# Parmar SSC Live Mock 10 April,2025

Q. 1	Looking at the family picture, Ritu said, "She is my brother's wife's son's father's mother-in-law's only daughter.' How is the girl in the photo related to Ritu?
	a) Mother ✗
	b) Brother's wife ✓
	c) Daughter-in-law ✗
	d) Sister ✗

Explanation:	Correct answer is option 2.

Q. 2	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.
	CVS : UYE : : HIM : OLJ :: DEW : ?
	a) YGF ✗
	b) XFE ✗
	c) EFX ✗
	d) YHF ✓

Explanation:	Correct answer is option 4

Q. 3 Which of the following is the exact mirror image of the picture given below when the mirror is held horizontally below the figure ?

M ——————— N
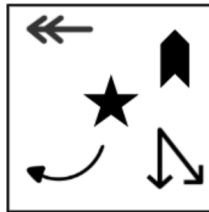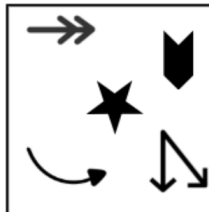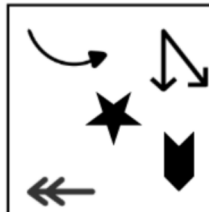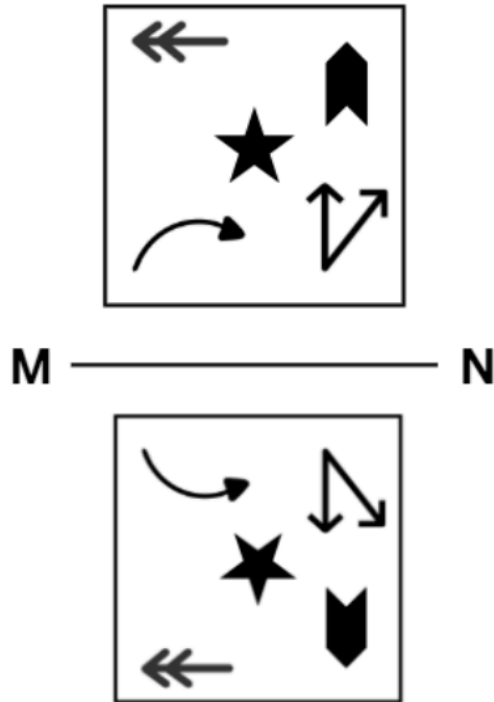
a)

 ✗

b)

 ✗

c)

 ✗

d)

 ✔
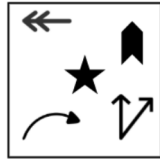
Explanation:	Correct answer is option 4. M ——————— N

Q. 4	In a certain code language, 'MOUNTAIN' is coded as 65 and 'OCEAN' is coded as 26. How will 'NARMADA' be coded in the same language? a) 50 ✅ b) 37 ❌ c) 49 ❌ d) 64 ❌
Explanation:	Correct answer is option 1. MOUNTAIN : 8 letters, $8^2 + 1 = 65$ OCEAN : 5 Letters . $5^2 + 1 = 26$ Similarly ; NARMADA : 7 Letters ; $7^2 + 1 = 50$

Q. 5	Select the option that represents the correct order of the given words as they would appear in an English dictionary.
	1. Diamond
	2. Dialogue
	3. Dictator
	4. Dialect
	5. Diameter
	6. Diagram
	a) 6, 2, 4, 1, 5, 3 ✗
	b) 6, 4, 2, 1, 5, 3 ✗
	c) 6, 4, 2, 5, 1, 3 ✔
	d) 4, 2, 6, 5, 1, 3 ✗
Explanation:	Correct answer is option 3. 6.Diagram >4. Dialect >2. Dialogue >5. Diameter >1. Diamond >3.Dictator

Q. 6	Which of the following terms will replace the question mark (?) in the given series?
	BJRX, DNXF, FRDN, ?, JZPD
	a) GVJV ✗
	b) HVJV ✔
	c) HVIT ✗
	d) GVKV ✗
Explanation:	Correct answer is option 2. $B \xrightarrow{+2} D \xrightarrow{+2} F \xrightarrow{+2} H \xrightarrow{+2} J$ $J \xrightarrow{+4} N \xrightarrow{+4} R \xrightarrow{+4} V \xrightarrow{+4} Z$ $R \xrightarrow{+6} X \xrightarrow{+6} D \xrightarrow{+6} J \xrightarrow{+6} P$ $X \xrightarrow{+8} F \xrightarrow{+8} N \xrightarrow{+8} V \xrightarrow{+8} D$

Q. 7	In a certain code language, 'FARM' is written as '350', 'CALM' is written as '395'. How will 'FOOD' be written in that language?
	a) 445 ✗
	b) 440 ✗
	c) 340 ✓
	d) 338 ✗

Explanation:	Correct answer is option 3.
	F A R M → U Z I N (Opposite)
	21+26 + 9 + 14 = 70
	× 5
	350
	C A L M → X Z O N (Opposite)
	24+26 +15+ 14 = 79
	× 5
	395
	F O O D → U L L W (Opposite)
	21+ 12 +12+ 23 = 68
	× 5
	340

Q. 8	Select the option that represents the letters that, when placed from left to right in the following blanks, will complete the letter-series.
	G _ A R E G L _ R _ G _ C _ E G L _ _ E
	a) K B E L R D R ✗
	b) L B E L R D R ✓
	c) L A E L R E R ✗
	d) K B E L R E R ✗

Explanation:	Correct answer is option 2.
	Sequence is : G L A R E ; G L B R E ; G L C R E ; G L D R E

Q. 9	Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.
	a) TXG ✗
	b) CGX ✗
	c) FIU ✓
	d) SWH ✗
Explanation:	Correct answer is option 3. T +4 = X ; Opposite of T is G C + 4 = G ; Opposite of C is X S + 4 = W ; Opposite of S is H But, F + **3** = I, which is different from others.

Q. 10	Study the given pattern carefully and select the number that can replace the question mark (?) in it.
	(6, 2, 9)
	(9, 3, 9)
	(12, 6, ?)
	(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/subtracting/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) 6 ✓
	b) 9 ✗
	c) 4 ✗
	d) 8 ✗
Explanation:	Correct answer is option 1. Logic is : 1st Number × 3 ÷ 2nd Number = 3rd Number 6 × 3 ÷ 2 = 9 9 × 3 ÷ 3 = 9 Similarly, 12 × 3 ÷ 6 = 6

Q. 11	Select the set in which the numbers are related in the same way as are the numbers of the following sets.
	(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 /subtracting /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)
	(17, 26, 37) (170, 197, 226) a) (48, 63, 80)　✔ b) (45, 52, 105)　✘ c) (16, 28, 36)　✘ d) (52, 65, 83)　✘
Explanation:	Correct answer is option 1. 17　　26　　37　　　170　　197　　226 　+9　　+11　　　　+27　　+29 　　　+2　　　　　　　　+2 　　48　　63　　80 　　　+15　　+17 　　　　+2
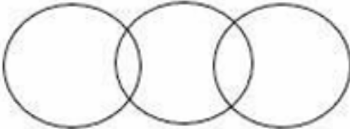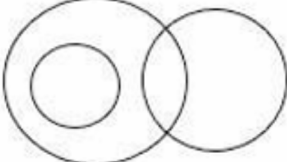
Q. 12	Select the set in which the numbers are related in the same way as are the numbers of the given sets.
	(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying 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.)
	(29, 17, 23)
	(15, 19, 17)
	a) (51, 39, 70) ✗
	b) (13 , 17, 15) ✔
	c) (59, 28, 77) ✗
	d) (34, 47, 83) ✗
Explanation:	Correct answer is option 2.
	29 + 17 = 46 ; 46 ÷ 2 = 23
	15 + 19 = 34 ; 34 ÷ 2 = 17
	Similarly,
	13 + 17 = 30 ; 30 ÷ 2 = 15

Q. 13	Select the Venn diagram that best represents the relationship between the following classes.
	Tiger, Polar Bear , Carnivores
Explanation:	Correct answer is option 1.
	Both Tiger and Polar Bear are carnivores but both are different animals.

Q. 14	The second number in the given number-pairs is obtained by performing certain mathematical operation(s) on the first number. The same operation(s) is/are followed in all the number-pairs, except one. Find that odd number-pair. a) (1826, 1472) ✔ b) (1984, 1505) ✘ c) (1805, 1326) ✘ d) (2136, 1657) ✘
Explanation:	Correct answer is option 1. Except option 1 all other numbers have a difference of 479. 1984 – 1505 = 479 1805 – 1326 = 479 2136 – 1657 = 479 But, **1826-1472 = 354**
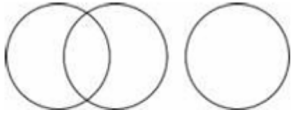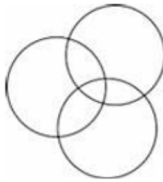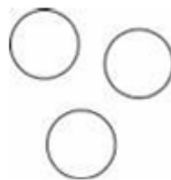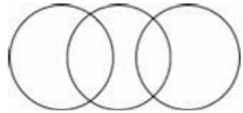
Q. 15   The paper is folded and cut as shown below. How will it appear when unfolded?

a)   ✔

b)   ✘

c)   ✘

d)   ✘

Explanation:

Correct answer is option 1.

Q. 16	Select the Venn diagram that best illustrates the relationship between the following classes.
	Laptop, Mobile, Fan

a) ✗

b) ✗

c) ✔

d) ✗

Explanation:	Correct answer is option 3.
	All Three are different from each other.

Q. 17	Which of the following interchanges of signs would make the given equation correct?
	52 + 13 ÷ 25 × 6 ÷ 3 = 157

a) + and ×   ✗

b) - and ÷   ✗

c) ÷ and +   ✔

d) ÷ and ×   ✗

Explanation:	Correct answer is option 3.
	52 + 13 ÷ 25 × 6 ÷ 3 = 157
	After Interchanging the signs:
	(52 ÷ 13) + 25 × 6 + 3
	4 + 150 + 3 = 157

Q. 18	Select the option that is related to the third word in the same way as the second word is related to the first word. (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.)
	Fish : Gills :: Frog : ?
	a) Skin ✅
	b) Intestine ❌
	c) Heart ❌
	d) Skull ❌
Explanation:	Correct answer is option 1. Fish can breathe through Gills Similarly, Frog can breathe through Skin Note: Frog can breathe through Lungs also.
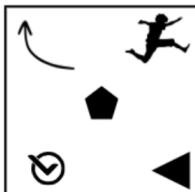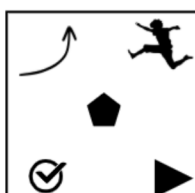
Q. 19	Select the correct Mirror Image :

Correct answer is option 3.

Explanation:
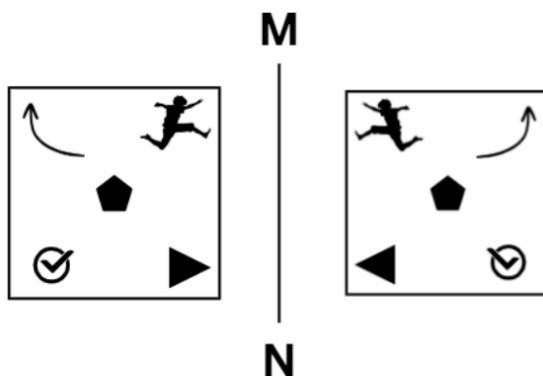
Q. 20	Select the option figure which is embedded in the given figure (rotation is NOT allowed).
	a) ✗
	b) ✗
	c) ✗
	d) ✔
Explanation:	Correct answer is option 4.
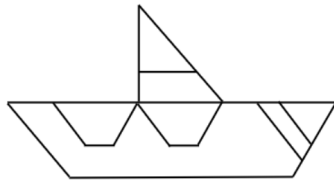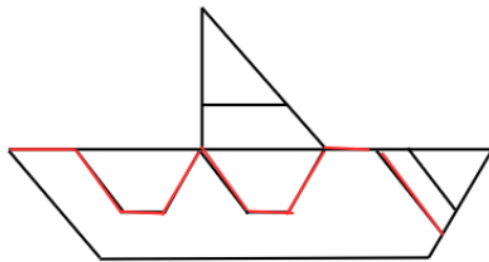
Q. 21	Select the figure from among the given options that can replace the question mark (?) in the following series.

a) ✗

b) ✔

c) ✗

d) ✗
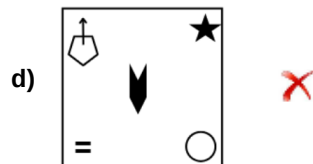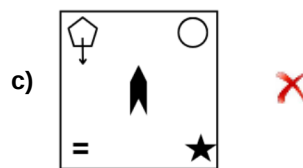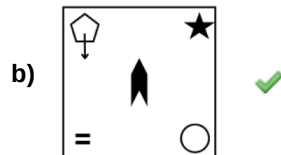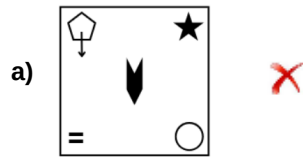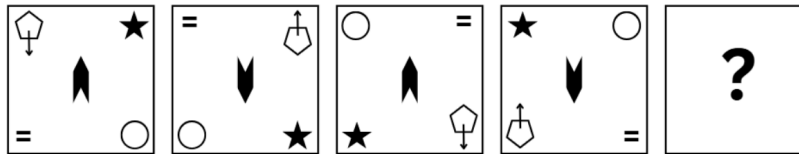
Explanation:	Correct answer is option 2.
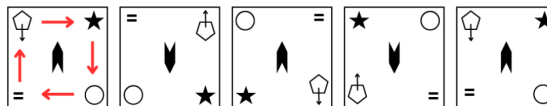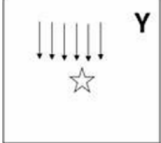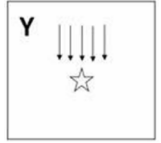
⬠ Moving Clockwise and turns 180 Degree every next step

★ Moving Clockwise

○ Moving Clockwise

= Moving Clockwise

⬧ Turns 180 Degree every next step

Q. 22	Which of the following numbers will replace the question mark (?) in the given series ?

$$\left[\frac{1}{1056}\right], \left[\frac{1}{528}\right], \; \boldsymbol{?} \; , \left[\frac{1}{132}\right], \left[\frac{1}{66}\right]$$

a) $\left[\frac{1}{254}\right]$ ✗

b) $\left[\frac{1}{264}\right]$ ✓

c) $\left[\frac{1}{64}\right]$ ✗

d) $\left[\frac{1}{120}\right]$ ✗

Explanation:	Correct answer is option 2.

$$\left[\frac{1}{1056}\right] \times 2 = \left[\frac{1}{528}\right] \times 2 = \left[\frac{1}{264}\right] \times 2 = \left[\frac{1}{132}\right] \times 2 = \left[\frac{1}{66}\right]$$

Q. 23	If '+' means 'division', '−' means 'multiplication', '÷' means 'subtraction' and '×' means 'addition', then what is the value of the following expression? 805 + 23 ÷ 4 − 6 × 2

a) 32 ✗

b) 25 ✗

c) 29 ✗

d) 13 ✓

Explanation:	Correct answer is option 4. 805 + 23 ÷ 4 − 6 × 2 After Changing the signs: (805 ÷ 23) − 4 × 6 + 2 35 − 24 + 2 11 + 2 = 13

Q. 24 | Select the figure that will come in place of the question mark (?) in the following figure series.

a) ✗

b) ✗

c) ✗

d) ✓

Explanation:

Correct answer is option 4.

↓ Increasing by One in each next step

☆ Decreasing by One in each next step

Letters are increased by two in each next step while revolving in clockwise direction in corners

Q. 25	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 teachers are scientists. All scientists are doctors. All doctors are engineers. Conclusions: I. Some doctors are teachers. II. Some engineers are teachers. III. Some doctors are scientists a) Only conclusions I and II follow　✗ b) All conclusions follow　✓ c) Only conclusions I and III follow　✗ d) Only conclusions II and III follow　✗
Explanation:	Correct answer is option 2. Some doctors are teachers : This is True statement. Some engineers are teachers : This conclusion is also true. Some doctors are scientists: This is also true.
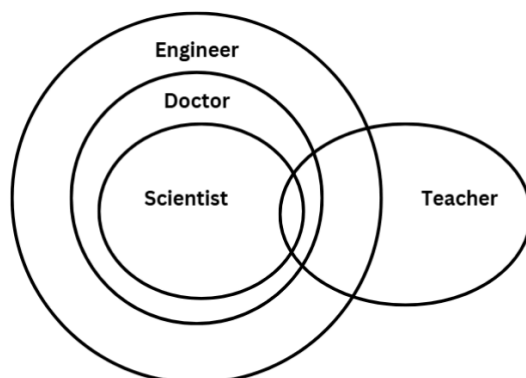
Q. 26	For the following equations, what are the values of a and b to have infinitely many solutions?
	$ax + by = 2$
	$6x - (8 - 2a)y = -6$
	a) a = 2, b = -4 ✗
	b) a = 2, b = -4/3 ✗
	c) a = -2, b = 4/3 ✗
	d) a = -2, b = 4 ✓
Explanation:	

1. For infinitely many solutions,

$$\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$$

$$ax + by = 2 \qquad\qquad 6x - (8-2a)y = -6$$
$$\Rightarrow ax + by - 2 = 0 \qquad 6x - (8-2a)y + 6 = 0$$

$$\frac{a}{6} = \frac{b}{-(8-2a)} = \frac{-2}{6}$$

$$\Rightarrow a = -2 \qquad\qquad \frac{b}{2a-8} = \frac{-2}{6}$$

$$\Rightarrow b = -\frac{1}{3}\left[2(-2)-8\right]$$

$$\Rightarrow b = \frac{-1}{3}\left[-4-8\right]$$

$$\Rightarrow b = 4$$

Q. 27	In triangle ABC, the length of side BC is 6 cm less than twice the length of side AB. The length of side AC exceeds the length of side AB by 20 cm. The perimeter of the triangle is 62 cm. Determine the length (in cm) of the largest side of the triangle.
	a) 12 ✗
	b) 32 ✔
	c) 18 ✗
	d) 36 ✗
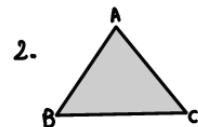
Explanation:	2. let AB = x BC = 2x-6 AC = x+20 Perimeter of $\triangle ABC$ = AB+BC+AC = 62cm = x+2x-6+x+20 = 62 $\Rightarrow$ 4x = 48 $\Rightarrow$ x = 12 $\therefore$ AB = 12cm , BC = 24-6 = 18cm , AC = 32cm $\hookrightarrow$ largest side

Q. 28	If $tan^4\theta - tan^2\theta = 1$, then the value of $sin^4\theta + sin^2\theta$ is:
	a) 2 ✗
	b) 1 ✔
	c) -1 ✗
	d) 0 ✗

Explanation:	3. $tan^4\theta - tan^2\theta = 1$ $\Rightarrow tan^4\theta = 1 + tan^2\theta$ $\Rightarrow tan^4\theta = sec^2\theta$ $[1+tan^2\theta = sec^2\theta]$ $\Rightarrow \dfrac{sin^4\theta}{cos^4\theta} = \dfrac{1}{cos^2\theta}$ $\left[tan\theta = \dfrac{sin\theta}{cos\theta}\right]$ $\Rightarrow sin^4\theta = cos^2\theta$ $\left[sec\theta = \dfrac{1}{cos\theta}\right]$ $\Rightarrow sin^4\theta = 1 - sin^2\theta$ $[cos^2\theta = 1 - sin^2\theta]$ $\Rightarrow sin^4\theta + sin^2\theta = 1$

Q. 29	Mahesh spends 80% of his income. His income increases by 15% and his expenditure also increases by 5%. The percentage of increase in his savings is:
	a) 55% ✔️
	b) 50% ✖️
	c) 40% ✖️
	d) 20% ✖️

Explanation:	
	4. let mahesh's income be 100x

Income	Expenditure	Savings
100x	80x	100x - 80x = 20x
115x	$\left(1+\frac{5}{100}\right) \times 80x$ = 84x	115x - 84x = 31x

% ↑ in savings = $\frac{31x - 20x}{20x} \times 100\%$

= 11 × 5 = 55%.

Q. 30	Which of the following numbers is divisible by 11?
	a) 255756 ✖️
	b) 324423 ✔️
	c) 698542 ✖️
	d) 536848 ✖️

Explanation:	
	5. Divisibility by 11 ⇒ (sum of odd digits) − (sum of even digits) = 0 or multiple of 11

Now check options

a) 255756 = (2+5+5) − (5+7+6) = −6
b) 324423 = (3+4+2) − (2+4+3) = 0 ✓
c) 698542 = (6+8+4) − (9+5+2) = 18−16 = 2
d) 536848 = (5+6+4) − (3+8+8) = 15−19 = −4

Q. 31	The base radius of a circular cylinder is 10.5 cm. If the area of its curved surface is 792 cm², then what is the volume of the cylinder?
	a) 4152 cm³ ✗
	b) 4518 cm³ ✗
	c) 4185 cm³ ✗
	d) 4158 cm³ ✔

Explanation:

6. Base radius 'r' of cylinder = 10.5 cm

$CSA = 792\ cm^2$

$\Rightarrow 2\pi r h = 792$

$\Rightarrow 2 \times \dfrac{22}{7} \times 10.5 \times h = 792$

$22h = 264$

$h = \dfrac{264}{22}$

$h = 12\ cm$

Volume of cylinder $= \pi r^2 h$

$= \dfrac{22}{7} \times (10.5)^2 \times 12$

$= 4158\ cm^3$

Q. 32	Simplify the following expression.
	[{80 - 60 ÷ 4 of 5}+(20 - 10)÷ 10]+600÷25 of (2 ×6)×(2 of 3) + 2 of 5
	a) 85 ✗
	b) 100 ✔
	c) 91 ✗
	d) 90 ✗

Explanation:

7. $[\{80-60\div 4\ of\ 5\}+(20-10)\div 10]+600\div 25\ of\ (2\times6)\times(2\ of\ 3)+2\ of\ 5$

$[\{80-60\div 4\ of\ 5\}+(20-10)\div 10]$

$[\{80-60\div 20\}+10\div 10]$

$[\{80-3\}+1] = 77+1 = 78$

Now

$78 + 600\div 25\ of\ (12)\times(6)+10$

$\Rightarrow 78 + 600\div 300\times6+10$

$\Rightarrow 78 + \dfrac{600}{300}\times6+10$

$\Rightarrow 78 + 2\times6+10$

$\Rightarrow 100$

B - bracket
O - of
D - division
M - multiplication
A - addition
S - subtraction

Q. 33	The given pie-chart shows the percentage distribution of 15,000 employees in a company. Study the given chart and answer the question that follows. If 25% of the employees in department B are females, then how many male employees are there in that department?

Percentage distribution of employees in different departments of a company

- E 16%
- A 22%
- B 24%
- C 18%
- D 20%
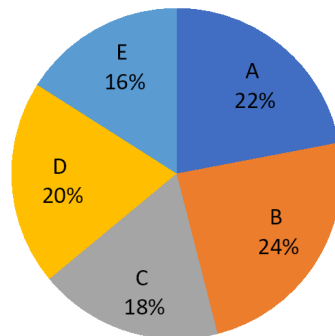
a) 2700 ✓

b) 900 ✗

c) 675 ✗

d) 750 ✗

Explanation:	8. Employees in department B = 24% of total Employees $= \dfrac{24}{100} \times 15000 = 3600$ Female employees = 25% of 3600 Male employees = 75% of 3600 = $\dfrac{75}{100} \times 3600 = 2700$

Q. 34	A manufacturer announces a trade discount of 18% on his products for his dealers. One of the dealers purchased 7 smart phones manufactured by the company at the rate of Rs. 36000 each. What is the amount of trade discount? a) 54860 ✗ b) 206640 ✗ c) 45360 ✓ d) 90720 ✗

Explanation:	9. Amount of Trade Discount $= \dfrac{18}{100} \times 36000 \times 7$ $= ₹45360$

Q. 35	Simplify the following expression.
	$$\frac{(a-b)^3+(b-c)^3+(c-a)^3}{(a-b)(b-c)(c-a)}$$
	a) 3 ✅
	b) 2 ❌
	c) 1 ❌
	d) 0 ❌

Explanation:	

10. $\dfrac{(a-b)^3+(b-c)^3+(c-a)^3}{(a-b)(b-c)(c-a)}$

If, $A+B+C = 0$, then $A^3+B^3+C^3 = 3ABC$

$A = (a-b)$, $B = (b-c)$, $C = (c-a)$

$A+B+C = a-b+b-c+c-a = 0$

$(a-b)^3 + (b-c)^3 + (c-a)^3 = 3(a-b)(b-c)(c-a)$

$\dfrac{3(a-b)(b-c)(c-a)}{[a-b][b-c][c-a]} = 3$

Q. 36	If $sinC = \frac{35}{37}$, what is the value of $[\cos C \, (\sec C - \tan C)]$? (given that $0 < C < \frac{\pi}{2}$)

a) 12/35   ✗

b) 1/19   ✗

c) 12/37   ✗

d) 2/37   ✔

Explanation:

11    $\sin C = \dfrac{35}{37} = \dfrac{\text{Perpendicular}}{\text{Hypotenuse}}$

$(\text{perpendicular})^2 + (\text{base})^2 = (\text{Hypotenuse})^2$

$(35)^2 + (\text{base})^2 = (37)^2$

$(\text{base})^2 = (37)^2 - (35)^2 = (37+35)(37-35)$

$\text{base} = \sqrt{72 \times 2} = \sqrt{144} = 12$

$\cos C \left[\sec C - \tan C\right]$

$\Rightarrow \dfrac{\text{base}}{\text{hyp}} \left(\dfrac{\text{Hyp.}}{\text{base}} - \dfrac{\text{Perpendicular}}{\text{base}}\right)$ $\left[\because \cos\theta = \dfrac{\text{base}}{\text{hyp.}}\right]$

$\Rightarrow \dfrac{12}{37} \left(\dfrac{37}{12} - \dfrac{35}{12}\right) = \dfrac{12}{37} \times \dfrac{2}{12}$ $\left[\because \sec\theta = \dfrac{\text{Hyp}}{\text{base}}\right]$

$= \dfrac{2}{37}$ $\left[\because \tan\theta = \dfrac{\text{Perpendicular}}{\text{base}}\right]$

🌟PTS WAY-

$\cos C \left[\sec C - \tan C\right)$

$\Rightarrow \cos C \cdot \sec C - \cos C \cdot \tan C$

$\Rightarrow 1 - \cos C \cdot \dfrac{\sin C}{\cos C}$

$\Rightarrow 1 - \sin C = 1 - \dfrac{35}{37} = \dfrac{2}{37}$

Q. 37	A and B are centres of two circles with radii 1 cm and 18 cm respectively, where AB = 25 cm. C is the centre of another circle of radius r cm, which touches each of the above two circles externally. If ∠ACB=90° , then the value of r is:

a) 2 cm   ✗

b) 6 cm   ✔

c) 3 cm   ✗

d) 5 cm   ✗

Explanation:

12
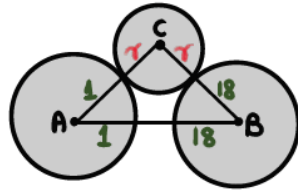
$$AB = 25\,cm$$

In $\triangle ABC$,

$$AC^2 + BC^2 = AB^2$$

$$\Rightarrow (r+1)^2 + (r+18)^2 = (25)^2$$

$$\Rightarrow r^2 + 1 + 2r + r^2 + 324 + 36r = 625$$

$$\Rightarrow 2r^2 + 38r + 325 = 625$$

$$\Rightarrow 2r^2 + 38r - 300 = 0$$

$$\Rightarrow r^2 + 19r - 150 = 0$$

$$\Rightarrow r^2 + 25r - 6r - 150 = 0$$

$$\Rightarrow r(r+25) - 6(r+25) = 0$$

$$\Rightarrow r = 6\,cm$$

Q. 38	Find the mean proportional of 64.8 and 39.2 ?.
	a) 49.6 ✗
	b) 47.8 ✗
	c) 50.4 ✓
	d) 48.8 ✗

Explanation:	

13. Mean proportional ; $b^2 = ac$

$a = 64.8$, $c = 39.2$

$b^2 = 64.8 \times 39.2$

$b = \sqrt{\dfrac{648}{10} \times \dfrac{392}{10}}$

$b = \sqrt{\dfrac{324 \times 2 \times 392}{100}}$

$b = \dfrac{18 \times 28}{10}$

$b = 50.4$

Q. 39	At a cafe, Rama bought drinks for her 13 friends for Rs. 515. Some of them wanted coffee, while others wanted black tea. A regular cup of coffee cost Rs. 45 and a regular cup of black tea cost Rs. 35. How many cups of tea did she purchase?
	a) 5 ✗
	b) 6 ✗
	c) 8 ✗
	d) 7 ✓

Explanation:	

14. Let the no. of friends who wanted coffee = 'a'
Let the no. of friends who wanted Black tea = 'b'

$a + b = 13$ ———①

$45a + 35b = 515$

$\Rightarrow 9a + 7b = 103$ ———②

Multiply eqⁿ ① by 9 and subtract eqⁿ ② from ①

$\Rightarrow 9a + 9b - (9a + 7b) = 13 \times 9 - 103$

$\Rightarrow 2b = 117 - 103$

$\Rightarrow 2b = 14$

$\Rightarrow b = 7$

Q. 40	A cuboid of dimensions 75 cm, 150 cm, 175 cm can be divided into how many identical largest cubes?
	a) 100 ✗
	b) 84 ✗
	c) 126 ✓
	d) 16 ✗

Explanation:	15. HCF of 75, 150, 175 = 25 No. of Identical cubes = $\dfrac{75 \times 150 \times 175}{25 \times 25 \times 25}$ = 126

Q. 41	Solve the following:
	$(2.25 + 4.25 + \frac{11}{2})^3 \div 12 \, of \, \frac{1}{3} - 12^2 + 36$
	a) 120 ✗
	b) -60 ✗
	c) 324 ✓
	d) 288 ✗

Explanation:	16 $(2.25 + 4.25 + \frac{11}{2})^3 \div 12 \, of \, \frac{1}{3} - (12)^2 + 36$ $\Rightarrow (2.25 + 4.25 + 5.5)^3 \div 4 - (12)^2 + 36$ $\Rightarrow (6.5 + 5.5)^3 \div 4 - 144 + 36$ $\Rightarrow \dfrac{(12)^3}{4} - 144 + 36$ $\Rightarrow \dfrac{\overset{3}{\cancel{12} \times 12 \times 12}}{\cancel{4}} - 144 \times 36$ $\Rightarrow 432 - 144 + 36$ $\Rightarrow 324$ B -bracket O -of D -division M -multiplication A -addition S -subtraction

Q. 42	A boat can travel 78 km upstream and back in a total of 32 hours. It can travel 15 km upstream and 52 km downstream in a total of 9 hours. How much distance will the boat cover in 14 hours in still water?
	a) 112 ✓
	b) 96 ✗
	c) 98 ✗
	d) 104 ✗

Explanation:

1) let speed of stream be 's' km/hr
let speed of boat in stream be 'b' km/hr

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

upstream speed = $(b-s)$
down stream speed = $(b+s)$

$$\Rightarrow \frac{39}{78}_{(b+s)} + \frac{39}{78}_{(b-s)} = \frac{16}{32} \quad ——①$$

Also, $\frac{52}{(b+s)} + \frac{15}{(b-s)} = 9 \quad ——②$

$$\therefore \frac{39}{b+s} + \frac{39}{b-s} = 16 \qquad\qquad \frac{52}{(b+s)} + \frac{15}{(b-s)} = 9$$

$$\Rightarrow \frac{39b - 39s + 39b + 39s}{16} = b^2 - s^2 \qquad \frac{52b - 52s + 15b + 15s}{9} = b^2 - s^2$$

$$\Rightarrow \frac{78b}{16} = b^2 - s^2 ——③ \qquad\qquad \frac{67b - 37s}{9} = b^2 - s^2 ——④$$

Equating eqn (3) & (4) we get

$$\frac{78b}{16} = \frac{67b - 37s}{9}$$

$$\Rightarrow 9 \times 39b = 67 \times 8b - 37 \times 8s$$

$$\Rightarrow 351b = 536b - 296s$$

$$\Rightarrow 296s = 185b$$

$$\Rightarrow \frac{b}{s} = \frac{296}{185} = \frac{8}{5}$$

let the common factor be 'x'

$$\Rightarrow \frac{78}{16}b = b^2 - s^2 \quad \Rightarrow \frac{39}{8}(8x) = (8x)^2 - (5x)^2$$

$$\Rightarrow 39x = (8x + 5x)(8x - 5x)$$

$$\Rightarrow 39x = 13x - 3x$$

$$\Rightarrow x = 1$$

b = 8km/hr ; S = 5km/hr

Distance = Time × speed of boat
= 14 × 8 = **112 Km**

Q. 43	A dishonest fruit-seller sells fruits at 36% profit but he uses 850 gm weight in place of 1 kg. What is the profit per cent?
	a) 15.6% ✗
	b) 40% ✗
	c) 60% ✔
	d) 35.5% ✗

Explanation:	18. Let CP = 100x $$\therefore SP = \left(1 + \frac{36}{100}\right) 100x = 136x$$ $$\boxed{Profit\ \% = \frac{SP-CP}{CP} \times 100\%}$$ $$= \frac{\frac{136x}{850} - \frac{100x}{1000}}{\frac{100x}{1000}} \times 100\%$$ $$= \frac{\frac{8x}{50} - \frac{x}{10}}{\frac{x}{10}} \times 100\%$$ $$= \frac{\frac{8x-5x}{50}}{\frac{x}{10}} \times 100\%$$ $$= 60\%$$

Q. 44	If $a^2 + b^2 + 4c^2 + 6 = 2(2a - b + 2c)$, then the value of $a^3 + b^2 + c$ =
	a) 3 ✗
	b) $\frac{17}{2}$ ✗
	c) $\frac{19}{2}$ ✔
	d) $\frac{11}{2}$ ✗

Explanation:	19 $a^2 + b^2 + 4c^2 + 6 = 2(2a - b + 2c)$ $\Rightarrow a^2 + b^2 + 4c^2 + 6 - 4a + 2b - 4c = 0$ $\Rightarrow a^2 - 4a + b^2 + 2ab + 4c^2 - 4c + 6 = 0$ $\Rightarrow a^2 - 2(a)(2) + (2)^2 + b^2 + 2(b)(1) + (1)^2 + (2c)^2 - 2(2c)(1) + (1)^2 = 0$ $\Rightarrow (a-2)^2 + (b+1)^2 + (2c-1)^2 = 0$ sum of squares is 0, this is possible only when individual terms are 0. $\Rightarrow a - 2 = 0$, $b + 1 = 0$, $2c - 1 = 0$ $a = 2$, $b = -1$, $c = \frac{1}{2}$ $a^3 + b^2 + c = (2)^3 + (-1)^2 + \frac{1}{2} = 8 + 1 + \frac{1}{2} = \frac{19}{2}$

Q. 45	Find the value of ($\sin 150° - \tan 225° - \sec 135° + \cot 45°$)
	a) $\frac{5}{2} - \sqrt{2}$ ✗
	b) $\frac{1}{2} - \frac{1}{\sqrt{2}}$ ✗
	c) $\frac{5}{2} + \sqrt{2}$ ✗
	d) $\frac{1}{2} + \sqrt{2}$ ✓

| Explanation: | 20 $\sin 150° - \tan 225° - \sec 135° + \cot 45°$
 ⇒ $\sin(90+60) - \tan(180+45) - \sec(180-45) + \cot 45°$
 ⇒ $\cos 60° - \tan 45° + \sec 45° + \cot 45°$ [∴ $\sin(90+\theta) = \cos\theta$
 ∴ $\tan(180+\theta) = \tan\theta$
 ∴ $\sec(180-\theta) = -\sec\theta$]
 ⇒ $\frac{1}{2} - 1 + \sqrt{2} + 1 = \frac{1}{2} + \sqrt{2}$ |

Q. 46	A circular arc whose radius is 15 cm makes an angle of 60° at the centre. Find the perimeter (in cm) of the sector formed. (Use π = 3.14)
	a) 42.5 ✗
	b) 38.7 ✗
	c) 45.7 ✓
	d) 30 ✗

| Explanation: | 21.   Perimeter of sector = $\frac{\theta}{360} \times 2\pi r + 2r$

 $= \frac{60}{360} \times 2 \times r \times 3.14 + 2 \times r$
 $= 2r\left(\frac{3.14}{6} + 1\right)$

 Perimeter of sector $= 2 \times 15 (0.53 + 1)$
 $= 30(1.53)$
 $= 45.7 \text{ cm}$ |

Q. 47	Two pipes A and B can fill a tank in 36 minutes and 54 minutes, respectively. If both the pipes are opened simultaneously, then after how many minutes should pipe B be closed so that the tank gets filled in 24 minutes?
	a) 12 ✗
	b) 24 ✗
	c) 18 ✓
	d) 20 ✗

Explanation:	

22.

Total capacity of tank
(LCM of 36 & 54)

A ⟶ 36 min
B ⟶ 54 min

→ 18×2×3 → efficiency
3
2

$\overline{5 \text{ units}}$ ⟶ 1 min by both A and B together

'B' is closed after few minutes
let both the pipe were opened for 'm' minutes

$5m + 3(24-m) = 18 \times 2 \times 3$
$\Rightarrow 5m + 72 - 3m = 108$
$\Rightarrow 2m = 108 - 72 = 36$
$\Rightarrow \boxed{m = 18 \text{ min}}$

Q. 48	A trader owes a merchant Rs.11340 due in 2 years, but the trader wants to settle the account after 18 months. If the rate of simple interest is 13% per annum, how much cash (in ₹) should he pay?
	a) 10450 ✗
	b) 10170 ✗
	c) 10755 ✓
	d) 10950 ✗

| Explanation: | 23. let principal = 100x |

$$R = 13\%$$
$$T = 2 \text{ years}$$
$$\text{Amount} = ₹11340$$

$$A = P + \frac{PRT}{100}$$

$$\Rightarrow 11340 = 100x + \frac{100x \times 13 \times 2}{100}$$

$$\Rightarrow 11340 = 126x$$

$$\Rightarrow x = \frac{11340}{126}$$

$$\Rightarrow 100x = \frac{11340}{126} \times 100$$

$$\Rightarrow 100x = 9000$$

$$\text{Principal} = ₹9000$$
$$\text{Time} = \frac{18}{12} = \frac{3}{2} \, yr$$
$$\text{Rate} = 13\%$$

$$\text{Amount} = P + \frac{PRT}{100}$$

$$= 9000 + \frac{9000 \times 13 \times 3}{2 \times 100}$$

$$= 9000 + 1755$$
$$= 10755$$

Q. 49	Every month, a man consumes 15 kg of rice and 10 kg of wheat. The price of rice is 40% of the price of wheat, resulting in a total expenditure of some amount per month for rice and wheat combined. If the price of wheat is increased by 40%, what percentage reduction in rice consumption is needed to maintain the same expenditure ? (Given that the price of rice and consumption of wheat is constant.)

a) 50% ✗

b) 33.33% ✗

c) 66.67% ✓

d) 25% ✗

Explanation:

24. Let price of wheat be '100x'

	Rice	wheat
consumption	15kg	10kg
Price	40x	100x
Expenditure	600x	1000x

Total Expenditure = 600x + 1000x = 1600x
Price of wheat is ↑ by 40%.

Let new consumption of Rice be 'a' kg

	Rice	wheat
consumption	a Kg	10kg
Price	40x	140x
Expenditure	40ax	1400x

Total Exp. Remains constant
$$40ax + 1400x = 1600x$$
$$\Rightarrow 40a = 200$$
$$\Rightarrow a = 5kg$$

% reduce in consumption $= \dfrac{(15-5)}{15} \times 100$

$$= \dfrac{2}{3} \times 100\%$$
$$= 66.67\%$$

Q. 50	The table below shows the production of three types of cars (A, B and C) manufactured (in thousand) by an automobile company over the years?

Year	A	B	C
2010	1850	1850	1900
2011	1950	2250	2070
2012	2520	2750	2990
2013	3030	3100	3040

The average number of A-type cars produced by the company during 2011 to 2013 is what percent of the average number of C-type cars produced by the company during 2010 to 2013

a) 96.25%　✗

b) 100%　✓

c) 105.25%　✗

d) 102.25%　✗

Explanation:

25. Avg. of A type cars from 2011 to 2013 $= \dfrac{1950+2520+3030}{3}$

$= 2500$ ————①

Avg. of C type cars from 2010 to 2013 $= \dfrac{1900+2070+2990+3040}{4}$

$= 2500$ ————②

$\Rightarrow \dfrac{eq^n①}{eq^n②} \times 100\% = \dfrac{2500}{2500} \times 100\% = 100\%$

Q. 51	Which of the following pairs of "terms – sports" is NOT correct?
	I. Penalty kick – Handball
	II. Greco Roman – Boxing
	a) Neither I nor II ✗
	b) Both I and II ✓
	c) Only II ✗
	d) Only I ✗

Explanation:	Correct answer = 2 (Both I and II)
	Statement I = "Penalty kick" is commonly associated with football (soccer).
	Statement II = "Greco-Roman" is a style of wrestling.
	<u>Sports and their Terminologies:</u>
	• **Handball =** Court player, Free throw, Penalty throw, Dive shot, Throw-in, Corner Throw, Bounced shot, Assault, Centerline, Court Player, Dribble, Center back
	• **Boxing =** Jab, Cross, Hook, Uppercut, Bob and Weave, Combination, Feint, Blocking, Clinch, Bout, Knockout, Neutral Corner, Count, Canvas
	• **Wrestling =** Babyface, Heel, Feud, Pin, Bump, Card, Bout, Freestyle, Clean Finish, Booker, Dark Match, Bridge, Heat, Fall, Call
	• **Swimming =** Backstroke, Bilateral breathing, Breaststroke, Dolphin kick, Freestyle, Flip turn, Butterfly, Catch, Aquatics

Q. 52	In which year Kalidas Samman established?
	a) 1978 ✗
	b) 1980 ✓
	c) 1982 ✗
	d) 1984 ✗

Explanation:	**Correct answer = Option 2 (1980)**
	
	 Kalidas Samman (1980):
	 • **First Recipients (1980-81) =**
	     o Semmangudi Srinivasa Iyer (Classical Music)
	     o Mallikarjun Mansur (Classical Music)
	 • **Winners 2023 =**
	     o Raghupati Bhatt (Ganjifa Arts - Painting)
	     o Rudraprasad Sengupta (Theatre)
	
	 Jnanpith Award (1961): Given for 22 languages(Eighth Schedule)&English .
	 • The oldest and highest Indian literary award.
	 • **First Recipient =** G. Sankara Kurup (Malayalam, 1965) for his collection of poems "Odakkuzhal" (The Bamboo Flute)
	 • **First Woman Recipient =** Ashapoorna Devi (Bengali, 1976) for her novel "Prothom Protishruti" (The First Promise)
	 • **First English Language Recipient** = Amitav Ghosh (2018).
	 • **Winners 2024 (59th) =** Vinod Kumar Shukla (Hindi)
	
	 Sahitya Akademi Award (1954):
	 • Given for 24 languages (22 languages of 8th schedule +English &Rajasthani).
	 • The first recipient of Hindi = **Makhanlal Chaturvedi** in 1955
	 • The first recipient of English = **RK Narayan** in 1960(The Guide)
	 • Winner 2024 (Hindi) = Main Jab Tak Aai Bahar (Poetry), **Gagan Gill**
	 • Winner 2024 (English) = Spirit Nights (Novel**), Easterine Kire**
	
	 Saraswati Samman (1991):
	 • Instituted by K.K.Birla Foundation.
	 • Given for 22 languages.
	 • **First Recipient =** Harivansh Rai Bachchan (1991) for his four-volume autobiography, "Kya Bhooloon Kya Yaad Karoon"
	 • **Winners 2024 = Bhadreshdas Swami** (Sanskrit) for his book "Swaminarayana Siddhanta Sudha."
	
	 Vyas Samman (1991):
	 • Instituted by K.K.Birla Foundation.
	 • Given for Hindi language only.
	 • **First Recipient =** Ram Vilas Sharma (1991) for his work, "Bharat ke Pracheen Bhasha aur Hindi".
	 • **Winners 2024 = Suryabala** for her novel "Kaun Des Ko Vasi: Venu Ki Diary

Q. 53	Identify the correct statement with respect to saturated or unsaturated hydrocarbons.
	a) Compounds of carbon having double bonds or triple bonds between their carbon atoms are called saturated compounds. ✗
	b) Compounds of carbon having single bonds between their oxygen atoms are called unsaturated compounds. ✗
	c) Compounds of carbon having a single bond between their carbon atoms are called saturated compounds. ✓
	d) Compounds of carbon having double or triple bonds between their hydrogen atoms are called unsaturated compounds. ✗

Explanation:	Correct answer = Option 3 (Compounds of carbon having a single bond between their carbon atoms are called saturated compounds)
	
	 • **Saturated Compounds:**
	    o Organic compounds in which all carbon atoms are connected by single bonds (C–C), and each carbon is "saturated" with hydrogen atoms.
	    o **Alkanes (saturated hydrocarbons) =** C_nH_{2n+2}
	    o **Ex:-** Methane (CH_4), Ethane (C_2H_6), Propane (C_3H_8), Butane (C_4H_{10})
	    o Less reactive
	    o Burn with a clean (blue) flame.
	    o Found in natural gas and LPG.
	    o Alkanes are Paraffins .
	
	 • **Unsaturated Compounds:**
	    o Organic molecules containing double or triple bonds between carbon atoms.
	    o **Alkenes (Contain double bonds) (C=C) =** C_nH_{2n}
	    o **Alkenes are Olefins .**
	    o **Ethylene (alkene) – used in fruit ripening.**
	    o **Alkynes (Contain triple bonds) (C≡C) =** C_nH_{2n-2}
	    o **Acetylene (ethyne) –used in welding.**
	    o **Ex:-** Ethene (C_2H_4), Propyne (C_3H_4), Butene (C_4H_8), Butyne (C_4H_6)
	    o More reactive.
	    o Undergo addition reactions (e.g., Bromination, Hydrogenation)
	    o Burn with a sooty (yellow) flame.

Q. 54	Which of the following is added in the national income to obtain personal income of households?
	a) Net Interest Payments ✗
	b) Undistributed Profits ✗
	c) Transfer Payments ✓
	d) Corporate Tax ✗

Explanation:	Correct answer =Option 3 (Transfer Payments) • **Net Interest Payments =** This refers to the difference between interest paid by households and interest received by households. • **Undistributed Profits =** The portion of a company's earnings that are retained and not distributed to shareholders as dividend • **Transfer Payments =** Payments made by the government or firms to individuals or households without any direct exchange of goods or services. • **Corporate Tax =** This is a tax levied on the profits of corporations. • **National Income =** The total of money earned within a country. • **Personal Income (PI) =** Total income of an individual earned from all the sources before taxes. • PI = National Income + Income received not earned - Income earned but received • PI = NI + Transfer payment - Undistributed corporate profit- Corporate Taxes

Q. 55	Jata Jatin is the folk dance of_____.
	a) Punjab ✗
	b) Haryana ✗
	c) Rajasthan ✗
	d) Bihar ✓

Explanation:	Correct answer = Option 4 (Bihar) **Jat-Jatin** is a traditional folk dance from the **Mithila** and Koshi regions of North **Bihar**. <u>States & their Folk dances:</u> • **Punjab =** Gatka, Giddha, Bhangra, Luddi, Sammi, Kikkli, Malwai Giddha • **Haryana =** Phag Dance, Daph, Dhamal, Loor, Gugga, Khor, Gagor • **Rajasthan =** Ghoomar, Suisini, kalbeliya, Chakri, Gangaur, Jhulan Leela, Jhuma, Suisini, Ghapal, Panihari, Ginad , Terah tali, Chari ,Maand, Chang dance • **Bihar =** Bidesiya, Domkach, Phagua, Jat-Jatin, Jhijhiya, Kajri, Paiki , Nrityakali dance , Sohar khelawana , • **Chattisgarh =** Raut Nacha, Saila Dance, Pandwani, Suwa Nacha, Gendi Dance, Panthi Dance, Khada Nacha, Cherchera, Karma • **Orissa =** Gotipua Dance, Chhau Dance, Dalkhai, Paika Dance, Sabar Dance, Chaiti Ghoda, Danda Nata ,Mahari dance

Q. 56	What did the post of Nagara Shresthi during the Rashtrakuta and Cholas mean? **a)** Leader of Merchant Caravans ✗ **b)** Merchant of city ✓ **c)** Important Minister ✗ **d)** Chief Judicial Officer ✗
Explanation:	**Correct answer = Option 2 (Merchant of city)** **Posts during Cholas:** • **Rajadhiraja =** King • **Amaichar =** Minister or advisor to the king • **Perundaram =** High official • **Sirudaram =** Lower official • **Nagara Shresthi =** Head of city merchants • **Kanakku =** Accountant/ Record Keeper • **Nayagam =** Military commander • **Puravuvari-tinaikkalanayagam =** Head of the land revenue department • **Sarthavaha =** Leader of merchant caravans • **Dharmadhikari =** Chief Judicial Officer • **Amatya =** Important Minister • **Dandanayagam =** The commander-in- chief # The founder of the Rashtrakuta dynasty = **Dantidurga** # The founder of the Chola dynasty = **Vijayalaya** # **Nagar –shreshthi** office was NOT held by the poet **Harishena.**

Q. 57	Which was the 1st attempt for the road development program between 1943 - 1963? **a)** Poona Road Plan ✗ **b)** Nagpur Road Plan ✔ **c)** Bombay Road Plan ✗ **d)** Lucknow Road Plan ✗

Explanation:	**Correct answer = Option 2 (Nagpur Road Plan)**
	
	Nagpur Road Plan (1943–1963):
	• First official and systematic road development plan in India.
	• Laid the foundation for modern road classification in India (National Highways, State Highways, etc.)
	• Set a target road density of 16 km per 100 sq. km of land area.
	
	Bombay Road Plan (1961–1981):
	• Second Road Plan.
	• Focused more on road development in backward and tribal areas.
	• Target of 32 km of road per 100 sq. km.
	
	Lucknow Road Plan (1981–2001):
	• Planned for future vehicle population and economic demands.
	• Target of 82 km per 100 sq. km in rural areas.
	
	Major Government Road Schemes:
	• **National Highways Development Project (NHDP) (1998) =**
	   o Executed by NHAI (National Highways Authority of India)
	   o Launched by Atal Bihari Vajpayee.
	   o **Key projects =** Golden Quadrilateral (Delhi-Mumbai-Chennai-Kolkata)
	   o **Total length of Golden Quadrilateral = 5846 km**
	• **Pradhan Mantri Gram Sadak Yojana (PMGSY) (2000) =**
	   o Focused on rural road connectivity.
	   o Launched by Atal Bihari Vajpayee.

Q. 58	Which force is responsible for the motion of the moon around the Earth?
	a) Van der wall ✗
	b) Centripetal ✓
	c) Centrifugal ✗
	d) Frictional ✗

Explanation:	Correct answer = Option 2 (Centripetal)
	• **Van der wall =**
	o Weak electric forces that attract neutral molecules to one another.
	o Ex:- Gecko (Type of Lizard) adhesion to smooth surfaces.
	• **Centripetal Force =**
	o The force acting on an object in curvilinear motion directed towards the axis of rotation or centre of curvature.
	o Ex:- Planets orbiting around the sun, motion of the moon around the earth
	• **Centrifugal Force =**
	o A pseudo force in a circular motion which acts along the radius and is directed away from the centre of the circle.
	o Ex:- A bike making a turn, Vehicle driving around a curve
	• **Frictional Force =**
	o The force that resists motion when the surface of one object comes in contact with the surface of another.
	o Ex:- Walking, Writing, Braking, Rubbing Hands Together

Q. 59	Identify an animal that is not a Non Chordate? a) Arthropods ✗ b) Arachnids ✗ c) Porifera ✗ d) Aves ✓
Explanation:	**Correct answer = Option 4 (Aves)** **Chordates:** • Chordates are animals possessing a notochord, a dorsal hollow nerve cord, pharyngeal slits, bilateral symmetry and a post-anal tail at some point during their development. • Ex:- Fish, Amphibians, Reptiles, Birds, Mammals • Chordates typically have a ventral heart. **Non-Chordates:** • Non-Chordates are animals that do not have a notochord, Post-anal Tail, Pharyngeal Slits, Dorsal Nerve Cord at any stage of their life, • Ex:- Porifera, Cnidaria, Platyhelminthes , Annelida , Arthropoda, Mollusca, Echinodermata • Non-Chordates typically have a dorsal heart (if present). • Radial symmetry (like jellyfish , starfish), others have bilateral symmetry. • **Notochord =** A flexible rod-like structure along the back provides support to the body. • **Dorsal Nerve Cord =** A hollow nerve cord runs along the back (above the notochord). • **Pharyngeal Slits =** Openings in the throat area used for filter-feeding or breathing. • **Post-anal Tail =** A tail that extends beyond the anus (may disappear in adults).

Q. 60	From the north most to the south most points of India, what is the extent of India?
	a) 4109 km ✗
	b) 2914 km ✗
	c) 3214 km ✔
	d) 3785 km ✗

Explanation:	**Correct answer = Option 3 (3214 km)**
	• **Northernmost Point =**
	    o Indira Col, Siachen Glacier, Ladakh
	    o Located in the Karakoram Range.
	• **Southernmost Point =**
	    o Indira Point, Great Nicobar Island, Andaman & Nicobar Islands
	        ▪ India's southern tip including islands.
	    o **Mainland southernmost point =** Kanyakumari, Tamil Nadu
	• **Easternmost Point =**
	    o Kibithu, Arunachal Pradesh
	    o A remote village near the India–China–Myanmar border.
	• **Westernmost Point =**
	    o Guhar Moti, near Sir Creek, Gujarat
	    o Located in the Kutch region, close to the Pakistan border.
	• Distance from easternmost (Kibithu) to westernmost point (Guhar Moti) of India = 2,933 km

Q. 61	Which of the following pairs regarding the peninsular plateau of India is correct?
	I. Central Highlands – south of Narmada river
	II. Deccan Plateau – north of Narmada river
	a) Only I ✗
	b) Both I and II ✗
	c) Neither I nor II ✓
	d) Only II ✗

Explanation:	Correct answer = Option 3 (Neither I nor II)
	<u>Peninsular plateau:</u> Peninsular Plateau is one of the oldest and most stable landmasses of India.
	• **Divisions of the Peninsular Plateau:**
	o **Deccan Plateau =**
	▪ Lies south of the Narmada River.
	▪ Covers Maharashtra, Karnataka, Telangana, Andhra Pradesh, Tamil Nadu.
	▪ Made of basaltic lava (black soil).
	o **Central Highlands =**
	▪ North of the Narmada River.
	▪ Covers MP, eastern Rajasthan, Chhattisgarh, western UP
	o **Chota Nagpur Plateau =**
	▪ Called the "Storehouse of Minerals" in India.
	▪ Covers Jharkhand, parts of Chhattisgarh, Odisha, West Bengal
	o **Meghalaya & Karbi Anglong Plateau (Northeastern Plateau) =**
	▪ Broken off from the Deccan Plateau due to tectonic activity.
	▪ Covers Meghalaya, Assam.

Q. 62	_ diseases last for only shorter periods of time. **a)** Hereditary ✗ **b)** Chronic ✗ **c)** Acute ✓ **d)** Genetic ✗

Explanation:	Correct answer = Option 3 (Acute)
	
	• **Hereditary Disease:**
	  o These diseases are passed down from parents to their offspring through genes.
	  o Examples:
	    ▪ **Cystic Fibrosis =** disorder affecting the lungs and digestive system.
	    ▪ **Sickle Cell Disease =** A blood disorder causing red blood cells to be sickle-shaped, leading to pain, anemia, and other complications.
	    ▪ **Hemophilia** = A bleeding disorder where blood doesn't clot normally due to a deficiency in clotting factors.
	    ▪ **Thalassemia =** A blood disorder causing the body to produce less or abnormal hemoglobin, leading to anemia.
	
	• **Chronic Diseases:**
	  o These are long-lasting conditions that develop gradually.
	  o Examples:
	    ▪ **Diabetes =** A metabolic disorder characterized by high blood sugar levels.
	    ▪ **Arthritis =** Inflammation of the joints, causing pain and stiffness.
	    ▪ **Asthma =** causing inflammation and narrowing of the airways, leading to wheezing, coughing, and shortness of breath.
	
	• **Acute Diseases:**
	  o These diseases have a rapid onset and last for a short period.
	  o Examples:
	  o **Common Cold =** Caused by various viruses.
	  o **Influenza =** A viral infection causing fever, body aches, fatigue, and respiratory symptoms.
	  o **Bronchitis =** Inflammation of the airways in the lungs, often caused by a virus.
	  o **Pneumonia =** An infection of the lungs that can be caused by bacteria.
	
	• **Genetic Diseases:**
	  o These diseases are caused by abnormalities in an individual's genetic material, including mutations in genes or changes in chromosomes.
	  o Examples:
	    ▪ **Down Syndrome =** A chromosomal disorder caused by an extra copy of chromosome 21.
	    ▪ **Turner Syndrome =** A chromosomal disorder affecting females, where one of the X chromosomes is missing or partially missing, leading to various developmental issues.
	    ▪ **Klinefelter Syndrome =** Affects males who have an extra X chromosome, often leading to infertility and other physical characteristics.

Q. 63	Which of the following is NOT a type of a fold mountain?
	a) Aravali range ✗
	b) The Rhine Valley ✓
	c) Appalachians ✗
	d) Ural Mountains ✗

Explanation:	**Correct answer = Option 2 (The Rhine Valley)**
	
	 Types of Mountains:
	
	 • **Dome Mountain =**
	    o Formed where a region of flat-lying sedimentary rocks is warped or bowed upward making a structural dome.
	    o Rounded or elliptical shape.
	    o Ex:- Black Hills (USA), Adirondack Mountains (USA)
	
	 • **Fold Mountains =**
	    o Created when tectonic plates collide, causing the Earth's crust to buckle and fold.
	    o The upward folds are called anticlines and the downward folds are synclines.
	    o Ex:- Himalayas, Alps, Andes, Rockies, Appalachians, Aravali, Ural
	
	 • **Block Mountains =**
	    o Created by faulting in the Earth's crust, where large blocks of the Earth's surface are uplifted or dropped.
	    o Steep slopes with flat tops.
	    o Ex:- Sierra Nevada (USA), Harz Mountains (Germany), Vosges Mountains (France)
	
	 • **Volcanic Mountains =**
	    o Formed by volcanic activity.
	    o Typically cone-shaped with a crater at the summit.
	    o Ex:- Mount Fuji (Japan), Mount Kilimanjaro (Tanzania), Mount St. Helens (USA)
	
	 • **Plateau Mountains =**
	    o These mountains were initially plateaus – large, flat elevated areas.
	    o Relatively flat tops and steep sides.
	    o Ex:- Catskill Mountains (USA), Scottish Highlands

Q. 64	Which of the following statements is correct regarding the marginal utility of a commodity?
	I. It is the change in total utility due to consumption of one additional unit of a commodity.
	II. It increases with increase in consumption of the commodity.
	a) Both I and II ✗
	b) Only II ✗
	c) Only I ✓
	d) Neither I nor II ✗
Explanation:	**Correct answer = Option 3 (Only I)**
	• **Statement I =** It is the change in total utility due to consumption of one additional unit of a commodity. This is the definition of marginal utility
	• **Statement II =** It increases with increase in consumption of the commodity. This statement is incorrect according to the Law of Diminishing Marginal Utility.
	• **Marginal Utility =**
	o The additional satisfaction or benefit that a consumer derived from buying an additional unit of a commodity/service.
	o It's the change in total utility resulting from a one-unit increase in the quantity consumed.
	o **Formula:** $MU_n = TU_n - TU_{n-1}$
	▪ **MU_n =** Marginal utility of the nth unit
	▪ **TU_n =** Total utility from consuming n units
	▪ **TU_{n-1} =** Total utility from consuming (n−1) units
	• **Law of Diminishing Marginal Utility =** As a consumer consumes more and more of a good or service, the additional satisfaction (utility) they derive from each additional unit decreases.

Q. 65	When was the Lucknow Pact signed by All India Muslim League and Indian National Congress?
	a) 1916 ✔️
	b) 1911 ✗
	c) 1919 ✗
	d) 1906 ✗

| Explanation: | **Correct answer = Option 1 (1916)**

• **1916: Lucknow Pact**
  o Lucknow Pact between the Indian National Congress (INC) and the All India Muslim League (AIML).
  o Congress accepted separate electorates for Muslims.
  o Congress President = **Ambika Charan Mazumdar**
• **1906:**
  o Formation of the All India Muslim League in Dhaka.
  o Congress President for the Calcutta session was **Dadabhai Naoroji**.
• **1911:**
  o Delhi Durbar: King George V visited India.
  o Capital of India shifted from Calcutta to Delhi.
  o Partition of Bengal (1905) was annulled.
  o Congress President for the Calcutta session was Pandit Bishan Narayan Dar.
• **1919:**
  o Jallianwala Bagh Massacre (Amritsar) by General Dyer.
  o The Rowlatt Act passed — allowed arrest without trial.
  o Montagu-Chelmsford Reforms introduced dyarchy in provinces.
  o Congress President for the Amritsar session was Pandit Motilal Nehru. |

Q. 66	Which pass connects the Kullu Valley with the Lahaul and Spiti Valleys of Himachal Pradesh, India?
	a) Banihal Pass ✗
	b) Rohtang Pass ✓
	c) Lipulekh Pass ✗
	d) Thamarassery Pass ✗

| Explanation: | **Correct answer = Option 2 (Rohtang Pass)**
Some Passes in India:
• **Banihal Pass =**
    o Located in the Pir Panjal Range of Jammu and Kashmir.
    o Connects Jammu with Srinagar (Kashmir Valley).
• **Rohtang Pass =**
    o Located in the Himachal Pradesh.
    o Connects Kullu Valley (south of the Pir Panjal range) with Lahaul and Spiti Valleys
• **Lipulekh Pass =**
    o Located on the tri-junction of India–Nepal–Tibet (China) border in Uttarakhand.
    o Connects Uttarakhand (India) with Tibet (China).
• **Thamarassery Pass (also known as Wayanad Churam) =**
    o Located in Kerala (Western Ghats).
    o Connects Kozhikode (Calicut) on the coast with Wayanad Plateau in the Western Ghats.
• **Zoji La Pass =**
    o Located in Jammu & Kashmir.
    o Connects Srinagar with Leh (via Sonmarg and Drass).
• **Khardung La =**
    o Located in Jammu & Kashmir.
    o Connects Leh with Nubra Valley.
• **Baralacha La =**
    o Located in Himachal Pradesh.
    o Connects Lahaul with Ladakh.
• **Mana Pass =**
    o Located in Uttarakhand.
    o Connects India with Tibet.
• **Nathula Pass =**
    o Located in Sikkim.
    o Connects Sikkim with Tibet (China) |

Q. 67	Raman wants to use a rear-view mirror in his vehicle. Which type of mirror should he pick for it? **a)** Convex Mirrors ✅ **b)** Concave Mirrors ❌ **c)** Plane Mirrors ❌ **d)** Cylindrical Mirrors ❌

Explanation:	**Correct answer = Option 1 (Convex Mirror)**
	• **Convex Mirror =**
	  o Curved outward shape (like the back of a spoon).
	  o Forms a virtual, erect and diminished.
	  o Ex:- Rear-view mirrors in cars, scooters, and buses, ATMs
	• **Concave Mirror =**
	  o Curved inward shape (like the inside of a spoon).
	  o Forms real or virtual images, erect or inverted, and magnified or diminished depending on distance from the mirror.
	  o Ex:- Car headlights, Solar cookers, Shaving mirrors / Makeup mirrors, Dentist mirrors
	• **Plane Mirror =**
	  o Forms a virtual, erect, same-sized, laterally inverted (left-right reversal) image.
	  o Ex:- Periscopes, Optical experiments
	• **Cylindrical Mirror =**
	  o Curved in one direction (like a cylinder's side).
	  o Forms Distorted image.
	  o Ex:- Scientific labs, Art installations (to create fun distortions)

Q. 68	Aga Khan Palace is located in ___ city of Maharashtra. a) Aurangabad ✗ b) Mumbai ✗ c) Pune ✓ d) Ahmednagar ✗

Explanation:	**Correct answer = Option 3 (Pune)**
	• **Aga Khan Palace =**
	   o Built by Sultan Mohammed Shah Aga Khan III in 1892 in Pune.
	   o Mahatma Gandhi, Kasturba Gandhi, Mahadev Desai imprisoned during Quit India Movement (8 Aug,1942).
	   o Kasturba Gandhi and Mahadev Desai both died here.
	   o Palace is known as Gandhi National Memorial.
	• **Sultan Mohammed Shah Aga Khan III** was the Founder and 1st permanent president of All India Muslim League (AIML) (1906).
	• **Ahmednagar Fort =**
	   o Ahmednagar Fort was built by Malik Ahmad Nizam Shah I in 1490 in Ahmednagar, Maharashtra.
	   o Jawaharlal Nehru was imprisoned here during the Quit India Movement.
	   o Jawaharlal Nehru wrote his famous book **"The Discovery of India"** in **Ahmednagar Fort Jail**.

Q. 69	Which of the following is NOT a tributary of river Kaveri? **a)** Musi ✅ **b)** Bhavani ❌ **c)** Hemavati ❌ **d)** Kabini ❌
Explanation:	**Correct answer = Option 1 (Musi)** **KAVERI RIVER =** • Originates from Brahmagiri hills in Coorg, Karnataka. • Shivasamudram (Karnataka) & Hogenakkal (Tamil Nadu) waterfalls are most important on this river. • **Left bank tributaries =** Hemavati, Shimsha, Akravathi • **Right bank tributaries =** Laxmanatirtha, Suvarnavati, Kabini, Bhavani (2nd longest of Tamil Nadu), Amravati **KRISHNA RIVER =** • Second longest river of Peninsula that flows east. • Originates near Mahabaleshwar in Western Ghats. • **Left bank tributaries =** Bhima (longest tributary of krishna river), Musi, Munneru, Paleru • **Right bank tributaries =** Venna, Koyna, Panchganga, Ghatprabha, Malprabha, Tungbhadra **GODAVARI RIVER =** • Longest river of Peninsula and third largest in India. • Also known as Dakshin Ganga or Vridha Ganga. • Originates from Trimbak in Western Ghats in Nashik. • **Left bank tributaries =** Purna, Dudhna, Penganga, Wainganga, Indravati, Sabari • **Right bank tributaries =** Pravara, Dharna, Manjra, Mula, Maner

Q. 70	Which of the following earthquake waves are surface waves? a) P waves ❌ b) L waves ✅ c) S Waves ❌ d) M waves ❌
Explanation:	**Correct answer = Option 2 (L waves)** **P Waves (Primary Waves) =** Body Waves • Also known as longitudinal waves/ compressional waves. • They are the fastest seismic waves and can travel through solids, liquids, and gases. • These waves have high frequency and are the least destructive. • Recorded first on the seismograph. • Travel through the interior of the Earth. • Particles move back & forth (push-pull) in the same direction as waves. **L Waves (Love Waves) =** Surface Waves • These waves move only along the surface. • Low–frequency transverse waves (shear waves). • Most destructive. • Slower than P and S, but **faster than Rayleigh waves.** • Recorded last on the seismograph. • Ground moves side to side. **S Waves (Secondary Waves) =** Body Waves • Also called transverse waves or shear waves or distortional waves. • Travel through solids only. • Particles move up & down or side to side perpendicular to the wave. **R waves (Rayleigh wave) =** • It moves the ground up and down and side-to-side in the same direction that the wave is moving. • **Rayleigh waves are also surface waves**, like Love waves. • Most of the shaking and damage from an earthquake.

Q. 71	What is the pH of normal milk?
	a) 9.1-9.3 ✗
	b) 8.1-8.3 ✗
	c) 5.4-5.6 ✗
	d) 6.7-6.9 ✔
Explanation:	**Correct answer = Option 4 (6.7-6.9)** pH (Potential of Hydrogen):- - It's a measurement of the acidity or alkalinity of a solution, indicating the concentration of hydrogen ions (H+). - pH Range = - pH < 7 - Acidic, Ex:- lemon juice and vinegar - pH = 7 - Neutral (neither acidic nor alkaline), Ex:- Pure Water - pH > 7 - Alkaline (basic), Ex:- baking soda and ammonia **pH of some substances:** **Stomach Acid (HCl) =** 1.5-3.5 **Lemon Juice =** 2-3 **Vinegar =** 2-3 **Acid Rain =** 4-5 **Milk =** 6.7-6.9 **Pure Water =** 7 **Blood =** 7.35-7.45 **Seawater =** 7.5-8.4 **Baking Soda Solution =** 8-9 **Soap (Liquid) =** 9-10 **Ammonia (Household) =** 11-12

Q. 72	The first English factory was set up on the banks of the river _ in 1651.
	a) Son ✗
	b) Yamuna ✗
	c) Ganga ✗
	d) Hugli ✓
Explanation:	**Correct answer = Option 4 (Hugli)**
	• **Portuguese =**
	o First to arrive in India by sea route (Vasco da Gama, 1498).
	o First Factory - Calicut (Kerala) (1501), near Pattanam River.
	• **British (East India Company) =**
	o Founded in 1600 by a charter from Queen Elizabeth I.
	o First factory in Surat (1613) near Tapti river.
	o The first English factory in Bengal (1651) set up near Hugli river in Kolkata.
	• **Dutch =**
	o Arrived in India in 1602.
	o First factory was established in Masulipatnam (Andhra Pradesh) near the Krishna River delta in 1605.
	• **French =**
	o Arrived in 1664 under Louis XIV.
	o First factory was established in Surat on the Tapti River in 1668.
	• **Danish =**
	o Arrived in India in 1616.
	o First factory was established in Tranquebar (Tamil Nadu) near the Kaveri river in 1620.

Q. 73	According to which of the following laws, the pressure of a mixture of gases is equal to the sum of the partial pressure of the component gases?
	a) Boyle's Law ✗
	b) Dalton's Law ✓
	c) Charles' Law ✗
	d) Graham's Law ✗
Explanation:	**Correct answer = Option 2 (Dalton's Law)**
	• **Boyle's Law =** Pressure–Volume Relationship
	o At constant temperature, the pressure of a gas is inversely proportional to its volume.
	o Boyle's law (1662) is named after Robert Boyle.
	o $P \propto 1/V$
	• **Dalton's Law =** Law of Partial Pressures
	o In a mixture of non-reacting gases, the total pressure is the sum of the partial pressures of individual gases.
	o Dalton's law (1801) was observed by John Dalton.
	o $P_{total}=P1+P2+P3+...$
	• **Charles' Law =** Temperature–Volume Relationship
	o The volume occupied by a fixed amount of gas is directly proportional to its absolute temperature, if the pressure remains constant.
	o This law (1787) was formulated by Jacques Charles
	o $V \propto T$
	• **Graham's law =** Law of Diffusion/Effusion
	o The rate of effusion of a gas is inversely proportional to the square root of the molar mass of its particles.
	o This law (1848) was formulated by Thomas Graham.

Q. 74	What is the primary objective of the Sanchar Saathi app launched by the Minister of Communications, Jyotiraditya Scindia? **a)** To provide free mobile data to all users ✗ **b)** To help combat cyber fraud and enhance telecom security ✓ **c)** To track and monitor internet usage of telecom users ✗ **d)** To offer discounts on telecom services ✗
Explanation:	Correct Answer = Option 2 (To help combat cyber fraud and enhance telecom security) Sanchar Saathi App- • launched by = **Jyotiraditya Scindia** • Aims = to **combat cyber fraud** and improve **telecom security** for users. **Key features-** • include tracking lost mobile phones, blocking fraudulent calls, and providing a platform to report cyber fraud. • It is specifically designed to address security concerns in the telecom sector.

Q. 75	What is the significance of INS Vagsheer in the context of the Indian Navy's submarine fleet? **a)** It is the first nuclear-powered submarine of the Indian Navy ✗ **b)** It is the sixth and final submarine of the Kalvari-class ✓ **c)** It is the first submarine built in India ✗ **d)** It is a dedicated research submarine for marine studies ✗
Explanation:	Correct Answer = Option 2 (It is the sixth and final submarine of the Kalvari-class) • **INS Vagsheer** is the **sixth** and final submarine of the Kalvari-class of submarines in the Indian Navy. • These submarines are **diesel-electric attack submarines** known for their stealth capabilities and underwater warfare proficiency. • **The Kalvari-class** submarines are built under **Project 75** with the collaboration of Naval Group of France. The first five submarines of the Kalvari class- • **INS Kalvari** • **INS Khanderi** • **INS Karanj** • **INS Vela** • **INS Vagir** # **Chief of the Naval Staff (CNS) =** Admiral Dinesh Kumar Tripathi # **Chief of the Army Staff (COAS) =** General Upendra Dwivedi # **Chief of the Air Staff (CAS) =** Air Chief Marshal Amar Preet Singh

Q. 76	Find out the similar word of-
	Guzzle
	a) Slip ✗
	b) Imbibe ✓
	c) Starve ✗
	d) Release ✗
Explanation:	**Correct answer : (2) Imbibe**
	Guzzle - To eat or drink too fast and too much **Slip** - To slide accidentally, or to make a small mistake. फिसलना / चूक जान **Imbibe -** To absorb or take in (ideas, knowledge, or liquids). आत्मसात करना / पीना **Starve** - To suffer or die from lack of food. भूख से मरना / भूखा रहना **Release** - To set free, let go, or make public. मुक्त करना / जारी करना

Q. 77	Find out the similar word of-
	Embargo
	a) Barrier ✓
	b) Prescribe ✗
	c) Comfort ✗
	d) Justify ✗
Explanation:	**Correct Answer: (1) Barrier**
	Embargo - an official order to stop doing business with another country **Barrier** – Something that blocks or restricts movement or progress. **Prescribe** – To recommend or set rules, especially for treatment or conduct. **Comfort** – To provide relief or ease pain or distress. **Justify** – To prove or show something to be right or reasonable. न्यायोचित

Q. 78	Find out the opposite word of- Tempestuous a) Stress　✗ b) Toil　✗ c) Calm　✓ d) Examine　✗
Explanation:	Correct Answer: (3) Calm • **Tempestuous** - (used about a relationship, period of time, etc.) involving a lot of difficulty and extreme or strong emotions • **Stress** – A state of mental or emotional strain or pressure. • **Toil** – Hard and continuous work. • **Calm** – Peaceful and free from disturbance or strong emotion. • **Examine** – To inspect or analyze carefully.

Q. 79	In the following questions, select the alternative which best expresses the meaning of the Idiom/Phrase. Whoop it up a) Be continually reminded of an unpleasant topic　✗ b) Be totally ignorant or incompetent　✗ c) Used as an exhortation to overcome or be rid of something　✗ d) Enjoying a noisy way, usually in a group　✓
Explanation:	Correct Answer: (4) Enjoying a noisy way, usually in a group • **Whoop it up** is an idiom which means to celebrate or enjoy loudly and enthusiastically, often in a group setting. • Example - After their team won the championship, the fans **whooped it up** all night

Q. 80	In the following questions, select the alternative which best expresses the meaning of the Idiom/Phrase.
	Reap the whirlwind
	a) Providing that other factors or circumstance remain the same ✗
	b) Suffer negative consequences as a result of one's actions ✓
	c) an indication that something is accepted or regarded favourably ✗
	d) Believing that moderation is more satisfying than excess ✗
Explanation:	Correct Answer : (2) Suffer negative consequences as a result of one's actions. • **Reap the whirlwind** means facing serious consequences due to one's past actions, especially bad or reckless ones. • Example - The corrupt politicians **reaped the whirlwind** when the public voted them out of power.

Q. 81	Choose the correct one word for the given sentence.
	Obsession for wine
	a) Ethnomania ✗
	b) Oenomania ✓
	c) Egomania ✗
	d) Idolomania ✗

Explanation:	Correct Answer : (2) "Oenomania."
	• **Oenomania** comes from *Oeno-* (Greek for wine) and *-mania* (obsession). It means an extreme obsession or addiction to wine.
	• Other options:
	   ○ **Ethnomania** – Obsession with one's ethnicity or race.
	   ○ **Egomania** – Obsession with oneself (extreme self-centeredness).
	   ○ **Idolomania** – Obsession with idols or celebrities.

Q. 82	Rearrange the given para jumbled sentences in the correct order.
	P: If the intention is just to consume whatever comes from the West, then it is harmful.
	Q: Some of its effects are really helping and positive as it increases initiative and entrepreneurship qualities provided in that spirit.
	R: At the same time, the state's strategic intervention is essential because more than 40% of people live below the poverty line.
	S: The impact of economic reforms is mixed.
	a) SRQP ✗
	b) SQPR ✔
	c) RQPS ✗
	d) QPSR ✗
Explanation:	Correct Answer : (2) SQPR.
	1. **S** introduces the topic by stating that the impact of economic reforms is mixed.
	2. **Q** follows by explaining the positive effects of these reforms when taken in the right spirit.
	3. **P** continues by contrasting this, warning that blindly following Western trends can be harmful.
	4. **R** concludes by emphasizing the need for government intervention, as a large portion of the population lives below the poverty line.
	The correct order is: S → Q → P → R.

Q. 83	In the following question, select the alternative which is the best substitute for the phrase.
	Eating mud
	a) Equivorous ✗
	b) Limivorous ✔
	c) Calcivorous ✗
	d) Fructivorous ✗
Explanation:	Correct Answer: (2) "Limivorous."
	● **Limivorous** → Eating **mud** (from Latin *limus* meaning mud).
	● **Equivorous** → Eating **horseflesh** (*equus* = horse).
	● **Calcivorous** → Eating **limestone or chalk** (*calx* = lime).
	● **Fructivorous** → Eating **fruits** (*fructus* = fruit).

Q. 84	In the following questions, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select No Error.
	Many firms fail because when they begin (a)/ exporting, they have not research the (b)/ target markets or have not planned enough. (c)/No error (d)
	a) a ✗
	b) b ✔
	c) c ✗
	d) d ✗

Explanation:	Correct Answer : (b) "they have not research the"
	• Use "researched" instead of "research" because "have" requires **V3 (past participle)**.
	• The correct sentence : "Many firms fail because when they begin exporting, they have not **researched** the target markets or have not planned enough."

Q. 85	In the following questions, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select No Error.
	Part of what a man learns will measurable (a)/ as specific knowledge and skills, while (b)/ another part involves changes. (c)/No error (d)
	a) a ✔
	b) b ✗
	c) c ✗
	d) d ✗

Explanation:	Correct Answer : (a) "Part of what a man learns will measurable"
	• In part (a), the phrase **"will measurable"** is grammatically incorrect.
	• It should be **"will be measurable"**, because the verb "**will**" requires the base form **"be"** followed by the adjective **"measurable"**.

Q. 86	Rearrange the given para jumbled sentences in the correct order.
	P: We may see alcohol and tobacco advertisements everywhere, on television, in newspapers, on street ads card etc.
	Q: But we know the truth is alcohol and cigarettes are harmful for people's health and sometimes it may bring bad effects to self-impression.
	R: Alcohol ads usually create several feints to tell people that alcohol is good for people and induce people to drink.
	S: On the other hand, the malign influence of advertisements shows smoking as something "cool".
	a) PRSQ ✔
	b) PSQR ✘
	c) QRSP ✘
	d) RSPQ ✘

Explanation:	## Correct Answer : (1) PRSQ
	1. **P** introduces the topic by mentioning the widespread presence of alcohol and tobacco advertisements.
	2. **R** follows by explaining how alcohol ads deceive people into thinking drinking is beneficial.
	3. **S** then describes how advertisements also portray smoking as "cool," continuing the idea of misleading ads.
	4. **Q** concludes the paragraph by revealing the truth—that alcohol and cigarettes are actually harmful.
	The correct order is: **P → R → S → Q**.

Q. 87	Improve the bracketed part of the sentence.
	(It is been seen) as a "prestige battle" for the PM and a litmus test for the president of the opposition party.
	a) It have been seen ✘
	b) It is being seen ✔
	c) It had being seen ✘
	d) No improvement ✘

Explanation:	## Correct Answer : (2) It is being seen
	• **"It is been seen"** is incorrect here. The action is happening now, and it's in passive voice.
	• The correct **present continuous passive** form is **"It is being seen"**.

Q. 88	Improve the bracketed part of the sentence. The company hopes to eventually provide Singapore with the second-biggest electric car-sharing service in the world, (second to Paris only). **a)** second only to Paris ✔ **b)** second to only Paris ✘ **c)** only second to Paris ✘ **d)** No improvement ✘
Explanation:	Correct Answer : (1) second only to Paris ● Use "second only to Paris" instead of "second to Paris only" ● "**second only to Paris**" means Singapore is ranked just after Paris.

Q. 89	Improve the bracketed art of the sentence. While two judges in the majority said the practice was arbitrary and, therefore, unconstitutional, the third judge called it (legally). **a)** Illegally ✘ **b)** Illegal ✔ **c)** Legality ✘ **d)** No improvement ✘
Explanation:	Correct Answer : (2) Illegal ● The correct word should describe how the **third judge called** the practice — and "called" here requires an **adjective**, not an adverb. ● Hence, **"illegal"** is correct, as it is the proper adjective to describe the nature of the practice. ● **"Legally"** (adv.) means "**in a legal manner**". ● **"Illegal"** (adj.) means **unlawful**.

Q. 90	Choose the correct indirect form of the given sentence.
	My father said to me, "Don't talk to your mother like that."
	a) My father warns me not to talk to my mother like that. ✗
	b) My father warned me not to talk to my mother like that. ✔
	c) My father warned me not to have talked to my mother like that. ✗
	d) My father warns me not to have talked to my mother like that. ✗
Explanation:	Correct Answer : (2) My father warned me not to talk to my mother like that.
	• The sentence is in **direct speech with an imperative (command)**.
	• **"Said to"** changes to **"warned"** when the tone is cautionary.
	• "**Don't talk**" → becomes **"not to talk"** in indirect speech.

Q. 91	Choose the correct indirect form of the given sentence.
	My brother said to me, "I was upset, but now I am fine."
	a) My brother told me that he was upset, but now he was fine. ✗
	b) My brother told me that he had been upset, but then he will be fine. ✗
	c) My brother told me that he had been upset, but then he was fine. ✔
	d) My brother told me that he has been upset, but then he is fine. ✗
Explanation:	Correct Answer : (3) My brother told me that he had been upset, but then he was fine.
	• **"Said to"** changes to **"told"**
	• **"I was upset"** becomes **"he had been upset"** (past → past perfect)
	• **"now"** becomes **"then"**
	• **"I am fine"** becomes **"he was fine"**

Q. 92	Choose the passive voice of the given sentence. The General presented us a detailed battle plan.
	a) A detailed battle plan will be presented to us by the General. ✗
	b) The General presents us a detailed battle plan. ✗
	c) A detailed battle plan was presented to us by the General. ✓
	d) Presenting of a detailed battle plan was being done by the General to us. ✗
Explanation:	Correct Answer: (3) A detailed battle plan was presented to us by the General. • **Active Voice:** The General presented us a detailed battle plan. (Subject + Verb + Indirect Object + Direct Object) • **Passive Voice:** A detailed battle plan was presented to us by the General. (Direct Object becomes Subject + Passive Verb + to Indirect Object)

Q. 93	Choose the passive voice of the given sentence. The doctor has given me a very painful injection.
	a) A very painful injection has been given to me by the doctor. ✓
	b) The doctor gives myself a very painful injection. ✗
	c) A very painful injection is being given to me by the doctor. ✗
	d) Giving of a painful injection to me has been done by the doctor. ✗
Explanation:	Correct Answer: (1) A very painful injection has been given to me by the doctor. • **Active Voice:** The doctor has given me a very painful injection. (Subject + has/have + past participle + indirect object + direct object) • **Passive Voice:** A very painful injection **has been given** to me by the doctor. (Direct object becomes subject + has been + past participle)

Q. 94	Choose the passive voice of the given sentence. Who has composed this song? **a)** This song will be composed by whom? ✗ **b)** Who composes this song? ✗ **c)** Composing of this song has been done by who? ✗ **d)** This song has been composed by whom? ✓

Explanation:	Correct Answer: (4) This song has been composed by whom?
	
	• Active Voice (Question form):
	  Who has composed this song?
	  (Interrogative + Present Perfect + Object)
	
	• Passive Voice:
	  The object "**this song**" becomes the subject.
	  has/have + been + past participle (composed)
	  "**Who**" becomes "**by whom**" in passive voice.

Q. 95	Find out the incorrect meaning of the given idiom. **a)** At times: sometimes ✗ **b)** A bird's eyeview: a general view ✗ **c)** A cock and bull story: a love story ✓ **d)** A cry in the wilderness: useless talk ✗
Explanation:	Correct Answer: (3) A cock and bull story: a love story • **A cock and bull story** means **an unbelievable or made-up story**, not based on facts.

Q. 96	Directions (21-25): In the following passages, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.
	Violence takes a heavy toll and affects public life.....(1)...... High or low, known or unknown, rich or poor, popular or unpopular, no one is safe or secure today. It appears that one can harm anybody at any time and at..... (2)...... A mad and sad rat race is on to make money and..... (3).....power at any cost and by any means. The result is that no political party or group can now.....(4).....into claim to total innocence in so far as.... (5)..... of violence against innocent person for personal or political gains is concerned. Violent demonstrations, rallies, hartals have become the order of the day.
	Select the most appropriate option to fill in blank number 1.
	a) Adversely ✔
	b) Moderately ✘
	c) Relatively ✘
	d) Ultimately ✘

Explanation:	Correct Answer : (1) Adversely
	The sentence talks about how violence **"takes a heavy toll and affects public life"**. The word **"adversely"** is correct here, which means **"in a harmful or negative way."**

Q. 97	In the following passages, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.
	Violence takes a heavy toll and affects public life.....(1)...... High or low, known or unknown, rich or poor, popular or unpopular, no one is safe or secure today. It appears that one can harm anybody at any time and at..... (2)...... A mad and sad rat race is on to make money and..... (3).....power at any cost and by any means. The result is that no political party or group can now.....(4).....into claim to total innocence in so far as.... (5)..... of violence against innocent person for personal or political gains is concerned. Violent demonstrations, rallies, hartals have become the order of the day.
	Select the most appropriate option to fill in blank number 2.
	a) wish ✘
	b) will ✔
	c) drill ✘
	d) Still ✘

Explanation:	Correct Answer : (2) will
	The sentence is saying that nowadays, no one is completely safe because anyone can harm others whenever they want. The phrase **"at will"** means **"whenever someone wants, without any restriction or permission."**
	So, **"one can harm anybody at any time and at will"** means **"a person can hurt others whenever they want, without being stopped."**

Q. 98	In the following passages, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.
	Violence takes a heavy toll and affects public life.....(1)...... High or low, known or unknown, rich or poor, popular or unpopular, no one is safe or secure today. It appears that one can harm anybody at any time and at..... (2)...... A mad and sad rat race is on to make money and.....(3).....power at any cost and by any means. The result is that no political party or group can now.....(4).....into claim to total innocence in so far as.... (5)..... of violence against innocent person for personal or political gains is concerned. Violent demonstrations, rallies, hartals have become the order of the day.
	Select the most appropriate option to fill in blank number 3.
	a) Retain ✗
	b) Sustain ✗
	c) Gain ✓
	d) Maintain ✗
Explanation:	Correct Answer : (3) Gain

The sentence talks about people being desperate to **make money and gain power** at any cost.
- **Retain** means to keep something that you already have.
- **Sustain** means to support or maintain something for a long time.
- **Gain** means to get or acquire something, which is correct because people are trying to **gain power** at any cost.
- **Maintain** means to keep something in its existing state. |

Q. 99	In the following passages, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.
	Violence takes a heavy toll and affects public life.....(1)...... High or low, known or unknown, rich or poor, popular or unpopular, no one is safe or secure today. It appears that one can harm anybody at any time and at..... (2)...... A mad and sad rat race is on to make money and..... (3).....power at any cost and by any means. The result is that no political party or group can now.....(4).....into claim to total innocence in so far as.... (5)..... of violence against innocent person for personal or political gains is concerned. Violent demonstrations, rallies, hartals have become the order of the day.
	Select the most appropriate option to fill in blank number 4.
	a) Lie ✗
	b) laid ✗
	c) Lain ✗
	d) Lay ✔

Explanation:	Correct Answer : (4) "Lay."
	• In the given sentence, it talks about political parties or groups claiming to be completely innocent.
	• The correct verb here is **"lay"** because **"lay claim to,"** which is commonly used to indicate making a claim or asserting something.
	Other options:
	• **"Lie"** means to recline or rest.
	• **"Laid"** is the past tense of "lay."
	• **"Lain"** is the past participle of "lie".

Q. 100	In the following passages, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives. Violence takes a heavy toll and affects public life.....(1)...... High or low, known or unknown, rich or poor, popular or unpopular, no one is safe or secure today. It appears that one can harm anybody at any time and at..... (2)...... A mad and sad rat race is on to make money and.....(3).....power at any cost and by any means. The result is that no political party or group can now.....(4).....into claim to total innocence in so far as.... (5)..... of violence against innocent person for personal or political gains is concerned. Violent demonstrations, rallies, hartals have become the order of the day. Select the most appropriate option to fill in blank number 5. a) Penetration ✗ b) Precipitation ✗ c) Perpetration ✔ d) Interpretation ✗
Explanation:	Correct Answer : (3) "Perpetration." ● The word **"perpetration"** means **the act of committing a crime or wrongdoing.** ● The sentence is discussing **acts of violence** committed for personal or political gain. ● The phrase **"perpetration of violence"** is commonly used to describe **carrying out violent acts.**