C) Informal Communication
(D) E-mail Communication

Correct Answer: (C) Informal Communication

Solution: The term 'Grapevine' refers to informal communication that occurs within an organization or group. It is often used to describe rumors, gossip, and unverified information shared informally among employees or members.

Quick Tip

While informal, the grapevine plays an important role in communication networks, though its reliability may vary.

---

86. Birla Industrial and Technological Museum is located in the state _____.

(A) Bihar
(B) Karnataka
(C) West-Bengal

(D) Maharashtra

Correct Answer: (C) West-Bengal

Solution: Birla Industrial and Technological Museum is located in West Bengal, Kolkata.

Quick Tip

The Birla Industrial and Technological Museum is a prominent museum in Kolkata, West Bengal.

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87. Which is the oldest Veda ?

(A) Atharveda

(B) Yajurveda

(C) Samveda

(D) Rigveda

Correct Answer: (D) Rigveda

Solution: Rigveda is the oldest of all the Vedas, composed around 1500 BCE.

Quick Tip

The Rigveda is the oldest Veda, comprising hymns and mantras.

---

88. The famous hill station 'Kodaikanal' is in _____.

(A) Nilgiri Hills

(B) Cardamom Hills

(C) Palani Hills

(D) Javadi Hills

Correct Answer: (C) Palani Hills

Solution: Kodaikanal is located in the Western Ghats, in the Palani Hills region of Tamil Nadu.

Quick Tip

Kodaikanal is a popular hill station in the Palani Hills, Tamil Nadu.

---

89. Who won the Miss Universe Australia title in 2019 ?

(A) Priya Serrad

(B) Sushmitha Rao

(C) Kalpana Chawla

(D) Preethi Lamba

Correct Answer: (A) Priya Serrad

Solution: Priya Serrad won the Miss Universe Australia 2019 title.

Quick Tip

Priya Serrad is a well-known name in the beauty pageant world.

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90. MDMK is a Political Party, what does it stand for ?

(A) Marumalarchi Dravida Munnetra Kazhagam

(B) Munnetra Dravida Marumalarchi Kazhagam

(C) Makkal Dravida Munnetra Kazhagam

(D) Madras Dravida Munnetra Kazhagam

Correct Answer: (A) Marumalarchi Dravida Munnetra Kazhagam

Solution: MDMK stands for Marumalarchi Dravida Munnetra Kazhagam, a political party in Tamil Nadu.

Quick Tip

MDMK is an influential political party in Tamil Nadu, formed in 1994.

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91. The country which is also known as Persia is _____.

(A) Iraq

(B) Iran

(C) Kuwait

(D) Qatar

Correct Answer: (B) Iran

Solution: Iran was formerly known as Persia until 1935.

Quick Tip

Iran, historically known as Persia, has a rich cultural history.

---

92. How many overs were allowed per side in the inaugural 1975 Cricket World Cup ?

(A) 50

(B) 60

(C) 25

(D) 40

Correct Answer: (B) 60

Solution: In the inaugural 1975 Cricket World Cup, 60 overs per side were allowed.

Quick Tip

The 1975 Cricket World Cup was the first edition of the tournament, played in England.

---

93. Who is the founding member of Muslim League ?

(A) Md. Ali Jinnah

(B) Shaukat Ali

(C) Nawab Khwaja Salimullah

(D) Aga Khan

Correct Answer: (A) Md. Ali Jinnah

Solution: Md. Ali Jinnah is regarded as the founder of the All India Muslim League.

Quick Tip

Jinnah was a pivotal leader in the creation of Pakistan, serving as its first Governor-General.

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94. The bank which merged with Capital First was _____.

(A) IDBI

(B) SBI

(C) ICICI

(D) IDFC

Correct Answer: (D) IDFC

Solution: IDFC Bank merged with Capital First in 2018 to form IDFC First Bank.

Quick Tip

The merger of IDFC Bank and Capital First was an important development in the Indian banking sector.

---

95. _____ is gained when a bullet is fired upwards vertically.

(A) Synergy

(B) Energy

(C) Potential Energy

(D) Kinetic Energy

Correct Answer: (C) Potential Energy

Solution: When a bullet is fired vertically upwards, potential energy increases as it gains height.

Quick Tip

Potential energy is the energy possessed by an object due to its position or condition.

---

96. The length of the longest railway platform in India is _____.

(A) 4412 ft.

(B) 4432 ft.

(C) 4483 ft.

(D) 4492 ft.

Correct Answer: (C) 4483 ft.

Solution: The longest railway platform in India is located at Gorakhpur Junction, which measures 4483 ft in length.

Quick Tip

The length of the platform at Gorakhpur Junction was recognized as the longest in India.

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97. What strait divides Morocco and Spain?

(A) Strait of Gibraltar

(B) Strait of Malacca

(C) Strait of Hormuz

(D) Strait of Bosporus

Correct Answer: (A) Strait of Gibraltar

Solution: The Strait of Gibraltar separates the continents of Europe and Africa and divides Morocco from Spain.

Quick Tip

The Strait of Gibraltar connects the Atlantic Ocean to the Mediterranean Sea and serves as a natural boundary.

---

98. Which Indian has become the first woman in the world to be awarded with the International Maritime Organisation (IMO) award for Exceptional Bravery at sea?

(A) Avani Chaturvedi
(B) Radhika Menon
(C) Bhawana Kanth
(D) P.V. Sindhu

Correct Answer: (B) Radhika Menon

Solution: Radhika Menon became the first woman to receive the International Maritime Organisation award for her exceptional bravery at sea.

Quick Tip

Radhika Menon was recognized for her daring rescue operation at sea, making history as the first female recipient of the award.

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99. 'Siamese Fighting Fish' is the national aquatic animal of which country?

(A) Singapore

(B) Thailand

(C) New Zealand

(D) Australia

Correct Answer: (B) Thailand

Solution: The Siamese Fighting Fish is the national aquatic animal of Thailand, also known as Betta fish.

Quick Tip

The Siamese Fighting Fish is culturally significant to Thailand and is known for its vivid colors and aggressive nature.

---

100. In India, how many banks were nationalised during the Second Round of Nationalization in 1980?

(A) 5 Banks

(B) 6 Banks

(C) 7 Banks

(D) 8 Banks

Correct Answer: (B) 6 Banks

Solution: In 1980, during the second round of nationalization, six major banks were nationalized in India to strengthen the banking sector.

Quick Tip

The second round of nationalization in India aimed at increasing the reach of banking services in rural areas.
