Parmar SSC Live Mock 1 March 29,2025

Q. 1	**Which of the following statements is sufficient to conclude that two triangles are congruent?** **a) These have the same area and same base.** ✗ **b) One side and one angle of both triangles are equal.** ✗ **c) These have two equal sides and the same perimeter** ✓ **d) These have the same base and the same height** ✗
Explanation:	1. Since the 2 sides and Perimeter of triangle is equal, the third side will be equal and hence the triangles will be congruent.

Q. 2	A thief pursued by a policeman was 500 m ahead at the start. If the ratio of the speed of the policeman to that of the thief was 5 : 4, then how far (distance in kilometres) could the thief go before he is caught by the policeman? **a)** 2500 ✗ **b)** 2000 ✗ **c)** 2 ✔ **d)** 2.5 ✗
Explanation:	2. Let speed of policeman and thief be $5x$ and $4x$ respectively. Thief is 500m ahead of policeman at the start. Distance covered by policeman = $y+500$ $\quad\quad$ → 'y' is distance covered by thief before he is caught Distance covered by thief = y $S_{police} = 5x = \dfrac{y+500}{T}$ $S_{thief} = \dfrac{y}{T} = 4x$ ∴ The time will be equal, $\Rightarrow \dfrac{y+500}{5x} = \dfrac{y}{4x} \Rightarrow 4y + 2000 = 5y$ $\quad\quad\quad\quad\quad\quad y = 2000m$ $\quad\quad\quad\quad\quad\quad$ or $\quad\quad\quad\quad\quad\quad \boxed{y = 2\,KM}$ ☀ <mark>PTS WAY</mark> The time will be same for Police and thief. x → distance covered by thief Time = $\dfrac{distance}{speed}$ $\Rightarrow \dfrac{500+x}{5} = \dfrac{x}{4}$ $\Rightarrow \quad x = 2000\,m = 2\,km$ ⚠ Pay attention to the units mentioned in the question

Q. 3	A customer wanted to purchase an item marked for Rs. 10000. Shopkeeper offered two types of discounts, 25% flat discount or successive discounts of 14% and 12%. Which is the better offer for the customers and by how much?
	a) First offer by Rs. 32 ✗
	b) Second offer by Rs. 68 ✗
	c) Second offer by Rs. 32 ✗
	d) First offer by Rs. 68 ✓

Explanation:	3. $D_1 \rightarrow$ that is 25%. $D_2 \rightarrow$ Successive Discount 14% & 12%. $\quad D_2 = -14 - 12 + \frac{(14)(12)}{100} = -26 + 1.68 = 24.32\%$ $\therefore D_1$ is better discount.

Q. 4	**X, Y, Z are three points on a plane with XY=18cm, YZ= 21 cm, and XZ = 39 cm. The number of circles that travel through points X, Y, Z is:**
	a) 0 ✓
	b) 3 ✗
	c) 2 ✗
	d) 1 ✗

Explanation:	4. Since $XY + YZ = 18 + 21 = 39cm = XZ$ The given 3 points are collinear, hence 0 circle passes through X, Y, Z.

Q. 5	Replace * by the smallest digit so that 720*53* is divisible by 6.
	a) 4 ✗
	b) 2 ✓
	c) 3 ✗
	d) 1 ✗
Explanation:	5. $720{*}53{*} \rightarrow$ divisible by 6 for divisibility by 6, it should be divisible by 2 and 3. Hence, last digit will be even. Therefore, 2 options are eliminated. option 1) 4 $\rightarrow$ 7204534 $\rightarrow$ Not divisible by 3 2) ② $\rightarrow$ 7202532 $\rightarrow$ divisible by 3. (✓)

Q. 6	A line from point A is drawn that is tangent to the circle at point B. A secant is also drawn from point A to the circle intersecting it at points C and D. If AB = 36 cm and AC = 27 cm, then what is the ratio between AB and CD?
	a) 7:12 ✗
	b) 7:11 ✗
	c) 12:7 ✓
	d) 3:4 ✗
Explanation:	6. $AB^2 = AC \cdot AD$ AB = tangent AC, AD = Secant $\Rightarrow 36 \times 36 = AC \times AD$ $\Rightarrow AD = 48$ CD = AD - AC = 48 - 27 = 21 cm $\dfrac{AB}{CD} = \dfrac{36}{21} = \dfrac{12}{7}$
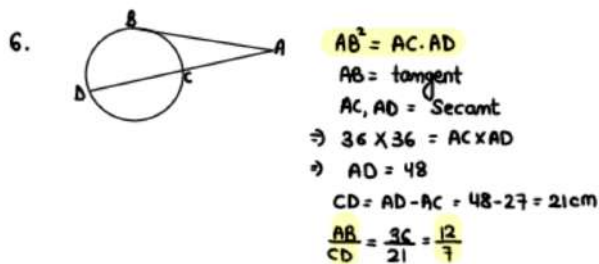
Q. 7	In a collection of rare coins, there is one gold coin for every four non-gold coins. If 80 more gold coins are added to the collection, the ratio of the number of gold coins to that of non-gold coins will be 2:3. The total number of coins in the collection will now be ?
	a) 80 ✗
	b) 160 ✗
	c) 240 ✗
	d) 320 ✔
Explanation:	7. Let Gold coin be 'x'. Non-gold coin be '4x' $\Rightarrow \dfrac{x+80}{4x} = \dfrac{2}{3}$ $\Rightarrow 3x + 240 = 8x$ $5x = 240$ $x = 48$ ∴ Total Coins = $5x + 80$ = $240 + 80$ = 320

Q. 8	A vendor started selling vegetables at ₹ 10 per kg, but couldn't find buyers at this rate. So he reduced the price to ₹ 8.5 per kg, but uses a faulty weight of 680 g instead of 1 kg. Find the percentage change in the actual price.
	a) 72% profit ✗
	b) 42.2% lose ✗
	c) 25% profit ✔
	d) 20% loss ✗
Explanation:	8. Percentage change $= \dfrac{\dfrac{10}{1000} - \dfrac{8.5}{680}}{\dfrac{10}{1000}} \times 100\% = 25\%$ Profit

Q. 9

If $a^3 + 3a^2 + 3a + 32 = 4$, then find the value of $a^2 + 2a$?

a) 8 ✓

b) 15 ✗

c) 3 ✗

d) 0 ✗

Explanation:

9. $a^3 + 3a^2 + 3a + 32 = 4$

$\Rightarrow a^3 + 3a^2 + 3a + 1 + 31 = 4$

$\Rightarrow (a+1)^3 = 4 - 31$

$\Rightarrow (a+1)^3 = -27$

$\Rightarrow a+1 = -3$

$\Rightarrow a = -3 - 1 = -4$

Now, $a^2 + 2a = (-4)^2 + 2(-4)$

$= 16 - 8$

$= 8$

Q. 10	A man is standing on the deck of a ship, which is 20m above water level. He observes the angle of elevation of the top of a lighthouse as 45^0 and the angle of depression of the base of the lighthouse as 30^0. Find the height of the light house
	a) $20(\sqrt{3} + 3\sqrt{3})$ ✗
	b) $20\sqrt{3}(\sqrt{3} + 1)$ ✗
	c) $20(\sqrt{3} - 1)$ ✗
	d) $20(\sqrt{3} + 1)$ ✓
Explanation:	

10.

AE = BC = 20m.

In $\triangle ABC$, $\tan 30° = \frac{1}{\sqrt{3}} = \frac{20}{AB}$ ⟹ AB = $20\sqrt{3}$

In $\triangle ABD$, $\tan 45° = \frac{BD}{AB}$ ⟹ $1 = \frac{BD}{20\sqrt{3}}$ ⟹ BD = $20\sqrt{3}$

∴ Height of Lighthouse = CD
⟹ CB + BD
= $20 + 20\sqrt{3}$
= $20(1+\sqrt{3})$ or $20(\sqrt{3}+1)$
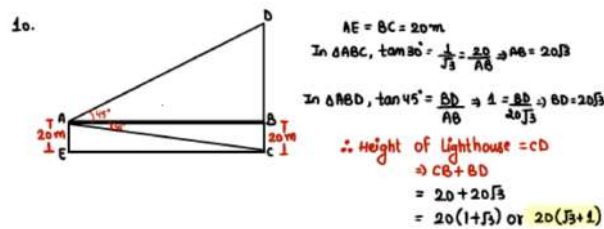
Q. 11	If the equations $18x + (k - 2)y + 3 = 0$ and $(k - 2)x + 8y - 5 = 0$ ($k > 0$) are parallel, then find the value of $k^2 + 6$?
	a) 202 ✓
	b) 190 ✗
	c) 175 ✗
	d) 200 ✗
Explanation:	

11. If the eqⁿ are parallel
$\frac{a_1}{a_2} = \frac{b_1}{b_2}$ ⟹ $\frac{18}{k-2} = \frac{k-2}{8}$ ⟹ $(k-2)^2 = 18 \times 8$
⟹ $k-2 = 12$ ⟹ $k = 14$

∴ $k^2 + 6 = (14)^2 + 6 = 196 + 6 = 202$

Q. 12	The difference between compound interest and simple interest on a sum for 2 years at 25000 principal is Rs. 1000. Then, calculate the compound interest for 3 years at 20000 principal?
	a) 18200 ✗
	b) 34500 ✗
	c) 14560 ✔
	d) 33100 ✗

Explanation:	

12. Difference between S.I and C.I for 2years

$\dfrac{PR^2}{10^4}$ = diff. between SI and C.I ⟶ (Note: this formula is valid for 2years only)

⇒ $\dfrac{25000 \times R^2}{10^4}$ = 1000

⇒ R = 20%

C.I = $P\left(1+\dfrac{R}{100}\right)^3 - P$ = $20,000\left(1+\dfrac{20}{100}\right)^3 - 20,000$

= 14560

Q. 13	Pipes P, R and T can fill a tank in 25, 50 and 100 minutes respectively. Initially, pipes R and T are kept open for 10 mins, and then pipe R is shut while pipe P is opened. Pipe T is closed 15 minutes before the tank overflows. How much time (in minutes) will it take to fill the tank if the three pipes work in this pattern?
	a) 30 ✗
	b) 27 ✓
	c) 33 ✗
	d) 42 ✗

Explanation:

Efficiency

P → 25 min ⟶ 4
R → 50 min ⟶ 100 unit ⟵ 2
T → 100 min ⟶ 1

Total work

∴ R+T Worked for 10 min.
Work done → 3×10 = 30 units

∴ Remaining work = 100−30 = 70 unit

∴ P+T did the remaining work and P did work alone for last 15 min.

∴ Work done by P in 15 min = 15×4 = 60 unit

∴ Remaining work = 70−60 = 10 unit

→ 10 unit work is done by P+T
Time taken = $\frac{10}{5}$ = 2 min.

∴ Total time taken = 10+15+2
= 27 minutes.

Q. 14	The cost price of an article is Rs. 2850. If it sells at 25% profit and 5% discount, then what will be the marked-up price of the article?
	a) 3562.5 ✗
	b) 3750 ✓
	c) 3707.5 ✗
	d) 3075 ✗

Explanation:	14. After giving 5% discount, the article is sold at 25% profit. $\Rightarrow \frac{95}{100}$ (MP) $= \frac{125}{100}$ (CP) $\Rightarrow \frac{19}{20}$ (MP) $= \frac{5}{4} \times 2850$ MP = 3750

Q. 15	Solve the equation: $\cos^2(1) + \cos^2(5) + \cos^2(9) + \ldots + \cos^2(85) + \cos^2(89)$
	a) 22 ✗
	b) 22.5 ✗
	c) 11 ✗
	d) 11.5 ✓

Explanation:	15. $\cos^2 1 + \cos^2 5 + \cos^2 9 + \ldots + \cos^2 85 + \cos^2 89$ $\cos^2 89 = \sin^2(90-1)$ 1st and last Term, $\cos^2 1 + \cos^2 89 \Rightarrow \cos^2 1 + \sin^2 1 = 1$ Total No. of Terms. $l = a + (n-1)d$ last term, first term, common diffrence. $\Rightarrow 89 = 1 + (n-1)4$ $\Rightarrow n = 23$ terms Middle term will be $\cos^2 45° = \frac{1}{2}$ Rest 22 terms will be clubbed $[\sin^2\theta + \cos^2\theta = 1]$, sum = 11 Total = 11 + 0.5 = 11.5

Q. 16	There is a 64 ltr. mixture of milk and water. The ratio of milk and water in this mixture is 5 : 3. How many litres of water should be added to this mixture so that the resultant mixture has 50% water in it? **a)** 8 ✗ **b)** 6 ✗ **c)** 12 ✗ **d)** 16 ✔
Explanation:	16. $M:w = 5:3$ $M:w = \left(\dfrac{5}{8}:\dfrac{3}{8}\right) \times 64$ $\Rightarrow M:w = 40:24$ $\dfrac{w}{M} = \dfrac{1}{1} \Rightarrow \dfrac{24+x}{40} = \dfrac{1}{1} \Rightarrow x=16$

Q. 17	The radii of the two cones are in the ratio of 5: 3 and their volumes are in the ratio of 20 : 21. What is the ratio of their heights? **a)** 100:63 ✗ **b)** 500:189 ✗ **c)** 12:35 ✔ **d)** 63:100 ✗
Explanation:	17. Volume of Cone $= \dfrac{1}{3}\pi r^2 h$ $\dfrac{V_1}{V_2} = \left(\dfrac{r_1}{r_2}\right)^2 \times \dfrac{h_1}{h_2} \Rightarrow \dfrac{20}{21} = \left(\dfrac{5}{3}\right)^2 \times \dfrac{h_1}{h_2}$ $\dfrac{h_1}{h_2} = \dfrac{20 \times 3 \times 3}{21 \times 5 \times 5} = \dfrac{12}{35}$ $\therefore \boxed{\dfrac{h_1}{h_2} = \dfrac{12}{35}}$

Q. 18	$11^{15} + 11^{14} + 11^{16}$ is divisible by:
	a) only 7 ✗
	b) only 31 ✗
	c) 7 and 11 ✓
	d) 7,11 and 31 ✗
Explanation:	18. $11^{15} + 11^{14} + 11^{16}$ $\Rightarrow 11^{14} [11+1+11^2]$ $\Rightarrow 11^{14} [133]$ $\Rightarrow$ 133 is divisible by 7,19 11^{14} is divisible by 11.

Q. 19	Suresh's expenditure and savings are in the ratio of 3 : 1. His income increases by 25%. If his savings increase by 40%, then by how much percentage does his expenditure increase? **a)** 20% ✔ **b)** 15% ✘ **c)** 25% ✘ **d)** 16% ✘
Explanation:	19 Exp : Saving = 3:1 Salary = Exp. + Saving = 3x + x = 4x Salary ↑ by 25% = $\frac{5}{4} \times 4x = 5x$ Saving ↑ by 40% = $\left(1 + \frac{40}{100}\right)x = \frac{7}{5}x$ Exp. = Salary - Saving = 5x - $\frac{7x}{5}$ = $\frac{18x}{5}$ ⟹ % change in Exp. = $\frac{\frac{18x}{5} - 3x}{3x} \times 100\%$ = $\frac{3x}{5 \times 3x} \times 100\% = 20\%$

Q. 20	Simplify the following expression. [{85 − 30 ÷ 2 of 3} + (15−**3**)÷ 4] + 450÷ 5 of (3 ×2)× (6 of 2) + 3 of 19 **a)** 300 ✗ **b)** 310 ✗ **c)** 320 ✓ **d)** 330 ✗

Explanation:	20. [{85-30÷2 of 3} + (15-3)÷4] + 450÷5 of 6x2)x (6of2)+3 of 19
	    85-30÷6 =12÷4 6 12
	     = 85-5 = 3
	     = 80
	⇒ [80+3]+450÷5 of 6x12+3 of 19
	⇒ 83+450÷30x12+57
	⇒ 83+15x12+57
	⇒ **320**
	
	BODMAS
	B → Bracket
	O → of
	D → Division
	M → Multiplication
	A → Addition
	S → Subtraction.

Q. 21	A and B starts a business with investment of Rs. 14000 and Rs. 21000 respectively. A invests for 6 months and B invests for one year. If the total profit at the end of year is Rs.6400 then what is the share of B? **a)** 4800 ✓ **b)** 1600 ✗ **c)** 3200 ✗ **d)** 4000 ✗

Explanation:	21. A : B
	     14000 : 21000
	       6 : 12
	
	$\dfrac{A}{B} = \dfrac{14 \times 6}{21 \times 12} = \dfrac{1}{3}$
	
	Share of B = $\dfrac{3}{3+1} \times 6400 = 4800$

Q. 22

The following table shows scores in different subjects obtained by Shubham in school. Study the table and answer the question that follows.

Subject	Marks obtained	Total marks
English	75	100
Hindi	62	90
Science	56	80
Mathematics	90	120
IT	38	50

In which subject did he score the highest marks (in %) ?

a) Mathematics ✗

b) English ✗

c) IT ✔

d) Hindi ✗

Explanation:

22. Eng. % $\frac{75}{100} \times 100 = 75\%$

Hindi % $\frac{62}{90} \times 100 = 68.9\%$

Sci. % $\frac{56}{80} \times 100 = 70\%$

Maths % $\frac{90}{120} \times 100 = 75\%$

IT % $\frac{38}{50} \times 100 = 76\%$

Q. 23	In a circular race of 1200 m, A and B start running in the same direction at the same time from the same point at the speeds of 16 m/s and 8 m/s, respectively. After how much time will they meet next?
	a) 100 sec ✗
	b) 50 sec ✗
	c) 75 sec ✗
	d) 150 sec ✔
Explanation:	23. A and B are running in same direction, their relative speed will be subtracted. 16 m/s − 8 m/s = 8 m/sec. Time = $\dfrac{Distance}{Speed}$ = $\dfrac{1200m}{8 m/sec}$ = 150 Sec.

Q. 24	If $\dfrac{sec\ a+tan\ a}{sec\ a-tan\ a} = \dfrac{13}{7}$, then find the value of Cosec a ?
	a) 10/3 ✅
	b) 3/10 ❌
	c) 20/7 ❌
	d) 7/13 ❌

Explanation:

24. $\dfrac{Sec\ a + tan\ a}{Sec\ a - tan\ a} = \dfrac{13}{7}$

$$\dfrac{\frac{1}{Cosa} + \frac{Sina}{Cosa}}{\frac{1}{Cosa} - \frac{Sina}{Cosa}} = \dfrac{13}{7}$$

$$\dfrac{1+Sina}{1-Sina} = \dfrac{13}{7}$$

$\Rightarrow\ 7 + 7\ Sina = 13 - 13\ Sina$

$20\ sina = 6$

$Sin\ a = \dfrac{6}{20}$

$\therefore\ Cosec\ a = \dfrac{20}{6} = \dfrac{10}{3}.$

⭐ PTS WAY

$\dfrac{Sec\ a + tan\ a}{Sec\ a - tan\ a} = \dfrac{13}{7}$

$Sec\ a + tan\ a = 13$ ———(i)
$Sec\ a - tan\ a = 7$ ———(ii)
From eqⁿ (i) & (ii) we get
$Sec\ a = 10$ & $tan\ a = 3$

$\Rightarrow\ cos\ a = \dfrac{1}{10}$ $\qquad \dfrac{Sina}{cos\ a} = 3$

$\Rightarrow\ sin\ a = 3\ cos\ a = \dfrac{3}{10}$

$\Rightarrow\ cosec\ a = \dfrac{10}{3}$

Q. 25	The average of the squares of the first 24 natural numbers is :
	a) 202.17 ✗
	b) 204.17 ✔
	c) 200.17 ✗
	d) 206.17 ✗

Explanation:	25. Sum of square of 1st 'n' Natural no's $= \dfrac{n(n+1)(2n+1)}{6}$ Avg. of Sq^2 of 1st 24 Natural no's $= \dfrac{24(24+1)(48+1)}{6 \times 24}$ $= \dfrac{25}{6} \times 49 = 204.17$.

Q. 26	What will come in place of the question mark (?) in the following equation, if '+' and '–' are interchanged and '×' and '÷' are interchanged? $2525 \times 5 - 491 \div 3 + 642 = ?$
	a) 1331 ✗
	b) 1316 ✗
	c) 1313 ✗
	d) 1336 ✔

Explanation:	$2525 \times 5 - 491 \div 3 + 642$ After Interchanging the signs $2525 \div 5 + 491 \times 3 - 642$ Apply BODMAS $(2525 \div 5) + (491 \times 3) - 642$ $= 505 + 1473 - 642$ $= 1336$

| Q. 27	47 is related to 138 by certain logic. Following the same logic, 56 is related to 165. To which of the following is 99 related, following the same logic?
	(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
	a) 296 ✗
	b) 196 ✗
	c) 294 ✓
	d) 194 ✗
Explanation:	47 x 3 – 3 = 138 ; 141-3 = 138
	56 x 3 – 3 = 165; 168 - 3 = 165
	99 x 3 – 3 = 294 ; 297-3 = 294

Q. 28

Six letters A, U, T, H, O and R are written on different faces of a dice. Two positions of this dice are shown in the figures below. Find the letter on the face opposite to A.
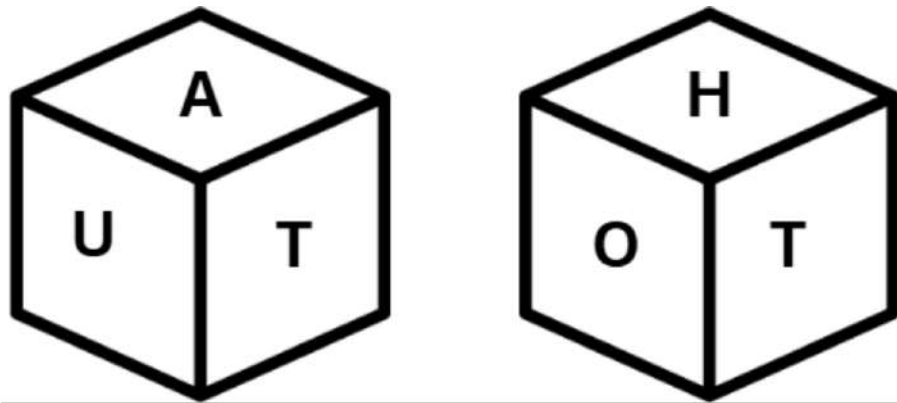
a) R ✗

b) U ✗

c) H ✔

d) O ✗

Explanation:

T	U	A
T	O	H

Opposite of U is O

Opposite of A is H

Opposite of T is R

Q. 29	In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. In three of the four pairs, the same pattern is applied and hence they form a group. Select the number-pair that DOES NOT belong to this group.
	(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding/ subtracting/multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
	a) 101 – 326 ✗
	b) 225 – 450 ✗
	c) 96 – 331 ✓
	d) 72 – 297 ✗
Explanation:	101 + 225 = 326
	225 + 225 = 450
	96 + 235 = 331
	72 + 225 = 297
	Clearly , option 3 is different.

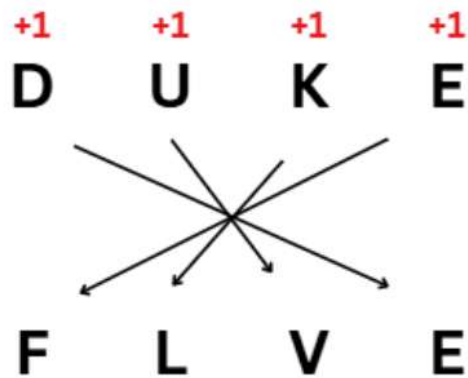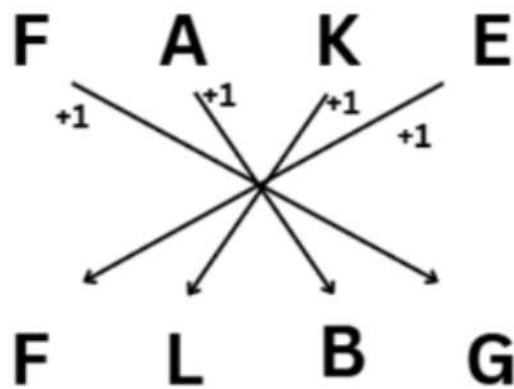|	
Q. 30	In a certain code language, 'FAKE' is written as 'FLBG' and 'ZONE' is written as 'FOPA'. How will 'DUKE' be written in that language? **a)** FOLV ✗ **b)** FLVE ✓ **c)** ELEV ✗ **d)** FLEV ✗
Explanation:	

Q. 31	The question contains pairs of words that are related to each other in a certain way. Three of the following four word pairs are alike as these have the same relationship and thus form a group. Which word pair is the one that DOES NOT belong to that group?
	(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)
	a) BRICK – Cuboid ✗
	b) BANGLE – Ring ✗
	c) DICE - Cube ✗
	d) FUNNEL - Trapezium ✓

Explanation:	Shape of BRICK is Cuboidal
	Shape of BANGLE is Ring Shaped
	Shape of DICE is Cubic
	Shape of Funnel is Cone (Not Trapezium)

Q. 32	The position of how many letters will remain unchanged if each of the letters in the word 'AUTOPSY' is re-arranged in the English alphabetical order from left to right?
	a) One ✗
	b) Four ✗
	c) Two ✓
	d) Three ✗

Explanation:	A U T O P S Y
	A O P S T U Y

Q. 33	What will come in the place of '?' in the following equation, if '+' and '−' are interchanged and '×' and '÷' are interchanged?
	$91 - 13 \div 7 + 1820 \times 10 = ?$
	a) 01 ✗
	b) 00 ✔
	c) 10 ✗
	d) 20 ✗
Explanation:	After Interchanging the signs $91 + 13 \times 7 - 1820 \div 10$ Applying BODMAS $91 + (13 \times 7) - (1820 \div 10)$ $= 91 + 91 - 182$ $= 0$

Q. 34	Select the option in which the numbers share the same relationship as that shared by the given pair of numbers. (144, 169) (529, 554)
	(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 − Operations on 13 such as adding/ deleting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
	a) 289 − 324 ✗
	b) 361 − 386 ✔
	c) 441 − 516 ✗
	d) 729 − 744 ✗
Explanation:	$169 - 144 = 25$ $554 - 529 = 25$ $386 - 361 = 25$

Q. 35

Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

M

pGtR3zL

N

a) ⅃zƐЯʇƏd ✗

b) ⅃zƐЯʇƏq ✓

c) ⅃zƐЯʇƏq ✗

d) ⅃zƐЯʇƏq ✗

Explanation:

M

pGtR3zL | ⅃zƐЯʇƏq

N

Q. 36	Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.
	APE: ZKV :: COL: XLO :: BGT:?
	a) YTG ✔
	b) YGT ✘
	c) YGG ✘
	d) YTT ✘
Explanation:	Opposite of A is Z ;
	Opposite of P is K;
	Opposite of E is V;
	Following the same logic
	Opposite of B is Y;
	Opposite of G is T;
	Opposite of T is G

Q. 37	Three statements are given followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

No laptop is a pen.
All laptops are phones.
Some phones are books.

Conclusions:

    I. All phones can never be pens.
    II. No laptop is a Book.
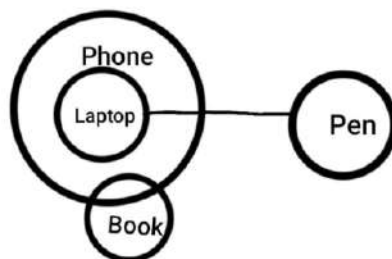   **III. At least some Books are Stationery.**

a) Only 2 & 3 Follow   ✗

b) Only 1 Follow   ✓

c) All 1,2 and 3 Follow   ✗

d) Only 1 and 3 Follow   ✗ |
| **Explanation:** |

I.Conclusion 1: All phones can never be pens.

This statement is definitely true because there is no relationship between laptops and pens, and laptops are a part of phones.
Thus, all phones can never be pens.

II.Conclusion 2 : No laptop is a Book :- This Statement Is not Definitely True as there is a possible relation between book and laptop

III.Conclusion 3 :- At least some Books are Stationery :- There is no mention of stationary in statement , therefore it is a false statement |

Q. 38

Select the correct mirror image of the given figure when the mirror is placed at MN as shown.

M

p c G F d

N

a) b F Ɔ c q ✗

b) b Ⅎ Ɔ c q ✗

c) b Ⅎ Ɔ c q ✓

d) d Ⅎ Ɔ c q ✗

Explanation:

M

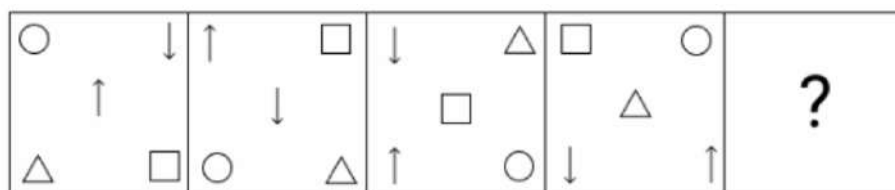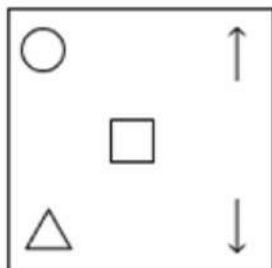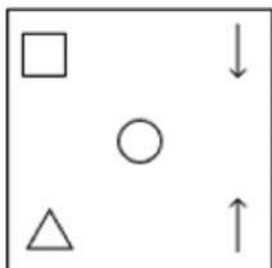p c G F d | b Ⅎ Ɔ c q

N

Q. 39

Identify the option figure that when put in place of the question mark (?) will logically complete the series.

a) ✗
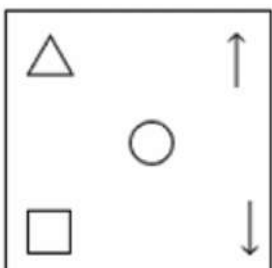
b) ✗

c) ✔

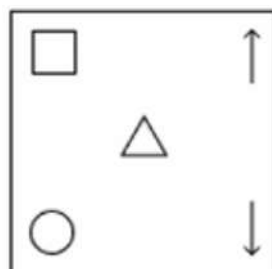d) ✗

Explanation:
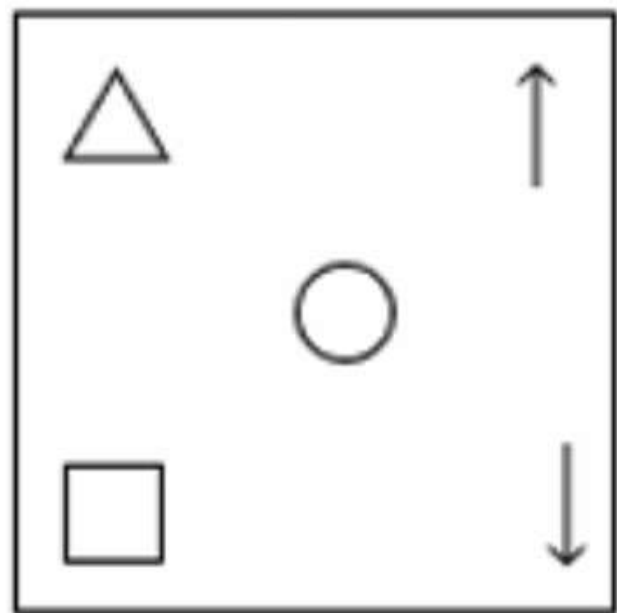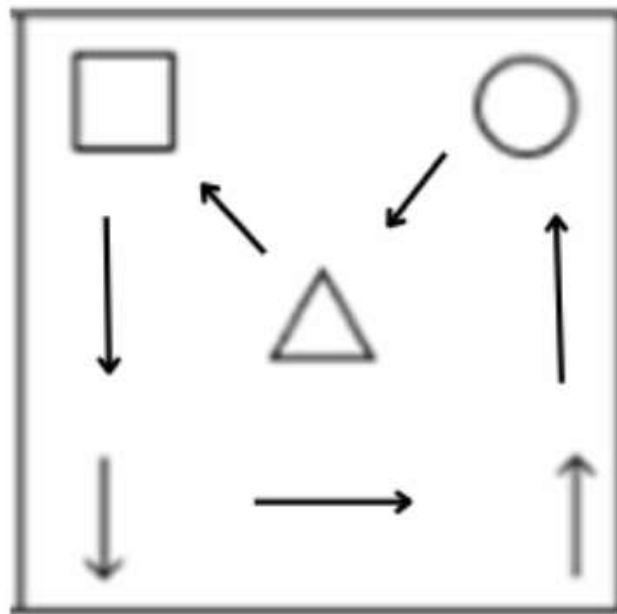
Q. 40

Which of the four options will replace the question mark (?) in the following series?

BY 1, CX 4, DW 9, EV 16, ?

a) UF 20 ✗

b) FU 20 ✗

c) FU 25 ✓

d) UF 25 ✗

Explanation: Opposite Letters are placed together , Square of Natural Numbers .

Q. 41	Select the option that represents the letters that when placed from left to right in the blanks below will complete the letter series.
	F_K_TS_L_K_S_LK_T_F_ _KTS
	a) LKFKTFKSLK ✓
	b) LFKKTFFSKL ✗
	c) LKKKTFKSLK ✗
	d) LKFKTFKSKL ✗
Explanation:	Pattern is : F L K K T S
	F L K K T S F L K K T S F LK K T S F L K K T S

Q. 42

Identify the figure from the given options, which when put in place of the question mark (?), will logically complete the series.

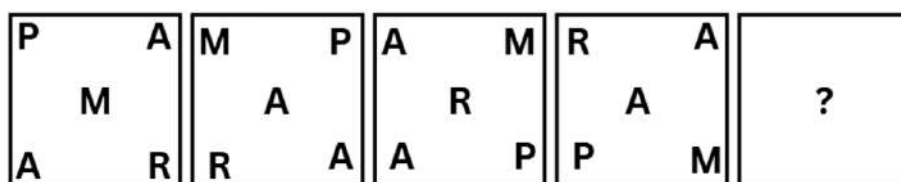| P A	M P	A M	R A	
M	A	R	A	?
A R	R A	A P	P M	

a)
P		R
	A	
M		A

✗

b)
A		R
	P	
M		A

✔

c)
P		M
	A	
R		A

✗

d)
A		R
	A	
M		P

✗
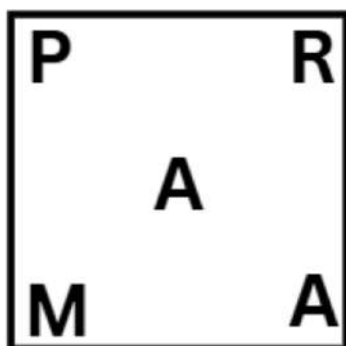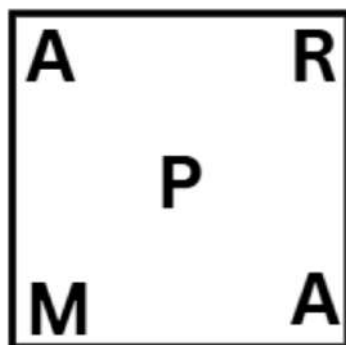
Explanation:	

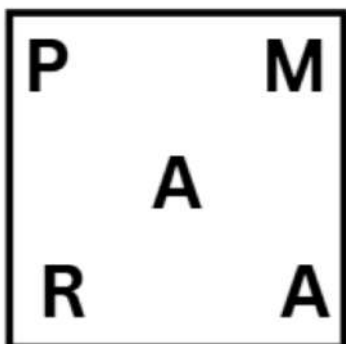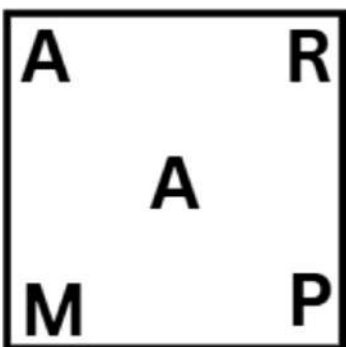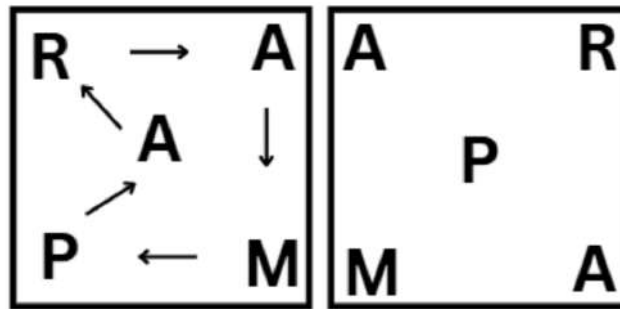| **Q. 43**	Six Letter Combinations ZA, YB, XC, WD, VE and UF are written on different faces of a dice. Three positions of this dice are shown in the figure. Find the number on the face opposite to WD.

a) VE ✗

b) ZA ✔

c) XC ✗

d) UF ✗

Explanation:	If two Dice have two common faces, the Third Side will be opposite to each other.

Q. 44

How many triangles are there in the given figure?
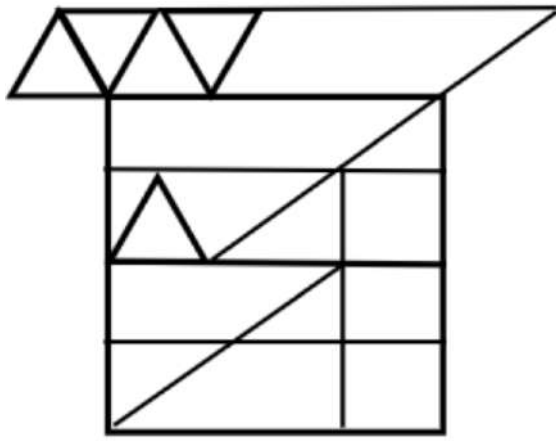
a) 12 ✗

b) 14 ✓

c) 13 ✗

d) 15 ✗

Explanation:
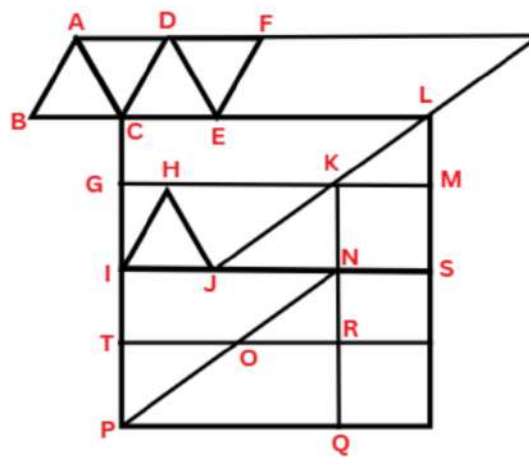
PTO	ABC	KLM	HIJ
PIN	CDE	JKN	GHI
NOR	DEF	LJS	
PNQ	ACD	JHK	

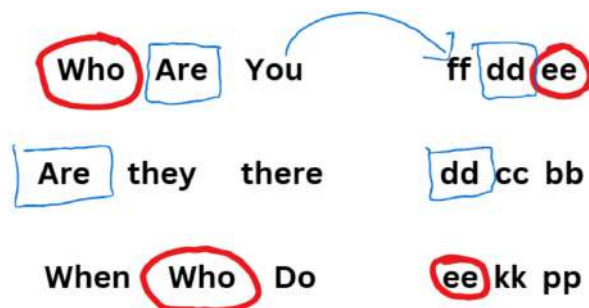| Q. 45	In a certain code language, 'Who Are You' is written as 'ff dd ee'; 'Are They There' is written as 'dd cc bb' and 'When Who Do' is written as 'ee kk pp'. How is 'You' written in that language?
	a) ff ✔
	b) dd ✘
	c) bb ✘
	d) kk ✘
Explanation:	

In the explanation:

Who Are You → ff dd ee

Are they there → dd cc bb

When Who Do → ee kk pp

| Q. 46 | Three statements are given followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

Some pencils are erasers.
Some erasers are pens.
All pens are books.

Conclusions:

    I. All pencils can never be book.
   II. Some erasers are books.
  III. All pencils being pen is a possibility.

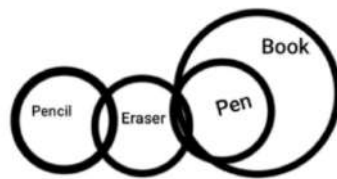**a)** Only conclusion I follows ✗

b) Both II and III conclusion follow ✔

c) Only conclusion III follows ✗

d) Both I and II conclusion follow ✗ |
|---|---|
| **Explanation:** |

   I. Conclusion 1 : All pencils can never be book:- This statement is False, As there can be a relation between Pencil and Book.
  II. Conclusion 2 : Some erasers are books :- This Statement is True, as in all cases there is a relation between eraser and Book.
 III. Conclusion 3 :- All pencils being pen is a possibility:- This Statement is True. As shown in the figure, all pencils can be pens. |

Q. 47

Which of the following terms will replace the question mark (?) in the given series?
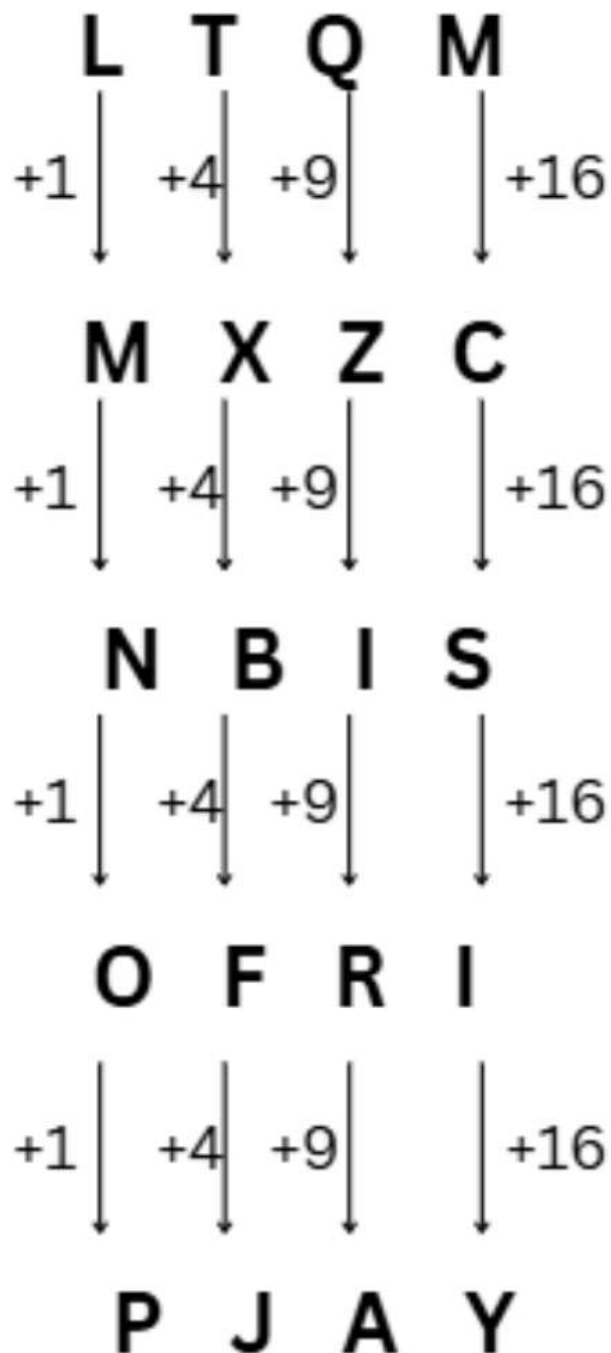
LTQM, ?, NBIS, OFRI, PJAY

a) MWCZ ✗

b) MXZC ✓

c) MAAC ✗

d) MXXV ✗

Explanation:

L T Q M

+1 | +4 | +9 | | +16

M X Z C

+1 | +4 | +9 | | +16

N B I S

+1 | +4 | +9 | | +16

O F R I

+1 | +4 | +9 | | +16

P J A Y

Q. 48

In a certain code language,

'A + B' means 'A is the mother of B',

'A – B' means 'A is the father of B',

'A $ B' means 'A is the son of B',

'A % B' means 'A is the sister of B',

'A / B' means 'A is the wife of B' and

'A = B' means 'A is the brother of B'.

Which of the following means D is the Grand daughter of K?

    i. A + K / J – P = D
    ii. J % P = K + A = D
    iii. K + A / P – D % J
    iv. D + K = A / P – J

a) i   ✗

b) iv   ✗

c) ii   ✗

d) iii   ✓

Explanation:

$$\bar{K}$$

$$\downarrow$$

$$\bar{A} = \overset{+}{P}$$

$$\downarrow$$

$$\bar{D} - J$$
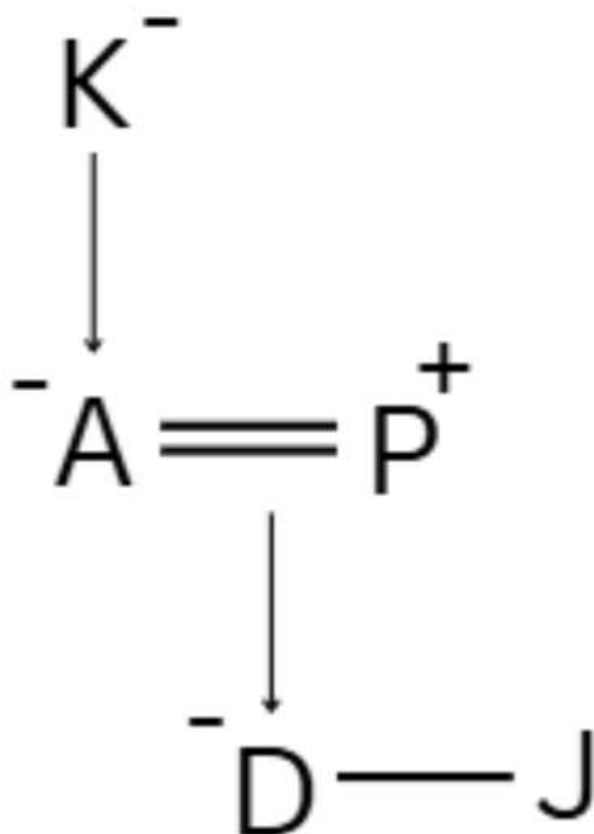
Signs	Represents
+	Male
-	Female
=	Married
_	Siblings
→	Generation

Q. 49	23 is related to 391 following a certain logic. Following the same logic, 79 is related to 1343. To which of the following is 53 related, following the same logic?
	(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed
	a) 910 ✗
	b) 901 ✔
	c) 1001 ✗
	d) 801 ✗
Explanation:	23 x 17 = 391 79 x 17 = 1343 53 x 17 = 901

Q. 50	Which of the following numbers will replace the question mark (?) in the given series? 1, 8, 58, 466, ? , 41962 , 461584
	a) 4196 ✔
	b) 4496 ✗
	c) 4691 ✗
	d) 4466 ✗
Explanation:	1 x 6 + 2 = 8 8 x 7 + 2 = 58 58 x 8 + 2 = 466 466 x 9 +2 = 4196 4196 x 10 + 2 = 41962 41962 x 11 + 2 = 461584

| Q. 51 | Select the most appropriate ANTONYM of the given word.

GRADUAL

a) Abrupt ✓

b) Regular ✗

c) Slow ✗

d) Gentle ✗ |
|---|---|
| Explanation: | **Correct Answer: 1. Abrupt**

Gradual (धीरे-धीरे होने वाला): Happening slowly or in small steps.

Abrupt (अचानक होने वाला): Sudden and unexpected, which is the opposite of gradual.

Other Options:

Regular (नियमित): Consistent or recurring.

Slow (धीमा): Similar to gradual.

Gentle (नरम/कोमल): Soft or mild. |

Q. 52	Select the most appropriate option to fill in the blank.
	Work and domestic_____made Kajal short-tempered.
	a) pressures ✓
	b) gravities ✗
	c) weights ✗
	d) forces ✗
Explanation:	**Correct answer option : (1) pressure**
	• The given sentence talks about Kajal's angry behavior and the cause behind it. The word in the blank should explain what caused Kajal to become short-tempered.
	• **Pressures** means worries, difficulties, or stress caused by having too much to handle.
	Other options
	Gravities (गंभीरता): Refers to seriousness or importance.
	Weights (भार): Refers to physical or metaphorical heaviness.
	Forces (बल): Refers to physical power or strength.

Q. 53	The following sentence has been divided into parts. One of them contains an error. Select the part that contains the error from the given options.
	You must avoid riding in a crowded bus/ or travelling in a metro/ during rush hour/ as both are quiet unpleasant experiences.
	a) as both are quiet unpleasant experiences ✔
	b) during rush hour ✘
	c) or travelling in a metro ✘
	d) You must avoid riding in a crowded bus ✘
Explanation:	**Correct Answer: as both are quiet unpleasant experiences** • The word **"quiet"** is incorrect in this sentence. **"Quiet"** means silent or calm. The correct word should be **"quite,"** which means very or to a significant degree. • The sentence talks about avoiding crowded transportation during rush hour because the experiences are very unpleasant. **Correct Sentence:** You must avoid riding in a crowded bus or travelling in a metro during rush hour as both are quite unpleasant experiences.

Q. 54	Select the INCORRECTLY spelt word.
	a) Sincere ✘
	b) Grievance ✘
	c) Liesure ✔
	d) Seize ✘
Explanation:	**Correct Answer: 3. Liesuré** • The correct spelling is **"Leisure"** (अवकाश, फुर्सत). **Meaning**: Free time or relaxation period. **Correct Spellings of Other Words:** • 1. **Sincere**: Honest, genuine (ईमानदार, सच्चा). • 2. **Grievance**: A complaint or feeling of injustice (शिकायत). • 3. **Seize**: To take hold of something quickly and firmly (पकड़ना, कब्जा करना).

Q. 55	Select the option that expresses the given sentence in passive voice.
	The sunrays burned my face.
	a) My face is burned by the sunrays. ✗
	b) My face has been burned by the sunrays. ✗
	c) My face is being burned by the sunrays. ✗
	d) My face was burned by the sunrays. ✓
Explanation:	**Correct Answer: 4. My face was burned by the sunrays.** • Passive Voice Structure: **Object + was/were + past participle of the verb + by + subject** Active voice to passive voice: Object (My face) becomes the subject in passive voice. Verb (burned) changes to was burned to maintain past tense. Subject (The sunrays) follows by.

Q. 56	Select the option that will improve the underlined part of the given sentence. In case no improvement is needed select 'No improvement required'.
	Fierce competition <u>against</u> restaurants has driven up the prices.
	a) along ✗
	b) No improvement required ✗
	c) among ✓
	d) through ✗
Explanation:	**Correct answer option (3) among** • **Against** implies opposition or conflict. • **Among** is the correct preposition to use when referring to competition between members of a group. The sentence should read: "Fierce competition among restaurants has driven up the prices."

Q. 57	Select the most appropriate meaning of the following idiom. **To walk on air** **a) To be completely free** ✗ **b) To feel very depressed** ✗ **c) To be very rich** ✗ **d) To be very happy** ✓
Explanation:	**Correct answer option (4) To be very happy** The idiom **"to walk on air"** means to **be very happy**. • The image of "walking on air" evokes a feeling of lightness and elation, suggesting extreme happiness and excitement.

Q. 58	Select the most appropriate meaning of the given idiom. **Want to curl up and die** **a) Too tired from physical labour** ✗ **b) Want to die comfortably** ✗ **c) Feel terribly ashamed and sorry** ✓ **d) Unable to sleep well** ✗
Explanation:	**Correct answer option (3)** The idiom **"want to curl up and die"** means to feel terribly ashamed and sorry. • **"curling up and dying"** suggests a desire to disappear or cease to exist due to overwhelming feelings of shame, embarrassment, or regret.

Q. 59	**The following sentence has been divided into parts. One of them contains an error. Select the part that contains the error from the given options.** **Lack of required/ vitamins and minerals/ lead against/ several complications/ in the human body.** a) **lead against** ✓ b) **Lack of required** ✗ c) **several complications** ✗ d) **in the human body** ✗
Explanation:	**Correct Answer: lead against** • The sentence should be in the correct tense. Since **"lack"** is a singular subject (lack of vitamins and minerals), the verb should be in the singular form. Therefore, **"lead"** should be changed to **"leads"**. **Corrected sentence:** Lack of required vitamins and minerals leads to several complications in the human body.

Q. 60	**Select the option that expresses the given sentence in indirect speech.** **"Read the instructions before you start making the dish," Deepa's mother said to her.** a) **Deepa's mother told her to read the instructions before she started making the dish.** ✓ b) **Deepa's mother told to her to read the instructions before you start making the dish.** ✗ c) **Deepa's mother said her to read the instructions before she start making the dish.** ✗ d) **Deepa's mother told her to read the instructions before you had made the dish.** ✗
Explanation:	**Correct Answer: 1.** Deepa's mother told her to read the instructions before she started making the dish. • In indirect speech, we change the direct command **"Read the instructions…"** into **"told her to read..."** to report what was said. • The verb **"start"** in direct speech changes to **"started"** in indirect speech.

Q. 61	Select the most appropriate ANTONYM of the given word.
	INVADE
	a) Surrender ✓
	b) Attack ✗
	c) Seize ✗
	d) Assault ✗

Explanation:	**Correct Answer is : option 1 - Surrender**
	ANTONYM of the word **"INVADE"** is **Surrender**.
	• **Invade**: To enter and occupy a foreign country by military force.
	• **Surrender**: To cease resistance to an enemy or opponent.
	The other options (**Attack, Seize, Assault**) are all synonyms of **"Invade,"** meaning to use force against.

Q. 62	Select the option that can be used as a one-word substitute for the given group of words.
	A person who listens to someone's private conversation without them knowing
	a) Infiltrator ✗
	b) Eavesdropper ✓
	c) Spy ✗
	d) Secret agent ✗

Explanation:	**Correct answer option (2)**
	• **Eavesdropper**: Someone who secretly listens to a private conversation.
	The other options have different meanings:
	• **Infiltrator**: Someone who secretly enters an organization or group to gather information.
	• **Spy**: A person employed by a government to secretly collect information in a foreign country.
	• **Secret agent**: Someone who works secretly for a government or organization.

Q. 63	**Select the most appropriate meaning of the given idiom.**
	Full of beans
	a) Full of cowardice ✗
	b) Full of energy ✓
	c) A dish made of French beans ✗
	d) Astoreroom full of vegetables ✗
Explanation:	**Correct Answer is – option 2**
	The idiom **"full of beans"** means full of energy
	• The phrase **"full of beans"** is often used to describe someone who is lively, enthusiastic, and brimming with energy.

Q. 64	**Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No improvement.**
	The money collected <u>by the students of this school</u> was deposited in the Prime Minister's fund.
	a) by the students of schools ✗
	b) from the student from this school ✗
	c) No improvement ✓
	d) by the students at this school ✗
Explanation:	**Correct Answer: 3. No improvement**
	Why not the other options?
	1. **"by the students of schools"** - Incorrect, as it refers to students from multiple schools.
	2. **"from the student from this school"** - Incorrect, as it uses "student" (singular) instead of "students" (plural).
	3. **"by the students at this school"** - Acceptable, but "of this school" is more precise and commonly used in formal writing.

Q. 65	Select the wrongly spelt word.
	a) Laudable ✗
	b) Laughable ✗
	c) Lamentable ✗
	d) Liabel ✓

| Explanation: | **Correct Answer: 4. Liabel**

The correct spelling is **"Liable"** (उत्तरदायी, जिम्मेदार).

Meaning: Legally responsible or likely to do something.

1. **Laudable**: Praiseworthy (प्रशंसनीय).

2. **Laughable**: Ridiculous or silly (हास्यास्पद).

3. **Lamentable**: Regrettable or very bad (शोकजनक) |
|---|---|

| Q. 66 | Select the most appropriate word to fill in the blank.

Last year there was an increase_____the number of road accidents on the Eastern Expressway. |
|---|---|
| | a) at ✗ |
| | b) in ✓ |
| | c) to ✗ |
| | d) with ✗ |

| Explanation: | **Correct Answer: 2. In**

The word **"increase"** is typically followed by **"in"** when referring to a rise or growth in quantity or numbers.

1. **at**: Incorrect, as **"at"** indicates a specific location or point.

2. **to**: Incorrect, as **"to"** indicates direction or destination.

3. **with**: Incorrect, as it implies accompaniment.

Correct Sentence: Last year there was an increase in the number of road accidents on the Eastern Expressway. |
|---|---|

Q. 67	Select the most appropriate option to fill in blank.
	It is difficult for him to_____all the comforts to his family in this small income.
	a) provided ✗
	b) provide ✓
	c) providing ✗
	d) provides ✗
Explanation:	**Correct Answer: 2. provide**
	• The verb **"to"** is followed by the base form of the verb (infinitive).

Q. 68	Select the antonym of the given word.
	GRIM
	a) Pleasant ✓
	b) Gloomy ✗
	c) Severe ✗
	d) Harsh ✗
Explanation:	**Correct Answer: 1. Pleasant**
	Grim means serious, stern, or depressing (गंभीर, कठोर, उदासजनक).
	"Pleasant," means enjoyable, cheerful, or agreeable (सुखद, आनंददायक).
	Why not the other options?
	2. **Gloomy**: Similar to grim, meaning sad or depressing (उदास).
	3. **Severe**: Similar to grim, meaning harsh or intense (कठोर).
	4. **Harsh**: Similar to grim, meaning unpleasantly rough or cruel (कटु, कठोर).

Q. 69	**Select the most appropriate meaning of the given idiom.**
	A hot potato
	a) A tasty snack ✗
	b) An offensive remark ✗
	c) A memorable thing ✗
	d) A controversial issue ✓
Explanation:	**Correct Answer: 4. A controversial issue**
	• The idiom **"A hot potato"** refers to a controversial or sensitive topic that is difficult to deal with and often avoided because it may cause disagreement or trouble.
	Example: The issue of corruption in politics is a hot potato that many leaders prefer to avoid.

Q. 70	**Find out the spotted part. If there is no error in any part of the sentence, choose no error**
	He is one of students who have supported us in our hardship days.
	a) He is ✗
	b) One of students ✓
	c) Who have supported us in our hardship days ✗
	d) No error ✗
Explanation:	**Correct Answer: 2. One of students**
	• The phrase **"one of students"** is incorrect because after "one of," a plural noun with an article is required.
	Correct Sentence: He is one of the students who have supported us in our hardship days.
	• **"One of"** always refers to a **single person or thing** from a group, and **"the"** is used to specify that group.

Q. 71	In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.
	Man-made fibre is fibre whose chemical composition, structure, and properties are significantly modified during the manufacturing process. Man-made fibres.....(1).....spun and woven into a large.....(2).....of consumer and industrial products, ...(3).....garments such as shirts, scarves, and hosiery; home furnishings.....(4).....as upholstery, carpets, and drapes; and.....(5).....parts such as tire cord, flame-proof linings, and drive belts.
	Select the most appropriate option to fill in blank number 1.
	a) will be ✗
	b) are ✓
	c) is ✗
	d) be ✗
Explanation:	**Correct Answer: "are"** • The subject **"Man-made fibres"** is **plural**, so the verb should also be plural. Therefore, **"are"** is the correct option.

Q. 72	In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.
	Man-made fibre is fibre whose chemical composition, structure, and properties are significantly modified during the manufacturing process. Man-made fibres.....(1).....spun and woven into a large.....(2).....of consumer and industrial products, ...(3).....garments such as shirts, scarves, and hosiery; home furnishings.....(4).....as upholstery, carpets, and drapes; and.....(5).....parts such as tire cord, flame-proof linings, and drive belts.
	Select the most appropriate option to fill in blank number 2.
	a) extent ✗
	b) number ✓
	c) figure ✗
	d) total ✗
Explanation:	**Correct Answer: number**
	• The word **"number"** it refers to a quantity or variety of things, which is describing different types of consumer and industrial products.

Q. 73	In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.
	Man-made fibre is fibre whose chemical composition, structure, and properties are significantly modified during the manufacturing process. Man-made fibres.....(1).....spun and woven into a large.....(2).....of consumer and industrial products, ...(3).....garments such as shirts, scarves, and hosiery; home furnishings.....(4).....as upholstery, carpets, and drapes; and.....(5).....parts such as tire cord, flame-proof linings, and drive belts.
	Select the most appropriate option to fill in blank number 3.
	a) wrapping ✗
	b) including ✔
	c) showing ✗
	d) counting ✗

| Explanation: | **Correct Answer: including**

• The word **"including"** introduces specific examples of the consumer and industrial products mentioned earlier. |

Q. 74	In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.
	Man-made fibre is fibre whose chemical composition, structure, and properties are significantly modified during the manufacturing process. Man-made fibres.....(1).....spun and woven into a large.....(2).....of consumer and industrial products, ...(3).....garments such as shirts, scarves, and hosiery; home furnishings.....(4).....as upholstery, carpets, and drapes; and.....(5).....parts such as tire cord, flame-proof linings, and drive belts.
	Select the most appropriate option to fill in blank number 4.
	a) much ✗
	b) such ✓
	c) more ✗
	d) so ✗
Explanation:	**Correct Answer: such** • The word **"such"** is used to introduce examples, describing specific items like upholstery, carpets, and drapes.

Q. 75	In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.
	Man-made fibre is fibre whose chemical composition, structure, and properties are significantly modified during the manufacturing process. Man-made fibres.....(1).....spun and woven into a large.....(2).....of consumer and industrial products, ...(3).....garments such as shirts, scarves, and hosiery; home furnishings.....(4).....as upholstery, carpets, and drapes; and.....(5).....parts such as tire cord, flame-proof linings, and drive belts.
	Select the most appropriate option to fill in blank number 5.
	a) industrialist ✗
	b) industrialised ✗
	c) industrial ✓
	d) industry ✗

Explanation:	**Correct Answer: industrial** • The word **"industrial"** it describes parts used in industrial applications, like tire cord, flame-proof linings, and drive belts.

Q. 76	Which of the below is a psychological disorder of refusal to eat food, caused by under- nutrition?
	a) Bulimia Nervosa ✗
	b) Anorexia Nervosa ✓
	c) Marasmus ✗
	d) Kwashiorkor ✗

Explanation:	**Option 2 is the right answer.** • **Anorexia Nervosa** - characterised by self-starvation and weight loss resulting in low weight for height and age. • **Bulimia Nervosa** - an eating disorder that causes you to eat large amounts of food at one time. • **Marasmus** - a deficiency of all macronutrients: carbohydrates, fats, and protein. (Mostly in the children of age group of 3 - 9 months) • **Kwashiorkor** - a disease marked by severe protein malnutrition and bilateral extremity swelling. (Mostly in the children from age group between 3-5 years)

Q. 77	**What is the trade-strategy, which India adopted in the first-seven Five-Year Plans?**
	a) Inward-looking trade strategy ✔
	b) Partially outward-looking trade strategy ✘
	c) Partially inward-looking trade strategy ✘
	d) Outward-looking trade strategy ✘

| **Explanation:** | **Option 1 is the right answer.**
• India adopted the **inward-looking trade** strategy, also known as import substitution, during the first seven Five-Year Plans.
• The Planning Commission of India was set up in 1950 that prepared the Five-Year Plan.
• The Five-Year Plans not only specify the objectives to be attained in the 5 years of a plan but also what is to be achieved over a period of 20 years. This long-term plan is called "**perspective plan**".

1st Five Year Plan (1951 - 1956):
• Focused on the agriculture sector, including investment in dams and irrigation.
• **Allocation of 3 Dams**:
  ○ Bhakra Nangal Dam {India's largest dam}
  ○ Hirakud Dam.
  ○ Nagarjuna Sagar Dam.
• Based on **Harrod Domar Model**.
• 5 IIT'S and 1 University grant Commission was setup.
• Target - 2.1% and we achieved - 3.6%.

2nd Five Year Plan (1956 - 1961) :
• Focus on Industrialization → Development of heavy industries like steel, cement, and machine-building.
• 3 Steel Plants Setup-
  ○ Bhilai in Chattisgarh with the help of Russia.
  ○ Rourkela in Odisha with the help of Germany.
  ○ Durgapur in West Bengal with the help of UK.
• **Mahalanobis Model** → Prioritized capital goods industries to boost long-term economic growth.
• Target- 4.5%, Achievement - 4.27%

3rd Five Year Plan (1961-66):
• Focused on **Self Reliant** and **Self Generative Economy**.
• The Green Revolution is introduced.
• It was affected by the Indo-Sino war , famine and Indo-Pak war.
• **Institution setup**- CACP (1965), IDBI (1964), UTI (1963), FCI (1965).
• Target - 5.6%, Achievement-2.4%.

Plan holidays (1966-1969) |

Q. 78	**PM FASAL BIMA YOJANA was launched in which year?**
	a) 2014 ✗
	b) 2015 ✗
	c) 2016 ✓
	d) 2017 ✗

Explanation:	**Option 2 is the right answer.**
	• The Pradhan Mantri Fasal Bima Yojana launched by Prime Minister Narendra Modi on **13 February 2016**.
	
	## Important Government Schemes for 360° Revision-
	
	1. **Pradhan Mantri Jan Dhan Yojana (PMJDY) – 2014**
	  ○ Financial inclusion scheme for bank accounts, insurance, and pension.
	2. **Atal Pension Yojana (APY) – 2015**
	  ○ Pension scheme for unorganized sector workers.
	3. **Pradhan Mantri Ujjwala Yojana (PMUY) – 2016**
	  ○ Provides LPG connections to BPL households.
	4. **Pradhan Mantri Awas Yojana (PMAY) – 2015**
	  ○ Affordable housing scheme for urban & rural poor.
	
	• Pradhan Mantri Kisan Samman Nidhi scheme was launched - Feb 2019

Q. 79	**Atmanirbhar Bharat Rojgar Yojana was launched in which year?**
	a) 1 October 2020 ✓
	b) 2 October 2020 ✗
	c) 1 October 2021 ✗
	d) 2 October 2021 ✗
Explanation:	**Option 1 is the right answer.** • **Launched by Government of India** on **1st October 2020.** • **Objective:** To **boost employment** in the formal sector and incentivize employers for hiring new employees after the **COVID-19 pandemic**. **Pradhan Mantri Rojgar Protsahan Yojana (PMRPY) (2016)-** • **Objective:** To encourage employers to **generate new employment** by covering **EPF (Employee Provident Fund) contributions**. • **Benefit:** Government pays **8.33% of EPF** for new employees for 3 years. • **Target Group:** Workers earning **less than ₹15,000 per month**.

| Q. 80 | Select the correct alternative on the given statements based on Ashoka's Lion capital and India's State Emblem.

Statement I: In the original Ashoka's Lion Capital, there are four lions mounted back-to- back on a circular abacus that itself rests on a bell-shaped lotus.

Statement II: The State Emblem is an adaptation of the Lion Capital of Ashoka at Sarnath in which the bell-shaped lotus was omitted.

a) Neither Statement I nor Statement II is true. ✗

b) Both Statement I and Statement II are true. ✗

c) Only Statement I is true. ✓

d) Only Statement II is true. ✗ |
|---|---|
| **Explanation:** | **Option 3 is the right answer.**
- Only statement I is correct as the bell shaped lotus is not omitted.
- The State emblem, adopted by the Government of India on 26 January 1950, only three lions are visible, the fourth being hidden from view.
- The capital has four Asiatic lions seated back to back. Abacus (drum on the bell base) has the depiction of a chakra (wheel) in all four directions and a bull, a horse, an elephant and a lion between every chakra.
- Each chakra has **24 spokes** in it. |

| Q. 81 | In the context of a consumption function for an economy, if MPC = 0.6, then what is the likely value of MPS?

a) 0.16 ✗

b) 0.36 ✗

c) -0.6 ✗

d) 0.4 ✓ |
|---|---|
| **Explanation:** | **Option 4 is the right answer.**
- MPC + MPS = 1
- MPS = 1 - MPC = 1 - 0.60 = 0.40
  - Where (**MPC - Marginal Propensity to consume**), (**MPS - Marginal Propensity to save**) |

Q. 82	Six rights guaranteed by Article 19 can not be suspended if emergency is declared on the following ground :
	1. War
	2. External aggression
	3. Armed rebellion
	4. Internal disturbance
	a) 2 and 3 both ✗
	b) 1 and 2 both ✗
	c) 3 only ✓
	d) 2, 3 and 4 only ✗

Explanation:	**Option 3 is the right answer.**
	• The **44th Amendment Act** laid out that Article 19 can only be suspended when the **National Emergency is laid on the grounds of war or external aggression and not in the case of armed rebellion.**
	• **Grounds for National Emergency (Article 352)**:
	  ○ War
	  ○ External aggression
	  ○ Armed rebellion (Inserted by 44th Amendment Act, 1978, replacing "internal disturbance")
	  ○ Internal disturbance X (NOT a ground since 1978)
	• **Types of Emergencies in India:**
	  ○ **National Emergency** (Article **352**): Due to war, external aggression, or armed rebellion.
	    ▪ 1962 (China war)
	    ▪ 1971 (Pakistan war)
	    ▪ 1975 (Internal Disturbances)
	  ○ **State Emergency** (Article **356**): President's Rule in states.
	  ○ **Financial Emergency** (Article **360**): Economic instability (0 times)
	
	#June 25, The Day Emergency Was Imposed In 1975, Declared As **'Samvidhaan Hatya Diwas'**

Q. 83	When and where was the first Wimbledon tournament held?
	a) 1887, Church Road site, Wimbledon ✗
	b) 1877, Worple Road Site, Wimbledon ✓
	c) 1887, Worple Road Site, Wimbledon ✗
	d) 1888, Church Road site, Wimbledon ✗

Explanation:	**Option 2 is the right answer.**
	• The first Wimbledon tournament was held in 1877.
	• It is the **oldest tennis tournament** in the world.
	• It is played on the outer grass-court till 1877.
	• The four Grand Slam tennis tournaments-
	   ○ **Australian Open** – January (Hard Court)
	   ○ **French Open (Roland Garros)** – May-June (Clay Court)
	   ○ **Wimbledon** – June-July (Grass Court)
	   ○ **US Open** – August-September (Hard Court)
	• Other tennis tournaments - Davis Cup (Men), Billie Jean King Cup (Women), Masters 1000 (Men) & WTA 1000 (Women),

Q. 84	Who among the following is the author of the book 'The House of Blue Mangoes'?
	a) David Davidar ✓
	b) Sekhar Bandyopadhyay ✗
	c) Durjoy Data ✗
	d) Arvind Adiga ✗
Explanation:	**Option 1 is the right answer.** **Other famous Authors and Books -** • **Anandmath** - Bankim Chandra Chatterjee • **The Guide** - R.K. Narayan • **Gitanjali** - Rabindranath Tagore • **The Origin of Species** - Charles Darwin • **The Alchemist** - Paulo Coelho • **Wings of Fire** - A.P.J. Abdul Kalam

| Q. 85 | Which country has become the first country to lose all its glaciers amidst climate change?

a) Venezuela ✓

b) Denmark ✗

c) Sweden ✗

d) Switzerland ✗ |
|---|---|
| **Explanation:** | **Option 1 is the right answer.**
Venezuela has become the first country to lose all its glaciers amidst climate change.
Some important Climate Agreements :-
- **VIENNA CONVENTION, 1985:** for protection of ozone layer
- **MINIMATA CONVENTION, Japan:** related to mercury poisoning
- **STOCKHOLM CONVENTION, 2001:** related to POP (persistent organic pollutants)
- **MONTREAL CONVENTION:** phase out CFC's->> HFCs->> Kigali amendment
- **BASAL CONVENTION, 1989:** to control trans boundary dumping of hazardous waste.
- **EARTH SUMMIT, 1992:** Rio de Janeiro, Agenda 21 |

| Q. 86 | Which of the following is correctly matched?
  1. Jamali Quamali Mosque : Delhi
  2. Laxmi Vilas Palace : Gujarat

a) 1 only ✗

b) 2 Only ✗

c) Both 1 and 2 ✓

d) None ✗ |
|---|---|
| **Explanation:** | **Option 3 is the right answer.**
Both statements are correct.
- **Grand trunk road** - Sher Shah Suri
- **Purana Quila** - Sher Shah Suri
- **Moti Masjid (Lahore)** - Jahangir
- **Moti Masjid (Agra)** - Shah Jahan
- Moti Masjid (Delhi) - Aurangzeb
- **Humayun's Tomb – Delhi** (Built by '**Bega Begum**'- Wife of Humayun, 1570).
- **Gol Gumbaz – Karnataka** (Largest dome in India, 1656). |

Q. 87	Which of the following processes occurs during decomposition in soil?
	a) Defragmentation ✗
	b) Humification ✓
	c) Oxidation ✗
	d) Crystallisation ✗
Explanation:	**Option 2 is the right answer.** • Humification is processes that occur during **decomposition in soil**. **Humification:** • Formation of **humus** (dark organic matter) from decomposed plant and animal remains. • **Increases soil fertility** and water retention **Oxidation:** • Breakdown of **organic matter** by reacting with oxygen. • Helps release **Carbon Dioxide (CO_2) and nutrients** into the soil. **Important point for your SSC Exam:-** • The bacteria primarily responsible for nitrogen fixation in the soil, forming a symbiotic relationship with leguminous plants, is **Rhizobium**.

Q. 88	The birth anniversary of Lord Jhulelal of the Sindhi community is also known as _____.
	a) Cheti Chand ✗
	b) Jamshedi Navroj ✓
	c) Chaliho Sahib ✗
	d) Ulambana ✗
Explanation:	**Option 2 is the right answer.** • **Cheti Chand -** Aka Jhulelal Jayanti,Celebrated as the **birth anniversary of Lord Jhulelal**, the **patron saint of Sindhis**. Falls on **Chaitra Shukla Dwitiya** (March–April). Marked as **Sindhi New Year**. • **Jamshedi Navroz** – Persian New Year (celebrated by Parsis). • **Chaliho Sahib** – 40 day Sindhi fasting festival dedicated to Jhulelal. • **Ulambana** – Buddhist festival related to ancestor worship.

Q. 89	**Which of the following is a Satellite Port?**
	    1. Haldia
	    2. Nhava Sheva
	    3. Tuticorn
	
	a) 1 and 2 ✔
	
	b) 2 and 3 ✘
	
	c) 1 and 3 ✘
	
	d) All ✘

Explanation:	**Option 1 is the right answer.** **Some important ports-** • **Shyama Prasad Mukherjee Port** also known as **Kolkata Port** - Oldest port (est. in 1870). • **Kandla Port** (Deen dayal Upadhyay port)- Tidal port • **Haldia port** - Riverine port • **Vishakapatnam** - Deepest Landlock port • **Tuticorn port** is also known as **VO Chidambaranar port** • **Tamil Nadu** has maximum number of ports.

Q. 90	With which of the following relief sculptures were the walls of the great Stupa of Amaravati in the Lower Godavari region adorned?
	a) Alto-relievo ✗
	b) Freestanding ✗
	c) Bas relief ✓
	d) Sunken relief ✗
Explanation:	**Option 3 is the right answer.** • The walls of the Great Stupa of **Amaravati** were adorned with bas relief sculpture, located in Andhra Pradesh, India. • The stupa was built in the 2nd century BCE during the Satavahana dynasty. **Some Important points for your SSC Exam-** **Parts of a Stupa-** • Anda: Hemispherical dome • Torana: Gateway • Medhi: Pedestrial Path • Vedika: Railings **Important Stupas:-** • Kesariya- Bihar (largest in India) • Dhamek - Sarnath, UP – Marks Buddha's first sermon. • Ramabhar - Kushinagara, UP • Sanchi - Madhya Pradesh– Built by Ashoka. • Borobudur – Indonesia **Symbols in Buddhism:-** • Lotus- Birth/Janma • Horse - House abandon /Mahabhinishkramana. • Bodhi tree- Enlightenment/Nirvana • Wheel -1st Sermon / Dharmachakrapravartana. • Stupa - Death(Mahaparinirvana).

Q. 91	India aims to establish its own permanent space station called 'Bharatiya Space Station' over the next 25 years (ISRO) has set a target to launch the first module of this station by?
	a) 2047 ✗
	b) 2030 ✗
	c) 2028 ✓
	d) 2035 ✗

Explanation:	**Option 3 is the right answer.** • India's space ambitions include the development of a space station (Bharatiya Antariksh Station) by 2035 and Indian Landing on the Moon by 2040. • The first module of BAS will be ready to launch by 2028. **India's Major Space Missions:** • **Gaganyaan (2025):** India's first human spaceflight mission. • **Chandrayaan-3 (2023):** Successful soft landing on the Moon's south pole. (The landing site is now known as **Shiv Shakti Point**) • **Aditya-L1 (2023):** India's first solar mission. • **Shukrayaan-1 (Upcoming):** Venus exploration mission. **#Tiangong (China):** China's permanent space station.

Q. 92	**Which of the following has the highest salinity?**
	a) Great Salt Lake ✗
	b) Lake Van ✓
	c) Red Sea ✗
	d) Dead Sea ✗

Explanation:	**Option 2 is the right answer.** • **Lake Van** - Is the largest lake of Turkey has an average salinity of 330 parts per thousand. • **Red Sea** - Its average salinity is 40 parts per thousand. • **Dead Sea** - The Dead Sea is also called the **Salt Sea**. It is bordered by Jordan in the east and Palestine and Israel to the west. It has an average salinity of 238 parts per thousand. • **Great salt lake** is located in - **Utah state of USA** and has salinity of 50-270 parts per thousand.

Q. 93	At what latitude does easterly stream blow over peninsula India in the summer months?
	a) 34° N ✗
	b) 24° N ✗
	c) 14° N ✓
	d) 25° N ✗

Explanation:	**Option 3 is the right answer.**
	- **An easterly jet stream**, called the sub-tropical easterly jet stream blows over peninsular India, approximately over 14°N during the summer months.
	- In summer, the subtropical **westerly jet streams** move north of the Himalayas with the apparent movement of the sun.
	- **Jet Streams:** They are high-speed winds that blow in Upper Troposphere (9-13 km altitude) that influence Northern Plains, this causes winter rainfall by bringing Western Disturbances (known as "**Mahawat**" in Rajasthan).
	- **Western Cyclonic Disturbances:** Cyclonic storms from the Mediterranean Sea and Caspian Sea bring winter rainfall.
	Some key points for SSC Exam :
	- •The term **"Monsoon"** is derived from an Arabic word **"Mausim"** meaning seasonal reversal of winds.
	- **The Inter-Tropical Convergence Zone (ITCZ)** is a low-pressure zone located at the equator where trade winds converge and air tends to ascend.
	- It is located around **20°N-25°N** latitudes (over the Gangetic plain) in July month and is sometimes called the **monsoon trough.**

Q. 94	**During ancient India in Tamil region, rich land owners were known as ?**
	a) Uzhavur ✗
	b) Adimai ✗
	c) Kadaisiyar ✗
	d) Vellalar ✓
Explanation:	**Option 4 is the right answer.** • In the Tamil region, **large landowners** were known as **Vellalar.** • **Ruling class -** Arasar • **Vaishiyar -** Traders • **Ordinary ploughmen** were known as **Uzhavar.** • Landless labourers, including slaves, were known as **Kadaisiyar** • **Adimai:** Slaves or bonded laborers.

Q. 95	**Which of the following rulers of Delhi Sultanate is known for developing Water Canal System?**
	a) Alauddin Khalji ✗
	b) Md Bin Tughluq ✗
	c) Firoz Shah Tughluq ✓
	d) Iltutmish ✗
Explanation:	**Option 3 is the right answer.** • The Sultan of Delhi who is reputed to have built the biggest network of canals in India was **Firoz Shah Tughlaq.** • Canal system of Firoz Shah Tughlaq was built to support the newly founded city of **Hissar-i-Firoza.** • In 1355, he constructed a double system of canals from **Yamuna to Sutlej**. • Muhammad Bin Tughlaq was the first Sultan of Delhi to visit the shrine of Khwaja Moinuddin Chishti **Some important monuments:-** • **Salim Chisti Tomb** - Akbar • **Bibi Ka Maqbara** - Aurangzeb • **Red Fort** - Shah Jahan • **Jama Masjid** - Saha Jahan • **Qutub Minar** - Qutub - Ud- Din - Aibak, Completed by Iltutmish

Q. 96	**Recently (GRAP) which is a set of emergency measures designed to prevent further deterioration of air quality in the National Capital Region (NCR) was implemented, what is the full form of GRAP ?** **a) Gaining Respiratory associated plan** ✗ **b) Gravel Response Action plan** ✗ **c) Graded Response associated plan** ✗ **d) Graded Response action plan** ✓
Explanation:	**Option 4 is the right answer.** **Graded Response Action Plan (GRAP):** • A set of emergency measures to control air pollution in Delhi-NCR. • Implemented based on AQI (Air Quality Index) levels**.** • Approved by the **Supreme Court (2016)** • **Implemented by:** Commission for Air Quality Management (CAQM) in Delhi-NCR. **Stages of GRAP & Actions Taken:** • **Moderate to Poor (AQI 201-300):** Ban on open waste burning, dust control. • **Very Poor (AQI 301-400):** Restrictions on diesel generators, enhanced public transport. • **Severe (AQI 401-450):** Ban on construction activities, stricter traffic control. • **Severe+ (AQI 450+):** Entry ban on trucks (except essentials), schools closed, work-from-home suggested. • **National Clean Air Programme (2019):** Targets 20-30% PM10 concentrations reduction in pollution by 2024.

Q. 97	**Which of the following is not a Statutory Body ?** **a) Law Commission of India** ✔ **b) Central Vigilance Commission** ✘ **c) National Human Rights Commission** ✘ **d) National Commission for Women** ✘
Explanation:	**Option 1 is the right answer.** • **Statutory bodies** are created by an **Act of Parliament or State Legislatures.** They derive their power from specific laws, not directly from the Constitution. • **Reserve Bank of India (RBI)** – (*RBI Act, 1934*) • **Securities and Exchange Board of India (SEBI)** – (*SEBI Act, 1992*) • **National Human Rights Commission (NHRC)** – (*Protection of Human Rights Act, 1993*) • **Competition Commission of India (CCI)** – (*Competition Act, 2002*) • **National Green Tribunal (NGT)** – (*NGT Act, 2010*)

Q. 98	How many Naturally Occurring Elements are there in Modern Periodic Table?
	a) 91 ✗
	b) 92 ✗
	c) 93 ✗
	d) 94 ✓
Explanation:	**Option 4 is the right answer.** • There are total **118 elements** discovered yet out of which **94** are naturally occurring elements. • **7 Periods (Horizontal Rows)** → Indicate increasing atomic number. • **18 Groups (Vertical Columns)** → Elements in a group have similar chemical properties. • **s-block** → Groups **1 & 2** (Alkali & Alkaline Earth Metals) • **p-block** → Groups **13 to 18** (Includes Metalloids, Non-Metals, Halogens, Noble Gases) • **d-block** → Groups **3 to 12** (Transition Metals) • **f-block** → **Lanthanides & Actinides** (Rare Earth Elements & Radioactive Elements) • **Hydrogen (H)** is a special element – It has properties of both Group 1 & 17 • The **most abundant element** in the universe is **Hydrogen (H)**. • The **most reactive metal** is **Francium (Fr)**, and the **most reactive non-metal** is **Fluorine (F)**. • The **heaviest naturally occurring element** is **Uranium (U, Atomic No. 92)**.

Q. 99	T. Balasaraswati is related to which dance form ?
	a) Kathak ✗
	b) Mohiniyattam ✗
	c) Bharatnatyam ✓
	d) Kuchipudi ✗
Explanation:	**Option 3 is the right answer.** **Bharatnatyam (Tamil Nadu)** • Rukmini Devi Arundale • Padma Subrahmanyam • Alarmel Valli • Sonal Mansingh **Kathak (UP)** • Birju Maharaj – Legendary Kathak exponent • Sitara Devi – "Queen of Kathak" • Shovana Narayan **Kuchipudi (Andhra Pradesh)** • Yamini Krishnamurthy (also Bharatnatyam) • Vempati Chinna Satyam • Raja and Radha Reddy • Mohiniyattam (Kerala) • **Kalamandalam Kalyanikutty Amma –** Known as the "Mother of Mohiniyattam." • Kanak Rele

Q. 100	Which of the following tribe celebrates the Moatsu festival?
	a) Naga ✗
	b) Ao ✓
	c) Garo ✗
	d) Mikir ✗
Explanation:	**Option 2 is the right answer.**
	● The **Ao tribe of Nagaland** has one such special festival, known as the **Moatsu festival.**
	● This festival is celebrated after seeds have been sown in the fields.
	● Men and women of the tribe gather around large outdoor fires and performing traditional dances.
	Other Important Naga Festivals:
	● **Hornbill Festival - (All Naga Tribes) –** 1 to 10th of December: Cultural showcase of Nagaland.
	● **Sekrenyi Fest. - (Angami Naga Tribe) –** February: Purification festival.
	● **Aoleang Fest. - (Konyak Naga Tribe) –** April: Marks the New Year and end of sowing.