









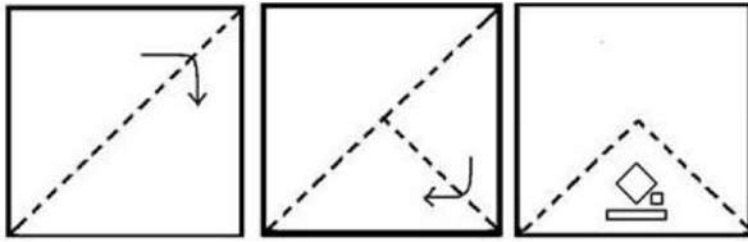
RBE SSC CGL 2025 Live Mock July 26,2025

Q. 1	<p>Select the correct combination of mathematical signs to replace the * signs and balance the given equation.</p> $24 * 56 * 32 * 8 * 12 = 32$ <p>a) $-, +, \div, \times$ </p> <p>b) $+, -, \div, \times$ </p> <p>c) $\div, +, \times, -$ </p> <p>d) $+, -, \times, \div$ </p>
Explanation:	<p>The correct answer is: b</p> $24 * 56 * 32 * 8 * 12 = 32$ <p>By interchanging, $+, -, \div, \times$ by all the stars the given equation will be balanced,</p> $24 + 56 - 32 \div 8 \times 12 = 32$ <p>LHS,</p> $\Rightarrow 24 + 56 - 32 \div 8 \times 12$ $\Rightarrow 80 - 32 \div 8 \times 12$ $\Rightarrow 80 - 48 = 32$ <p>LHS = RHS</p>

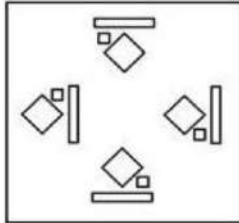
Q. 2	<p>Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.</p> <p>d _ce_ee_ed_cd_ ce</p> <p>a) efcdc </p> <p>b) ddcce </p> <p>c) cddde </p> <p>d) ccddc </p>
Explanation:	<p>The correct set of letters is ccddc.</p> <p>dcce/ceed/eddc/dcce</p> <p>Logic of the letter series:</p> <p>The letter which comes twice in the initial set of letters comes at the starting of the next set of letters and the last letter of the sets of letters get repeated twice in the next letter series. Also, the first letter of set of letters becomes last letter of the next set of letters.</p>

Q. 3

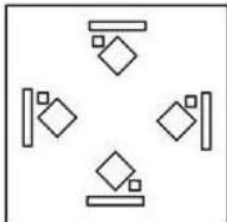
The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



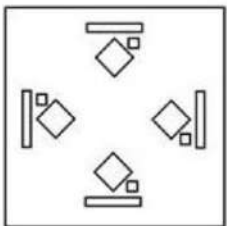
a)



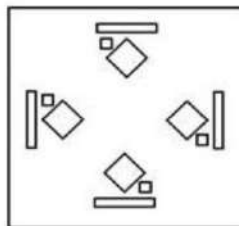
b)



c)

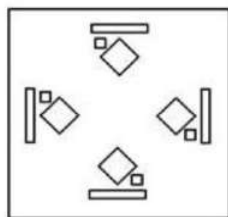






d)



The correct answer is: d

Explanation:



Q. 4	<p>Find the ratio of boys and girls in the class?</p> <p>Statement:</p> <p>I) There are 20 boys in the class.</p> <p>II) The ratio of the number of girls and students in the whole class is 3 : 7.</p> <p>a) Statement II alone is sufficient, while Statement I alone is not sufficient. </p> <p>b) Either statement I or statement II is sufficient </p> <p>c) statement I alone is sufficient, while statement II alone is not enough. </p> <p>d) Neither statement I nor is statement II sufficient. </p>
Explanation:	<p>Statement I gives only the number of boys (20), but nothing about girls. So, it is not sufficient alone.</p> <p>Statement II gives the ratio of girls to total students as 3:7. From this, the number of boys can be found as 4 parts out of 7 (since $7 - 3 = 4$). So, the ratio of boys to girls is 4:3.</p> <p>Hence, Statement II alone is sufficient, while Statement I alone is not.</p>

Q. 5

In a certain code language, if MERGE is coded as IDWBS, then how will SHIFT be coded?

a) XBMFY 

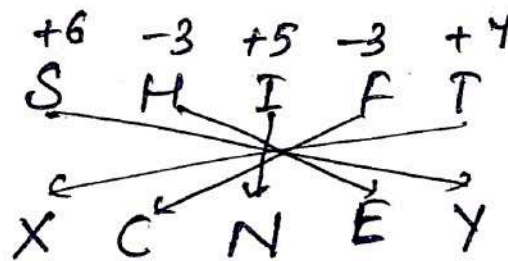
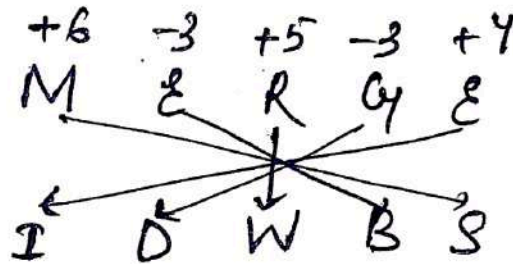
b) XCNEY 

c) WBMFY 

d) XCMFY 

The correct answer is: b

Explanation:



\therefore XCNEY is the answer.

Q. 6

Read the given statements and conclusions carefully. Assuming that the information given in the statements are true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

No master is qualified.

All qualified are professors.

Some professors are skilled.

Conclusions:

I. Some skilled are qualified.

II. Some professors are qualified.

III. No skilled is a master.

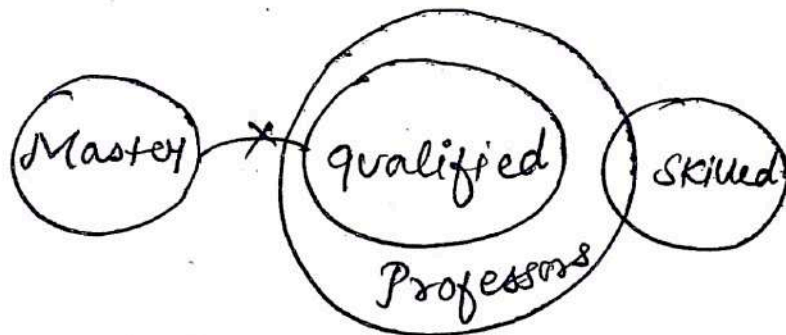
a) Only conclusions I and II follow ✗

b) All the conclusions follow ✗

c) Only conclusion I follows ✗

d) Only conclusion II follows ✓

Explanation:



only conclusion II follows.

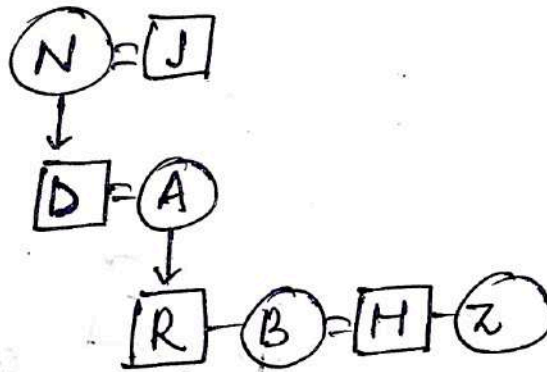
Q. 7

R is the son of A who is the mother of B. B is the daughter of D. D is the son of N. J is the father-in-law of A. B's daughter's father is H. Z is the sister of H. How is R related to H?

- a) Brother-in-law ✓
- b) Father ✗
- c) Husband ✗
- d) Brother ✗

The correct answer is: a


Explanation:



'R' is the brother-in-law of H'.
(O → Female, □ → Male)

Q. 8

Each vowel in the word CHARACTERISTIC is changed to the letter immediately following it as in the English alphabetical order and each consonant is changed to the letter immediately preceding it as in the English alphabetical order. How many letters are there between the letter which is fourth from the left and the letter which is third from the right?

a) None b) 1 c) 3 d) 2 





Explanation:

The correct answer is: b

C H A R A C T E R I S T I C
 B G B Q B B S F Q J R S J B

fourth from the left Third from the right

∴ There are one letter b/w
 Q & S i.e. R.

Q. 9	<p>A statement is given followed by two arguments I and II. Read the statement and the arguments carefully and select the appropriate answer from the given options.</p> <p>Statement: Floods caused widespread damage to crops in Odisha this year.</p> <p>Arguments: I. There has been a bumper production of food grains in Odisha this year. II. The number of crop insurance claims has seen a significant increase in Odisha this year.</p> <p>a) Argument I weakens, while argument II strengthens the statement. </p> <p>b) Both arguments I and II weaken the statement. </p> <p>c) Argument II weakens, while argument I strengthens the statement. </p> <p>d) Both arguments I and II strengthen the statement. </p>
Explanation:	<p>Argument I: "There has been a bumper production of food grains in Odisha this year." If there was bumper production, it contradicts the statement that crops were widely damaged. Hence, Argument I weakens the statement.</p> <p>Argument II: "The number of crop insurance claims has seen a significant increase in Odisha this year." If insurance claims increased, this supports the idea that many farmers suffered crop loss, likely due to the floods. Therefore, Argument II strengthens the statement.</p> <p>Correct Answer: (a) Argument I weakens, while argument II strengthens the statement.</p>

Q. 10

Read the given statements and conclusions carefully. Assuming that the information given in the statements are true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

Some dogs are cats.

No cat is a rabbit.

All rabbits are cages.

Conclusions:

I. No cage is a dog.

II. Some rabbits are dogs.

III. Some cages are cats.

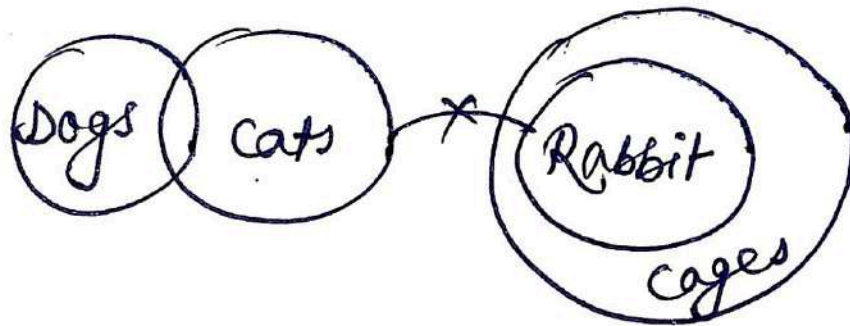
a) None follows ✓

b) Only I follows ✗

c) Only II follows ✗

d) Only II and III follow ✗

Explanation:




None follows.


Q. 11

Select the letter-cluster pair that best represents a similar relationship to the one expressed in the pair of letter-clusters given below.

SDQW : TERX

a) ERDW : FQEV 

b) JURZ : ZJUR 

c) FRDO : GSEP 

d) GHDU : FGEV 

The correct answer is: c

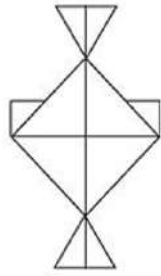
Explanation:

S D Q W
 ↓+1 ↓+1 ↓+1 ↓+1
 T E R X

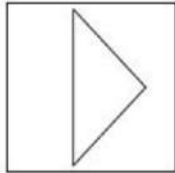
F R D O
 ↓+1 ↓+1 ↓+1 ↓+1
 G S E P

Q. 12

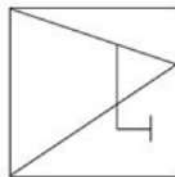
Select the option that is embedded in the given figure (rotation is NOT allowed).



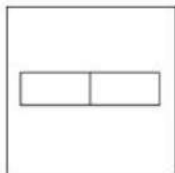
a)



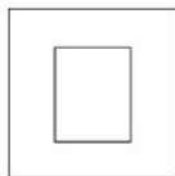
b)



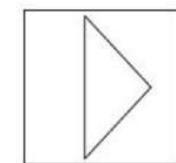
c)



d)



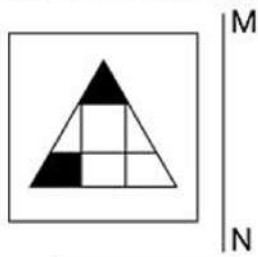
Explanation:



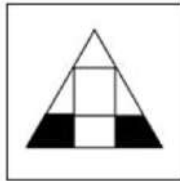
The correct answer is: a

Q. 13

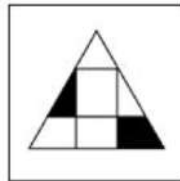
Select the correct mirror image of the given figure when the mirror is placed at MN, as shown.



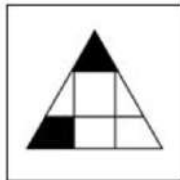
a)



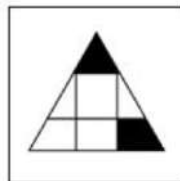
b)



c)

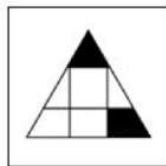


d)



Explanation:

The correct answer is: d



Q. 14

Which number from the options will replace the question mark (?) in the following series?

189, 204, 230, 269, 324, ?, 499

a) 399 ✓

b) 371 ✗

c) 363 ✗

d) 423 ✗

The correct answer is: a




Explanation:

$$\begin{array}{ccccccc}
 189 & , & 204 & , & 230 & , & 269 & , & 324 & , & \textcircled{399} & , & 499 \\
 \swarrow & & \swarrow & & \swarrow & & \swarrow & & \swarrow & & \swarrow & & \swarrow \\
 +15 & & +26 & & +39 & & +55 & & +75 & & +100 \\
 \swarrow & & \swarrow & & \swarrow & & \swarrow & & \swarrow & & \swarrow \\
 +11 & & +13 & & +16 & & +20 & & +25 \\
 \swarrow & & \swarrow & & \swarrow & & \swarrow & & \swarrow \\
 +2 & & +3 & & +4 & & +5 \\
 \swarrow & & \swarrow & & \swarrow & & \swarrow \\
 +1 & & +1 & & +1
 \end{array}$$

$\therefore ? = 324 + 75 = 399 \text{ (Ans)}$

Q. 15

In a certain code language 'GLOBAL' is coded as 107. How will 'BOUNDARY' be coded in that language?

a) 102 b) 108 c) 110 d) 106 

The correct answer is: b

G	L	O	B	A	L
↓	↓	↓	↓	↓	↓
T	O	L	Y	Z	O

(opposite letters)

Sum of Alphabetical position
of the opposite letters =

$$20 + 15 + 12 + 25 + 26 + 15$$

$$\Rightarrow 113$$

$$\therefore 113 - 6 = 107$$

Similarly,

B	O	U	N	D	A	R	Y
↓	↓	↓	↓	↓	↓	↓	↓
Y	L	F	M	W	Z	I	B

$$\Rightarrow 25 + 12 + 6 + 13 + 23 + 26 + 9 + 2 = 116$$

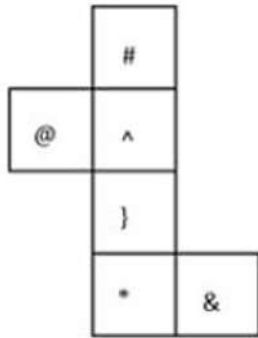
$$\Rightarrow 116 - 8 = 108 \text{ (Ans)}$$

[logic :- Sum of Alphabetical position
of the opposite letters - No. of letters in the
word]

Explanation:

Q. 16

What would be the symbol on the opposite side of @ if the given sheet is folded to form a cube?



- a) *
- b) }
- c) #
- d) &

Explanation:

The opposites of the given dice are: # - }, ^ - *, @ - &.

Q. 17

Which option represents the correct order of the given words as they would appear in an English dictionary?

1. Adventure
2. Advertise
3. Advocate
4. Advice
5. Advance

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

Explanation:

To arrange the words in dictionary order, we compare them letter by letter, from the first letter onward:

1. Advance → 5
2. Adventure → 1
3. Advertise → 2
4. Advice → 4
5. Advocate → 3

Correct Order: 5, 1, 2, 4, 3

So, the correct answer is: Option C

Q. 18

Read the given statements and conclusions carefully and decide which of the given conclusions logically follow(s) from the statements.

Statements:

1. R is older than I.
2. I is N's twin brother who is older than P.
3. Y is not younger than R who is older than K.

Conclusions:

I. K is older than I.

II. I is younger than Y.

a) Both conclusions I and II follow 

b) Conclusion I follows 

c) Conclusion II follows 

d) Neither conclusions I nor II follows 

Explanation:

Conclusion I: K is older than I

From the statements:

- $R > I$
- $R > K$

But we **don't know** the relation between I and K directly. K **might be younger or older than I**, but we **cannot conclude for sure**.

Conclusion I does not follow

Conclusion II: I is younger than Y

From the chain:

- $Y \geq R > I$
 \Rightarrow So Y is either older than or equal to R, and since R is older than I, we get $Y > I$ or $Y = R > I$

So I is definitely younger than Y.

Conclusion II follows

Final Answer: (c) Conclusion II follows

Q. 19

Select the correct combination of mathematical signs to replace the * signs and to balance the given equation.

$$12 * 16 * 156 * 132 * 96$$

a) $\times, =, +, -$ ✓b) $\times, +, -, =$ ✗c) $-, =, \div, \times$ ✗d) $\times, -, +, =$ ✗

Explanation:

The correct answer is: a

$$12 * 16 * 156 * 132 * 96$$

By interchanging, $\times, =, +, -$ with all the stars the given equation will be balanced.

$$12 \times 16 = 156 + 132 - 96$$

LHS,

$$\Rightarrow 12 \times 16 = 192$$

RHS,

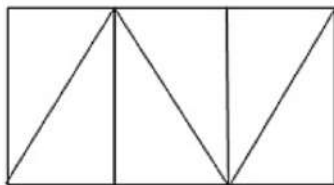
$$\Rightarrow 156 + 132 - 96$$

$$\Rightarrow 288 - 96 = 192$$

$$\text{LHS} = \text{RHS}$$

Q. 20

How many triangles are there in the following figure?



a) 7 ✗

b) 8 ✓

c) 9 ✗

d) 10 ✗

Explanation:

There are eight triangles in the given figure.

Central triangle in each rectangle contains 3 triangles, so there are 6 triangles in the central part.

There are two triangles sideways.

Q. 21

A statement is given followed by two assumptions numbered I and II. You have to assume everything in the statement to be true and decide which of the assumptions is implicit in the statement.





statement:

Do not throw glass bottles in green dustbins which are meant for other recyclable waste items.

Assumptions:

I. Dustbins for collecting glass bottles are of a different colour than the dustbins used to collect other recyclable items.

II. Glass bottles are to be thrown along with the non-recyclable waste.

- a) Only assumption II is implicit 
- b) Neither assumptions I nor II is implicit 
- c) Both assumptions I and II are implicit 
- d) Only assumption I is implicit 

Explanation:

Assumption I:

"Dustbins for collecting glass bottles are of a different colour than the dustbins used to collect other recyclable items."

Implicit

- Since the statement says **don't throw glass bottles in green dustbins** (meant for other recyclables), it implies that **there must be a separate category/container** for glass.
- The **differentiation by colour** is a **reasonable and necessary assumption** in this context.

Assumption II:

"Glass bottles are to be thrown along with the non-recyclable waste."

Not implicit

- The statement says **don't throw them in green bins meant for other recyclables**, but it **does NOT say** that glass is **non-recyclable** or must be thrown with non-recyclables.
- It's entirely possible that **glass is recyclable**, just needs to be placed in a **separate bin** (e.g., a blue or white one).

Final Answer: (d) Only assumption I is implicit.

Q. 22

Three of the following letter-clusters are alike in some manner and hence form a group. Which letter-cluster does NOT belong to that group?

a) BEJ b) FDX c) GCU d) HBQ 

Explanation:

The correct answer is: d

$$\begin{array}{ccc} B & E & J \\ \downarrow & \downarrow & \downarrow \\ 2 & \times & 5 = 10 \end{array}$$

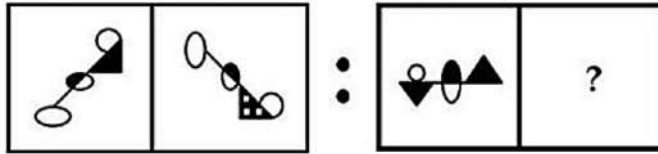
$$\begin{array}{ccc} F & D & X \\ \downarrow & \downarrow & \downarrow \\ 6 & \times & 4 = 24 \end{array}$$

$$\begin{array}{ccc} G & C & U \\ \downarrow & \downarrow & \downarrow \\ 7 & \times & 3 = 21 \end{array}$$

$$\begin{array}{ccc} H & B & Q \\ \downarrow & \downarrow & \downarrow \\ 8 & \times & 2 \neq 17 \end{array} \quad (\text{odd})$$

Q. 23

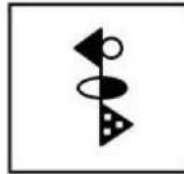
Select the option that is related to the third figure in the same way as the second figure is related to the first figure.



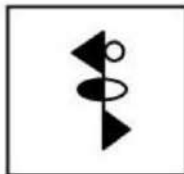
a)



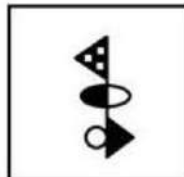
b)



c)



d)

**Explanation:**

The correct answer is: b

The figure is rotating 270° anti-clockwise and three white dots are also added.

Q. 24


Study the given pattern carefully and select the number that can replace the question mark (?) in it.


First row - 29, 41, 315


Second row - 24, 32, 252


Third row - 32, 64, ?

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. Eg. 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) 423 

b) 528 

c) 414 

d) 432 

Explanation:

The correct answer is: d





Logic:





$$[(1^{\text{st}} \text{ no.} + 2^{\text{nd}} \text{ no.}) \div 2] \times 9 = 3^{\text{rd}} \text{ number}$$

$$\Rightarrow [(29 + 41) \div 2] \times 9 = 35 \times 9 = 315$$

$$\Rightarrow [(24 + 32) \div 2] \times 9 = 28 \times 9 = 252$$

$$\Rightarrow [(32 + 64) \div 2] \times 9 = 48 \times 9 = 432$$

Q. 25	<p>Study the following information carefully and answer the question given below.</p> <p>Each of the five friends — Aarav, Nisha, Kabir, Meera, and Tanvi — is of a different age. Kabir is older than Aarav, while Tanvi is older than Kabir. Aarav is older than Meera. Nisha is older than only Meera.</p> <p>Who is the youngest among them all?</p> <p>a) Nisha </p> <p>b) Kabir </p> <p>c) Meera </p> <p>d) Aarav </p>
Explanation:	<p>The correct answer is: c</p> <p>The correct order of age of five friends: Tanvi > Kabir > Aarav > Nisha > Meera</p> <p>Meera is the youngest among all the friends.</p>





Q. 26	<p>Where was the 1st World Cup of Kabaddi organised in 2004?</p> <p>a) Mumbai </p> <p>b) Hyderabad </p> <p>c) Punjab </p> <p>d) Kolkata </p>
Explanation:	<p>The correct answer is: Mumbai</p> <p>Explanation:</p> <p>The 1st World Cup of Kabaddi was organized in Mumbai, Maharashtra, in 2004. It was recognized by the International Kabaddi Federation (IKF) and hosted by the South Kanara Sports Club under the Amateur Kabaddi Federation of India.</p>

Q. 27

Consider the following statements regarding the Indian judicial system:

1. India follows a unified judicial structure where all courts operate under a common framework.
2. Article 50 promotes the separation of the judiciary from the executive to maintain impartiality.
3. Judicial review is restricted only to the Supreme Court and not applicable to High Courts.
4. Supreme Court decisions are binding on all subordinate courts across the country.

Which of the above statements are correct?

- a) 1 and 3 only 
- b) 1, 2 and 4 only 
- c) 1, 2 and 3 only 
- d) 2, 3 and 4 only 

Explanation:









The correct answer is: **1, 2 and 4 only**









Explanation:









The **Indian Constitution** establishes an **independent judiciary**, ensuring that the judicial system functions **free from executive and legislative influence**. This independence is safeguarded through various constitutional provisions:

Key Features of India's Judicial System:

- **Single, unified judiciary** → Unlike the **dual judicial system** in the U.S., India follows a **unitary judicial structure**, meaning all courts function under a common framework.
- **Separation of powers** → Article 50 directs the **separation of the judiciary from the executive**, ensuring impartiality.
- **Judicial review** → The Supreme Court and High Courts have the power to **strike down unconstitutional laws**.
- **Security of tenure** → Judges cannot be removed arbitrarily, ensuring **fair decision-making**.
- **Binding authority** → Supreme Court rulings apply to all courts, maintaining **legal consistency**.

Q. 28	<p>Which among the following statements is incorrect?</p> <p>a) Industrial Securities Market is also known as the gilt-edged market. </p> <p>b) The secondary market is the market for the sale and purchase of previously issued securities. </p> <p>c) RBI plays a dominant role in the gilt-edged market through its 'Open Market Operations'. </p> <p>d) The primary market is also known as the new issue market </p>
Explanation:	<p>The correct answer is: Industrial Securities Market is also known as the gilt-edged market.</p> <p>Explanation:</p> <p>The Industrial Securities Market and the Gilt-Edged Market are two distinct financial markets.</p> <ul style="list-style-type: none"> • The Industrial Securities Market deals with corporate securities like stocks, bonds, and debentures issued by industrial companies. • The Gilt-Edged Market, on the other hand, refers to the government securities market, where low-risk government bonds are traded. These securities are considered highly secure investments because they are backed by the government. <p>Since these two markets serve different purposes, the statement claiming they are the same is incorrect.</p>
Q. 29	<p>Which state government has recently approved the 'Mukhyamantri Ekal Mahila Sashakt Swarozgar Yojana'?</p> <p>a) Himachal Pradesh </p> <p>b) Uttarakhand </p> <p>c) Uttar Pradesh </p> <p>d) Haryana </p>
Explanation:	<p>The correct answer is Uttarakhand.</p> <p>The Uttarakhand government has approved the Mukhyamantri Ekal Mahila Sashakt Swarozgar Yojana, aimed at empowering single women by providing financial assistance for self-employment. Under this scheme, eligible women—including widows, divorced, abandoned, and economically weaker women—can receive up to ₹2 lakh in financial aid to start their own businesses. The initiative is designed to promote economic independence and improve the standard of living for single women in the state.</p>





Q. 30	<p>Anna Chandy, the first Indian woman to serve as a judge at a high court was appointed in which High Court?</p> <p>a) West Bengal </p> <p>b) Tamil Nadu </p> <p>c) Kerala </p> <p>d) Andhra Pradesh </p>
Explanation:	<p>The correct answer is: Kerala High Court</p> <p>Explanation:</p> <p>Justice Anna Chandy was appointed as a judge of the Kerala High Court on February 9, 1959, making her India's first female High Court judge. She was also one of the first female judges in the British Empire.</p>
Q. 31	<p>Articles 52 to 78 in Part V of the Indian Constitution deal with _____.</p> <p>a) Amendment of the Constitution </p> <p>b) Union Executive </p> <p>c) Finance Commission of India </p> <p>d) National emergency </p>
Explanation:	<p>The correct answer is: Union Executive</p> <p>Explanation:</p> <p>Articles 52 to 78 in Part V of the Indian Constitution deal with the Union Executive, which includes the President, Vice President, Prime Minister, Council of Ministers, and Attorney General of India.</p> <p>Key Provisions:</p> <ul style="list-style-type: none"> • Article 52 → Establishes the President of India as the head of the Union. • Article 53 → Grants executive power to the President, exercised directly or through subordinate officers. • Article 74 & 75 → Defines the Council of Ministers, headed by the Prime Minister, to aid and advise the President. • Article 76 → Establishes the Attorney General of India, the chief legal advisor to the government. • Article 78 → Specifies the duties of the Prime Minister, including furnishing information to the President.

Q. 32	<p>The second Anglo-Mysore War came to an end by signing which of the following treaties?</p> <p>a) The Treaty of Arcot </p> <p>b) The Treaty of Madras </p> <p>c) The Treaty of Wandiwash </p> <p>d) The treaty of Mangalore </p>
Explanation:	<p>The correct answer is: The Treaty of Mangalore</p> <p>Explanation:</p> <p>The Second Anglo-Mysore War (1780–1784) ended with the Treaty of Mangalore, signed on March 11, 1784, between Tipu Sultan and the British East India Company.</p> <p>Key Features of the Treaty:</p> <ul style="list-style-type: none"> • Restoration of territories → Both sides agreed to return the lands captured during the war. • End of hostilities → The treaty marked the conclusion of the war without a decisive victory for either side. • Recognition of Mysore's strength → It was the last time an Indian ruler dictated terms to the British, showcasing Tipu Sultan's resilience.
Q. 33	<p>Due to which of the following reactions are household bleaching agents using phosphorous, sulphur and chlorine formed?</p> <p>a) Decomposition reaction </p> <p>b) Displacement reaction </p> <p>c) Combination reaction </p> <p>d) Disproportionation reaction </p>
Explanation:	<p>The correct answer is: Disproportionation reaction</p> <p>Explanation:</p> <p>A disproportionation reaction is a type of redox reaction in which a single element undergoes both oxidation and reduction simultaneously, forming two different oxidation states in the products.</p>

Q. 34

Match the columns.

Column-A (Disorder)	Column-B (Hormone/Gland)
i. Addison's disease	a. Adrenal gland
ii. Hashimoto's disease	b. Thyroid gland
iii. Acromegaly	c. Growth hormone
iv. SIADH	d. Vasopressin

a) i-a, ii-b, iii-c, iv-d b) i-d, ii-c, iii-b, iv-a c) i-b, ii-a, iii-d, iv-c d) i-b, ii-c, iii-a, iv-d The correct answer is: **i-a, ii-b, iii-c, iv-d****Explanation:**

The table from the image lists **four disorders** in **Column-A** and their corresponding **hormone/gland associations** in **Column-B**. The correct matches are:

Explanation:**1. i-A (Addison's Disease - Adrenal gland)**

- Addison's disease occurs due to **insufficient hormone production** by the **adrenal gland**, leading to fatigue, weight loss, and low blood pressure.

2. ii-B (Hashimoto's Disease - Thyroid gland)





- Hashimoto's disease is an **autoimmune disorder** that causes **thyroid gland dysfunction**, leading to hypothyroidism.





3. iii-C (Acromegaly - Growth hormone)





- Acromegaly results from **excessive secretion of growth hormone**, causing abnormal bone and tissue growth.

4. iv-D (SIADH - Vasopressin)

- SIADH (**Syndrome of Inappropriate Antidiuretic Hormone Secretion**) leads to **excessive vasopressin secretion**, causing fluid retention and low sodium levels.

Q. 35	<p>Which organic compound has a pleasant almond aroma that is commonly used to impart almond flavour to chocolate and baked goods?</p> <p>a) Isoamyl acetate </p> <p>b) Manzanate </p> <p>c) Benzaldehydes </p> <p>d) Ethyl maltol </p>
Explanation:	<p>The correct answer is: Benzaldehyde</p> <p>Explanation:</p> <p>Benzaldehyde is an aromatic aldehyde with a distinct almond-like aroma. It is widely used as a flavouring agent in foods, including chocolate, baked goods, and liqueurs.</p> <p>Key Features:</p> <ul style="list-style-type: none">• Naturally found in almonds, cherries, apricots, and cinnamon.• Used in perfumes and cosmetics due to its pleasant scent.• Essential component of bitter almond oil, contributing to its characteristic fragrance.

Q. 36	<p>Consider the following statements about the Average Fixed Cost (AFC) curve:</p> <ol style="list-style-type: none"> 1. AFC is calculated by dividing Total Fixed Cost (TFC) by Output (Q). 2. AFC increases as output increases because fixed costs rise with production. 3. The AFC curve resembles a rectangular hyperbola and is asymptotic to both axes. 4. Fixed costs vary with output levels. <p>Which of the above statements are incorrect?</p> <p>a) 2 and 4 only </p> <p>b) 1 and 3 only </p> <p>c) 2 and 3 only </p> <p>d) 1 and 4 only </p>
Explanation:	<p>The correct answer is: 2 and 4 only</p> <p>Explanation:</p> <p>The Average Fixed Cost (AFC) curve is a rectangular hyperbola because fixed costs remain constant regardless of output, but AFC decreases as output increases.</p> <p>Key Features:</p> <ul style="list-style-type: none"> • Formula: $AFC = \text{Total Fixed Cost (TFC)} / \text{Output (Q)}$ • Shape: As output increases, AFC declines, but it never reaches zero because TFC is always positive. • Graph Behaviour: The curve is asymptotic to both axes, meaning it approaches but never touches them.

Q. 37	<p>When did depressed classes get the reserved seats in provincial and central legislative councils, but they were to be voted in by the General electorate?</p> <p>a) September 1930 </p> <p>b) November 1932 </p> <p>c) November 1930 </p> <p>d) September 1932 </p>
Explanation:	<p>The correct answer is: September 1932</p> <p>Explanation:</p> <p>The Poona Pact, signed on September 24, 1932, granted reserved seats to the Depressed Classes in provincial and central legislative councils. However, instead of separate electorates, they were to be voted in by the General electorate.</p> <p>Key Features of the Poona Pact:</p> <ul style="list-style-type: none"> • Reserved seats → 148 seats in provincial legislatures and 19% of seats in the Central Legislature were reserved for the Depressed Classes. • Joint electorates → Members of the Depressed Classes could vote in general elections, but their candidates were selected through a primary election within their community. • Gandhi-Ambedkar Agreement → The pact was a compromise between Mahatma Gandhi and Dr. B.R. Ambedkar, replacing the Communal Award, which had proposed separate electorates.

Q. 38


With reference to the city Mauryan administration of Mauryan Empire, consider the following statements.


A) Megasthenes put light on the Mauryan city administration.


B) The city council was divided into six committees.


C) City administration was well planned.

Which of the above statements is/are correct?

a) B, C 

b) A, B 

c) A, B, C 

d) C, A 

Explanation:

The correct answer is: **A, B, C**

Explanation:

All three statements are **correct** regarding the **city administration of the Mauryan Empire**, particularly in **Pataliputra**, the capital.

1. **Megasthenes put light on the Mauryan city administration** → **Correct**

- Megasthenes, a Greek ambassador in **Chandragupta Maurya's court**, documented the **administrative structure** of Pataliputra in his book "**Indica**".
- He described the **organized governance** and the **division of responsibilities** within the city.





2. **The city council was divided into six committees** → **Correct**





- Megasthenes mentioned that **Pataliputra's administration** was managed by **six committees**, each consisting of **five members**.
- These committees handled **different aspects** like:





- **Industrial arts**
- **Foreigners' welfare**
- **Birth and death records**
- **Trade and commerce**
- **Public sales regulation**
- **Tax collection**





3. **City administration was well planned** → **Correct**





- The **Mauryan administration** was highly **structured and efficient**, ensuring **sanitation, security, trade regulation, and public welfare**.
- The **Nagarika** (city chief) oversaw urban governance, assisted by subordinate officials.
- Roads, drainage systems, and public buildings were **strategically designed** to support a growing population.





Q. 39	<p>Intervention by the monetary authority of a country in the money market to keep money supply stable against exogenous or sometimes external shocks is called _____.</p> <p>a) Neutralisation </p> <p>b) Capitalisation </p> <p>c) Conservation </p> <p>d) Sterilisation </p>
Explanation:	<p>The correct answer is: Sterilisation</p> <p>Explanation:</p> <p>Sterilisation refers to the monetary policy action taken by a country's central bank to neutralize the effects of external capital flows on the domestic money supply. This ensures monetary stability and prevents inflationary or deflationary pressures caused by sudden foreign exchange movements.</p> <p>How Sterilisation Works:</p> <ul style="list-style-type: none">• When a central bank buys foreign currency, it increases the domestic money supply. To counteract this, it sells government bonds to absorb excess liquidity.• Conversely, when a central bank sells foreign currency, it reduces the domestic money supply. To offset this, it buys government bonds to inject liquidity back into the system.• This process helps maintain stable interest rates and prevents excessive inflation or deflation.





Q. 40	<p>In India, trees of which forest type shed their leaves for about six to eight weeks in dry summer?</p> <p>a) Tropical Deciduous Forests </p> <p>b) Tropical Evergreen Forests </p> <p>c) Montane Forests </p> <p>d) Tropical Thorn Forests and Scrubs </p>
Explanation:	<p>The correct answer is: Tropical Deciduous Forests</p> <p>Explanation:</p> <p>Tropical Deciduous Forests, also known as Monsoon Forests, are the most widespread forests in India. They are found in regions with rainfall between 70-200 cm and shed their leaves for six to eight weeks during the dry summer to conserve water.</p> <p>Key Features:</p> <ul style="list-style-type: none"> • Seasonal shedding → Trees lose their leaves in dry summer to reduce water loss. • Two subtypes → Moist Deciduous Forests (100-200 cm rainfall) and Dry Deciduous Forests (70-100 cm rainfall). • Common species → Teak, Sal, Shisham, Amla, Kusum, Mahua, Sandalwood. • Geographical distribution → Found in Jharkhand, Odisha, Chhattisgarh, foothills of the Himalayas, and the eastern slopes of the Western Ghats.









Q. 41	<p>Which of the following is a mountain pass in the Pir Panjal range at a maximum altitude of 2832 meters that connects the Kashmir Valley in the Union Territory of Jammu and Kashmir with the Outer Himalayas and the plains in the south?</p> <p>a) Mana Pass </p> <p>b) Banihal Pass </p> <p>c) Bara-Lacha Pass </p> <p>d) ZojiLa pass </p>
Explanation:	<p>The correct answer is Banihal Pass.</p> <p>Banihal Pass, situated in the Pir Panjal range, serves as a crucial gateway between the Kashmir Valley and the Outer Himalayas, connecting the region to the plains in the south. At an altitude of 2832 meters, it has historically been a key route for movement and trade. The pass is now traversed by the Jawahar Tunnel, which significantly improves connectivity between Srinagar and Jammu.</p> <p>Here's a quick breakdown of the incorrect options:</p> <ul style="list-style-type: none">• Mana Pass – Located in Uttarakhand, at a much higher altitude, near the Tibet border.• Bara-Lacha Pass – Found in Himachal Pradesh, connecting Lahaul and Ladakh.• Zoji La Pass – A famous pass in the Great Himalayan range, connecting the Kashmir Valley to Ladakh.









<p>Q. 42</p>	<p>Which of the following Articles of the Constitution states that 'It shall be the duty of every citizen of India to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women.'?</p> <p>a) 51 A (b) </p> <p>b) 51 A (c) </p> <p>c) 51 A (e) </p> <p>d) 51 A (d) </p>
<p>Explanation:</p>	<p>The correct answer is Article 51A(e).</p> <p>Article 51A of the Indian Constitution outlines the Fundamental Duties of Indian citizens. Clause (e) specifically emphasizes the responsibility of every citizen to promote harmony and common brotherhood across religious, linguistic, and regional differences, while also renouncing practices derogatory to women's dignity.</p>





<p>Q. 43</p>	<p>Which of the following committees was associated with Industrial Licensing Policy Inquiry?</p> <p>a) Hazari Committee </p> <p>b) Sen Committee </p> <p>c) Gadgil Committee </p> <p>d) Dutt Committee </p>
<p>Explanation:</p>	<p>The correct answer is Dutt Committee.</p> <p>The Dutt Committee (Industrial Licensing Policy Inquiry Committee) was established in 1969 to examine India's industrial licensing policy and recommend reforms to enhance efficiency and reduce bureaucratic hurdles. The committee focused on identifying issues in the licensing system that were slowing industrial growth and suggested measures to encourage competition and streamline approvals.</p>

Q. 44	<p>'Ponu Yoksi', a sword like instrument used during ceremonial dances performed by the priests, belongs to:</p> <p>a) Himachal Pradesh </p> <p>b) Madhya Pradesh </p> <p>c) Uttar Pradesh </p> <p>d) Arunachal Pradesh </p>
Explanation:	<p>The correct answer is Arunachal Pradesh.</p> <p>Ponu Yoksi is a sword-like instrument used during ceremonial dances performed by priests in Arunachal Pradesh. It features two iron plates with holes in the middle, which produce rhythmic sounds when the sword is moved. This instrument plays a crucial role in maintaining the beat and rhythm of the dance, adding to the spiritual and cultural significance of the ceremony.</p>

Q. 45	<p>Which of the following war dances is performed in Ngada festival and is performed by the tribes of Nagaland?</p> <p>a) Jawara </p> <p>b) Dalkhai </p> <p>c) Rengma </p> <p>d) Garadi </p>
Explanation:	<p>The correct answer is Rengma.</p> <p>The Rengma tribe of Nagaland performs a traditional war dance during the Ngada festival, which is a post-harvest celebration observed in November. This festival is deeply rooted in the Rengma Naga traditions, marking the end of the agricultural year and serving as a time for thanksgiving and communal festivities. The war dance showcases the martial spirit of the tribe, with synchronized movements and symbolic gestures representing valour and unity.</p>

Q. 46	<p>In basketball, how many points are awarded when a basket is scored from outside the 6.25-meter line?</p> <p>a) Five points </p> <p>b) Six points </p> <p>c) Three points </p> <p>d) Two points </p>
Explanation:	<p>The correct answer is three points.</p> <p>In basketball, a shot made from outside the 6.25-meter line is considered a three-point field goal. This rule applies in international basketball and most European leagues, where the three-point arc is set at 6.25 meters from the basket.</p>
Q. 47	<p>Recently the Ministry of Education has started the "Baalpan ki Kavita" initiative, children of which age group can participate in it?</p> <p>a) 5 to 10 years </p> <p>b) 3 to 8 years </p> <p>c) 4 to 9 years </p> <p>d) 6 to 12 years </p>
Explanation:	<p>The correct answer is 3 to 8 years.</p> <p>The Ministry of Education has launched the "Baalpan ki Kavita" initiative to restore and promote Bharatiya rhymes and poems for young children. This initiative focuses on early childhood education, aligning with the National Education Policy (NEP) 2020. Children in the age group of 3 to 8 years can participate, categorized into:</p> <ul style="list-style-type: none"> • Pre-primary (3-6 years) • Grade 1 (6-7 years) • Grade 2 (7-8 years) <p>The initiative encourages contributions in Indian languages and English, aiming to make learning joyful and culturally enriching for young learners.</p>





Q. 48	<p>Masali village of which state has become India's first solar border village?</p> <p>a) Madhya Pradesh </p> <p>b) Gujarat </p> <p>c) Uttar Pradesh </p> <p>d) Rajasthan </p>
Explanation:	<p>The correct answer is Gujarat.</p> <p>Masali village, located in Banaskantha district, Gujarat, has become India's first solar-powered border village. Situated 40 km from the Pakistan border, the village now generates 100% of its electricity through solar power, with solar panels installed on 199 rooftops. This initiative is part of the Border Development Project, which aims to make 17 border villages fully solar-powered. The project was completed with financial support from the PM Surya Ghar Muft Bijli Yojana, public contributions, and corporate social responsibility (CSR) funding.</p>
Q. 49	<p>The battle of Khanwa was fought between the forces of the Babur and the Rajput forces led by:</p> <p>a) Ibrahim Lodi </p> <p>b) Mahmud Lodi </p> <p>c) Medini Rai </p> <p>d) Rana Sanga </p>
Explanation:	<p>The correct answer is Rana Sanga.</p> <p>The Battle of Khanwa, fought on March 16, 1527, was a decisive conflict between Babur, the founder of the Mughal Empire, and Rana Sanga, the ruler of Mewar. This battle was crucial in establishing Mughal dominance in northern India.</p> <p>Explanation:</p> <ul style="list-style-type: none"> • Rana Sanga, leading a Rajput confederacy, sought to expel Babur from India after his victory at the First Battle of Panipat (1526). • Babur, recognizing the strength of the Rajput forces, used gunpowder and artillery, which were relatively new to Indian warfare, to gain an advantage. • The battle ended in a Mughal victory, consolidating Babur's rule and marking the decline of Rajput power in northern India.

Q. 50	<p>Whose autobiography is the recently published book 'On That Note: Memories of a Life in Music'?</p> <p>a) Sanjay Subrahmanyam </p> <p>b) Ilaiyaraaja </p> <p>c) L. Subramaniam </p> <p>d) A.R. Rahman </p>
Explanation:	<p>The correct answer is Sanjay Subrahmanyam.</p> <p>"On That Note: Memories of a Life in Music" is the autobiography of Sanjay Subrahmanyam, co-authored by Krupa Ge. Sanjay Subrahmanyam is a renowned Carnatic vocalist, known for his mastery of classical music and his innovative approach to performance. The book provides a candid memoir of his journey in music, tracing his evolution from a traditional Carnatic musician to an artist exploring new creative directions. It offers insights into his musical philosophy, influences, and personal experiences, making it a valuable read for music enthusiasts.</p>

Q. 51

Choose the best one-word substitution for the following definition:

The time of year when day and night are of equal length.

- a) Solstice 
- b) Equinox 
- c) Eclipse 
- d) Twilight 

Explanation:

Explanation:

- **Equinox** refers to either of the two times in the year (around March 21 and September 23) when the sun crosses the celestial equator and day and night are of equal length.
- **Solstice** refers to the longest and shortest days of the year (around June 21 and December 21).
- **Eclipse** is when one celestial body moves into the shadow of another.
- **Twilight** is the soft light just after sunset or before sunrise.





Hindi Meanings

- Equinox = वह समय जब दिन और रात बराबर होते हैं (लगभग 21 मार्च और 23 सितंबर)
- Solstice = वर्ष के सबसे लंबे और छोटे दिन (लगभग 21 जून और 21 दिसंबर)
- Eclipse = जब कोई खगोलीय पिंड दूसरे के छाया में आ जाता है (ग्रहण)
- Twilight = सूर्यास्त के बाद या सूर्योदय से पहले की मद्धिम रोशनी (संध्या / गोधूलि)

Q. 52

Choose the correct meaning of the idiom:





To bring the house down.





- a) To cause a building to collapse 
- b) To invite everyone to your home for a gathering 
- c) To cause confusion in a group 
- d) To make the audience clap loudly and enjoy the performance 





Explanation:





Explanation:





- **"Bring the house down"** means to give a performance that is so good, it makes the audience cheer or applaud enthusiastically.
- It has nothing to do with actually collapsing a building!





Q. 53	<p>Identify the part of the sentence that needs improvement:</p> <p>He hardly never goes out in the evenings as he prefers staying home.</p> <p>a) hardly never </p> <p>b) goes out </p> <p>c) prefers staying </p> <p>d) No improvement </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none">• Hardly and never are both negative adverbs, and using them together creates a double negative, which is incorrect in standard English.• The correct usage should be either hardly ever or never.

Q. 54	<p>Rearrange the following parts (P, Q, R, S) to form a coherent paragraph:</p> <p>P. Despite diplomatic tensions stemming from the killing of Hardeep Singh Nijjar and opposition from Sikh organizations, Carney noted strong backing from the other G6 countries for India's inclusion.</p> <p>Q. Emphasizing India's critical global role as the world's fifth-largest economy, Carney highlighted the importance of India's involvement in discussions on essential issues such as energy security, critical minerals, and infrastructure partnerships.</p> <p>R. Canadian Prime Minister Mark Carney has defended his decision to invite Indian Prime Minister Narendra Modi to the G7 Summit scheduled in Kananaskis, Alberta, from June 15-17, 2025.</p> <p>S. Prime Minister Modi has confirmed his attendance, underscoring India's growing geopolitical significance.</p> <p>a) Q-R-S-P </p> <p>b) R-Q-P-S </p> <p>c) R-P-Q-S </p> <p>d) Q-R-P-S </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • R introduces the main topic: Carney's defense of his invitation to Modi. • Q provides context about India's economic role and why this invitation matters. • P discusses the diplomatic tensions and how Carney still found support from G6 nations. • S closes with the confirmation of Modi's attendance, emphasizing India's growing geopolitical role. <p>This structure follows a logical sequence: Introduction → Rationale → Challenges → Conclusion.</p>

Q. 55	<p>Choose the word that is most similar in meaning to the word Slander</p> <p>a) Commend </p> <p>b) Praise </p> <p>c) Defame </p> <p>d) Acclaim </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Slander means making false and damaging statements about someone. • Defame means to damage the good reputation of someone, which is the closest synonym. • Commend, praise, and acclaim are positive words and do not mean the same as slander. <p>Hindi Meanings</p> <p>Slander = मानहानि / बदनामी</p> <p>Commend = प्रशंसा करना</p> <p>Praise = सराहना करना</p> <p>Defame = बदनाम करना / मानहानि करना</p> <p>Acclaim = सराहना / प्रशंसा करना</p>

Q. 56	<p>Choose the correctly written Passive Voice sentence:</p> <p>Many Muslim organizations staged violent protests against the Waqf (Amendment) Act, 2025.</p> <p>a) Violent protests were staged by many Muslim organizations against the Waqf (Amendment) Act, 2025. </p> <p>b) Many Muslim organizations were staging violent protests against the Waqf (Amendment) Act, 2025. </p> <p>c) Violent protests staged by many Muslim organizations against the Waqf (Amendment) Act, 2025. </p> <p>d) Many Muslim organizations staged violent protests were against the Waqf (Amendment) Act, 2025. </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • The original sentence is in the simple past tense ("staged"). • The passive structure becomes: "Subject (violent protests) + were (helping verb) + past participle (staged) + by + agent (many Muslim organizations) + rest of sentence." • Option A correctly follows this structure. • B) incorrectly uses continuous tense, C) is a fragment, and D) misplaces the verb.





<p>Q. 57</p>	<p>Complete the sentence below with the correct verb form:</p> <p>China's defence stocks, along with broader sector gains, _____ sharply as news of the J-35 fighter jet deal emerged.</p> <p>a) soared </p> <p>b) soars </p> <p>c) have soared </p> <p>d) is soaring </p>
<p>Explanation:</p>	<p>Explanation:</p> <ul style="list-style-type: none"> • The sentence uses simple past tense, referring to a completed event ("news ... emerged"). • The subject is "China's defence stocks" (plural), with an additional phrase ("along with broader sector gains") that does not affect agreement. • Thus, the correct past-tense form is "soared". • Option B ("soars") is present tense—incorrect. • Option C ("have soared") uses present perfect, unsuitable for a concluded event. • Option D ("is soaring") is present continuous—also incorrect in this past context.





<p>Q. 58</p>	<p>Identify the part of the sentence that needs improvement:</p> <p>Each of the students must submit their assignments by the end of the week.</p> <p>a) Each of the students </p> <p>b) their assignments </p> <p>c) by the end </p> <p>d) No improvement </p>
<p>Explanation:</p>	<p>Explanation:</p> <ul style="list-style-type: none"> • The subject Each of the students is singular, so it should be followed by his or her (not their). • In standard English grammar, each is considered singular, so the pronoun should match.





Q. 59	<p>Identify the sentence with the correctly spelled word related to the killing of a prominent person:</p> <p>a) The president survived an assasinaton attempt last year. ❌</p> <p>b) The novel describes the assassination of a famous leader. ✅</p> <p>c) They planned a secret assasination to overthrow the government. ❌</p> <p>d) The film showed a dramatized version of the assasinashun. ❌</p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • The correct spelling is assassination with double 's' and 'i' before 'n'. • Options A, C, and D contain common misspellings.





Q. 60	<p>Choose the correct sentence:</p> <p>Group Captain Shubhanshu Shukla is leading India's scientific efforts on</p> <p>a) the historic Axiom Space Ax-4 mission, conducting pioneering space nutrition research during a 14-day stay aboard the ISS. ✅</p> <p>Group Captain Shubhanshu Shukla are leading India's scientific efforts</p> <p>b) on the historic Axiom Space Ax-4 mission, conducting pioneering space nutrition research during a 14-day stay aboard the ISS. ❌</p> <p>Group Captain Shubhanshu Shukla leads India's scientific efforts on the</p> <p>c) historic Axiom Space Ax-4 mission, conducting pioneering space nutrition research during a 14-day stay aboard the ISS. ❌</p> <p>Group Captain Shubhanshu Shukla have led India's scientific efforts on</p> <p>d) the historic Axiom Space Ax-4 mission, conducting pioneering space nutrition research during a 14-day stay aboard the ISS. ❌</p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Subject: Group Captain Shubhanshu Shukla is a singular noun phrase. • Verb: The singular subject requires the singular verb form "is leading". <p>Incorrect Options:</p> <ul style="list-style-type: none"> • B) "are leading" is plural and doesn't agree with the singular subject. • C) "leads" is present tense and doesn't match the ongoing nature of the action. • D) "have led" is past perfect tense, which is not appropriate for the current ongoing mission.





Q. 61	<p>Complete the sentence by choosing the correct pair of words for the blanks: Due to the _____ in opinions among the committee members, the final decision was _____ until next month to allow more discussion and respect for senior members' views.</p> <p>a) defer, difference ❌</p> <p>b) difference, deferment ✅</p> <p>c) deference, deferment ❌</p> <p>d) deferment, deference ❌</p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Difference means the state or condition of being unlike or dissimilar, fitting the first blank referring to varied opinions. • Deferment means postponement or delay, fitting the second blank about delaying the decision. • Defer means to postpone, but here it does not grammatically fit the first blank as a noun. • Deference means respect or submission, which fits with showing respect but doesn't fit well in the sentence structure. <p>Hindi Meanings</p> <p>Difference = अंतर</p> <p>Deferment = स्थगन / टालना</p> <p>Defer = टालना / स्थगित करना</p> <p>Deference = सम्मान / आदर</p>

Q. 62	<p>Choose the word that is most opposite in meaning to Acquiesce.</p> <p>a) Agree </p> <p>b) Accept </p> <p>c) Concede </p> <p>d) Resist </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Acquiesce means to accept something reluctantly but without protest. • Its antonym is resist, which means to oppose actively or refuse to comply. <p>Agree, accept, and concede all lean towards compliance or yielding, which are similar to acquiesce, not opposite.</p> <p>Hindi Meanings</p> <p>Acquiesce = बिना विरोध के मान लेना</p> <p>Agree = सहमत होना</p> <p>Accept = स्वीकार करना</p> <p>Concede = मान लेना / स्वीकार करना</p> <p>Resist = विरोध करना / प्रतिरोध करना</p>

Q. 63	<p>Rearrange the following parts (P, Q, R, S) to form a coherent paragraph:</p> <p>P. This improvement highlights the effectiveness of India's economic and social development policies over the past decade and marks a major milestone in the nation's fight against poverty.</p> <p>Q. According to the latest data released by the World Bank, India has made significant strides in poverty alleviation.</p> <p>R. With nearly 270 million people moving out of extreme poverty between 2011-12 and 2022-23.</p> <p>S. During this period, the percentage of the Indian population living in extreme poverty declined dramatically from 27.1% to just 5.3%.</p> <p>a) Q-R-S-P </p> <p>b) Q-S-R-P </p> <p>c) Q-R-P-S </p> <p>d) R-Q-S-P </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Q sets up the context and subject of the paragraph: World Bank's data about India's poverty alleviation. • R provides the major statistic of 270 million people moving out of poverty. • S then elaborates on the percentage drop from 27.1% to 5.3%. • P concludes by reflecting on what this achievement signifies for India's development policies and fight against poverty.





Q. 64	<p>Choose the correct indirect speech:</p> <p>The Home Minister said, "I will inaugurate the National Turmeric Board office in Nizamabad at the end of June."</p> <p>a) The Home Minister said that he would inaugurate the National Turmeric Board office in Nizamabad at the end of June. </p> <p>b) The Home Minister said he will inaugurate the National Turmeric Board office in Nizamabad at the end of June. </p> <p>c) The Home Minister said that I will inaugurate the National Turmeric Board office in Nizamabad at the end of June. </p> <p>d) The Home Minister said that he would have inaugurated the National Turmeric Board office in Nizamabad at the end of June. </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Reporting verb "said"—no change. • "I will" changes to "he would." • Time expression "at the end of June" remains the same.

Q. 65	<p>Choose the option that best completes the sentence using a phrasal verb. The CEO has decided to _____ the expansion project until the company's financial situation stabilizes.</p> <p>a) put out </p> <p>b) put up with </p> <p>c) put off </p> <p>d) put down </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • “put off” → means to postpone or delay. • In the context of delaying the expansion project, this fits perfectly. • “put out” → to extinguish (e.g., a fire). • “put up with” → to tolerate. • “put down” → to place something on a surface or to criticize someone. <p>Hindi Meanings</p> <p>Put out = बुझाना / समाप्त करना</p> <p>Put up with = सहन करना</p> <p>Put off = टालना / स्थगित करना</p> <p>Put down = नीचे रखना / दबाना / अपमानित करना</p>

Q. 66	<p>Convert back to direct speech:</p> <p>The minister admitted that many Muslim organizations had staged violent protests against the Waqf (Amendment) Act, 2025, and apologized for the resulting unrest.</p> <p>The minister said, “Many Muslim organizations staged violent protests</p> <p>a) against the Waqf (Amendment) Act, 2025, and I apologize for the resulting unrest.” </p> <p>The minister said, “Many Muslim organizations have staged violent</p> <p>b) protests against the Waqf (Amendment) Act, 2025, and I apologize for the resulting unrest.” </p> <p>The minister said, “Many Muslim organizations had staged violent</p> <p>c) protests against the Waqf (Amendment) Act, 2025, and I apologized for the resulting unrest.” </p> <p>The minister said, “Many Muslim organizations staged violent protests</p> <p>d) against the Waqf (Amendment) Act, 2025, but I visited the area to apologize for the unrest.” </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Past perfect (“had staged”) becomes simple past (“staged”) in direct speech. • “Apologized” changes to present tense “apologize” within the direct quote. • Option B uses present perfect (“have staged”), which is incorrect in this transformation. • Option C disrupts tense consistency. • Option D adds extra information not in the original.

Q. 67	<p>Choose the most appropriate meaning of the idiom “fall flat” as used in this sentence:</p> <p>Despite their best efforts to entertain the crowd, their jokes fell flat.</p> <p>a) The jokes had a very serious tone ❌</p> <p>b) The jokes failed to amuse or interest the audience ✅</p> <p>c) The jokes offended the audience and caused anger ❌</p> <p>d) The jokes were repeated again and again ❌</p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • “Fall flat” means that something (like a joke or performance) completely fails to achieve the desired effect or to entertain people. • In the sentence, the jokes didn’t land or didn’t work.
Q. 68	<p>Choose the option that best completes the sentence below:</p> <p>Following the cabinet's approval, the government is expected to _____ the new AI Mission across all departments by the end of the quarter.</p> <p>a) bring out ❌</p> <p>b) roll out ✅</p> <p>c) come across ❌</p> <p>d) turn over ❌</p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • “Roll out” means to introduce or launch something (like a policy or program) in a planned manner, fitting perfectly here as the AI Mission is being officially launched. • “Bring out” → to publish or produce, not ideal for phased implementation. • “Come across” → to encounter, not relevant. • “Turn over” → to transfer control, also inappropriate in this context. <p>Hindi Meanings</p> <p>Bring out = प्रकाशित करना / उजागर करना</p> <p>Roll out = शुरू करना / जारी करना</p> <p>Come across = सामना होना / मिल जाना</p> <p>Turn over = पलटना / उलट देना / सौंप देना</p>

Q. 69	<p>Choose the word that is most similar in meaning to Shimmering.</p> <p>a) Gloomy ❌</p> <p>b) Dull ❌</p> <p>c) Gleaming ✅</p> <p>d) Murky ❌</p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Shimmering means shining with a soft, tremulous light. • Gleaming means shining brightly, especially with reflected light – the closest match. • Gloomy, dull, and murky are negative and do not match the idea of shimmering. <p>Hindi Meanings</p> <p>Shimmering = झिलमिलाना / चमकना</p> <p>Gloomy = उदास / अंधेरा</p> <p>Dull = फीका / मद्धिम</p> <p>Gleaming = चमकदार</p> <p>Murky = धुंधला / अस्पष्ट</p>

Q. 70	<p>Choose the best one-word substitution for the following definition: An uncontrollable or excessive craving for wine.</p> <p>a) Bibliomania </p> <p>b) Dipsomania </p> <p>c) Oenomania </p> <p>d) Megalomania </p>
Explanation:	<p>Explanation:</p> <ul style="list-style-type: none"> • Oenomania: Excessive and uncontrollable craving for wine. • Bibliomania: Extreme passion for collecting books. • Dipsomania: An uncontrollable craving for alcohol in general (not just wine). • Megalomania: A delusional belief in one's own greatness or power. <p>Hindi Meanings</p> <p>Bibliomania = पुस्तकों का अत्यधिक संग्रह करने की प्रवृत्ति</p> <p>Dipsomania = शराब पीने की तीव्र लत</p> <p>Oenomania = शराब के प्रति पागलपन / मद्यपान का उन्माद</p> <p>Megalomania = महानता का भ्रम / शक्ति का उन्माद</p>

Q. 71

In the following passage, there are five blanks. Each blank has four options. Choose the word that best fits the context of the passage.

India's central bank made headlines this week by implementing a surprise policy move. On June 6, 2025, the Reserve Bank of India (RBI) announced a sharp (1)_____ of 50 basis points in its repo rate, bringing it down to 5.50%. This (2)_____ rate cut was the third consecutive easing since February and reflects RBI's shift from a strict inflation-targeting stance to a more growth-supportive posture. The central bank also reduced the cash reserve ratio (CRR) by 100 bps, promising to inject nearly ₹2.5 trillion liquidity into the banking system by year-end.

Financial markets reacted (3)_____ equities rallied, bond yields fell, and the rupee strengthened—media reports describe the move as an important (4)_____ to household consumption and lending. However, some critics warn that combining monetary stimulus with growth objectives could risk overshooting inflation targets or misaligning with (5)_____ supply-side reforms.

To conclude, the RBI's bold intervention represents a pivotal shift in policy direction—balancing between price stability and economic growth—as India grapples with slowing GDP expansion amid global uncertainties.

Select the option (1) that best completes the sentence and fits the meaning of the passage.

a) hike 

b) cut 

c) freeze 

d) override 

Explanation:

Explanation:

Correct answer: B) cut – because the RBI reduced the repo rate.

- A) hike – means to increase (opposite of what the RBI did).
- B) cut – to reduce the repo rate, matches the context perfectly.
- C) freeze – means to keep the rate unchanged (not applicable here).
- D) override – means to cancel or ignore (not relevant to a rate change).

Hindi Meanings

Hike = वृद्धि / बढ़ोतरी

Cut = कटौती / काटना

Freeze = स्थिर रखना / रोक देना

Override = निरस्त करना / अवहेलना करना

Q. 72

In the following passage, there are five blanks. Each blank has four options. Choose the word that best fits the context of the passage.

India's central bank made headlines this week by implementing a surprise policy move. On June 6, 2025, the Reserve Bank of India (RBI) announced a sharp (1)_____ of 50 basis points in its repo rate, bringing it down to 5.50%. This (2)_____ rate cut was the third consecutive easing since February and reflects RBI's shift from a strict inflation-targeting stance to a more growth-supportive posture. The central bank also reduced the cash reserve ratio (CRR) by 100 bps, promising to inject nearly ₹2.5 trillion liquidity into the banking system by year-end.

Financial markets reacted (3)_____ equities rallied, bond yields fell, and the rupee strengthened—media reports describe the move as an important (4)_____ to household consumption and lending. However, some critics warn that combining monetary stimulus with growth objectives could risk overshooting inflation targets or misaligning with (5)_____ supply-side reforms.

To conclude, the RBI's bold intervention represents a pivotal shift in policy direction—balancing between price stability and economic growth—as India grapples with slowing GDP expansion amid global uncertainties.

Select the option (2) that best completes the sentence and fits the meaning of the passage.

a) first 

b) symbolic 

c) abrupt 

d) routine 

Explanation:

Explanation:

Correct answer: C) abrupt – highlights the sudden and unexpected nature.

- A) first – It's not the first cut; it's the third consecutive.
- B) symbolic – a gesture without real impact; here, it had real impact.
- C) abrupt – sudden and unexpected, describing the surprise element.
- D) routine – normal or expected; clearly not applicable since it was a surprise move.

Hindi Meanings

First = पहला

Symbolic = प्रतीकात्मक

Abrupt = अचानक / असहज रूप से तीव्र

Routine = दिनचर्या / नियमित कार्य

Q. 73

In the following passage, there are five blanks. Each blank has four options. Choose the word that best fits the context of the passage.

India's central bank made headlines this week by implementing a surprise policy move. On June 6, 2025, the Reserve Bank of India (RBI) announced a sharp (1)_____ of 50 basis points in its repo rate, bringing it down to 5.50%. This (2)_____ rate cut was the third consecutive easing since February and reflects RBI's shift from a strict inflation-targeting stance to a more growth-supportive posture. The central bank also reduced the cash reserve ratio (CRR) by 100 bps, promising to inject nearly ₹2.5 trillion liquidity into the banking system by year-end.

Financial markets reacted (3)_____ equities rallied, bond yields fell, and the rupee strengthened—media reports describe the move as an important (4)_____ to household consumption and lending. However, some critics warn that combining monetary stimulus with growth objectives could risk overshooting inflation targets or misaligning with (5)_____ supply-side reforms.

To conclude, the RBI's bold intervention represents a pivotal shift in policy direction—balancing between price stability and economic growth—as India grapples with slowing GDP expansion amid global uncertainties.

Select the option (3) that best completes the sentence and fits the meaning of the passage.

a) sharply 

b) mildly 

c) negligibly 

d) apathetically 

Explanation:

Explanation:

Correct answer: A) sharply – indicates the market's strong positive reaction.

- **A) sharply** – sudden and significant, exactly what happened.
- **B) mildly** – slight impact; doesn't match the strong market movements.
- **C) negligibly** – means almost no impact, which isn't true.
- **D) apathetically** – meaning with no interest or enthusiasm (markets were excited!).

Hindi Meanings

Sharply = तीव्रता से / कठोरता से

Mildly = हल्के रूप से / नरमी से

Negligibly = नगण्य रूप से / न के बराबर

Apathetically = उदासीनता से / बिना रुचि के

Q. 74

In the following passage, there are five blanks. Each blank has four options. Choose the word that best fits the context of the passage.

India's central bank made headlines this week by implementing a surprise policy move. On June 6, 2025, the Reserve Bank of India (RBI) announced a sharp (1)_____ of 50 basis points in its repo rate, bringing it down to 5.50%. This (2)_____ rate cut was the third consecutive easing since February and reflects RBI's shift from a strict inflation-targeting stance to a more growth-supportive posture. The central bank also reduced the cash reserve ratio (CRR) by 100 bps, promising to inject nearly ₹2.5 trillion liquidity into the banking system by year-end.

Financial markets reacted (3)_____ equities rallied, bond yields fell, and the rupee strengthened—media reports describe the move as an important (4)_____ to household consumption and lending. However, some critics warn that combining monetary stimulus with growth objectives could risk overshooting inflation targets or misaligning with (5)_____ supply-side reforms.

To conclude, the RBI's bold intervention represents a pivotal shift in policy direction—balancing between price stability and economic growth—as India grapples with slowing GDP expansion amid global uncertainties.

Select the option (4) that best completes the sentence and fits the meaning of the passage.

a) barrier 

b) impediment 

c) catalyst 

d) obstacle 

Explanation:

Explanation:

Correct answer: C) catalyst – because the cut was meant to stimulate lending and consumption.

- **A) barrier** – an obstacle, opposite meaning of a helpful move.
- **B) impediment** – also means obstacle.
- **C) catalyst** – something that causes change and promotes activity.
- **D) obstacle** – same as a barrier.

Hindi Meanings

Barrier = बाधा / अवरोध

Impediment = अवरोध / रुकावट

Catalyst = उत्प्रेरक

Obstacle = बाधा / रुकावट

Q. 75





In the following passage, there are five blanks. Each blank has four options. Choose the word that best fits the context of the passage.

India's central bank made headlines this week by implementing a surprise policy move. On June 6, 2025, the Reserve Bank of India (RBI) announced a sharp (1)_____ of 50 basis points in its repo rate, bringing it down to 5.50%. This (2)_____ rate cut was the third consecutive easing since February and reflects RBI's shift from a strict inflation-targeting stance to a more growth-supportive posture. The central bank also reduced the cash reserve ratio (CRR) by 100 bps, promising to inject nearly ₹2.5 trillion liquidity into the banking system by year-end.

Financial markets reacted (3)_____ equities rallied, bond yields fell, and the rupee strengthened—media reports describe the move as an important (4)_____ to household consumption and lending. However, some critics warn that combining monetary stimulus with growth objectives could risk overshooting inflation targets or misaligning with (5)_____ supply-side reforms.

To conclude, the RBI's bold intervention represents a pivotal shift in policy direction—balancing between price stability and economic growth—as India grapples with slowing GDP expansion amid global uncertainties.

Select the option (5) that best completes the sentence and fits the meaning of the passage.

- a) Excessive 
- b) structural 
- c) drastic 
- d) fiscal 

Explanation:

Explanation:**Correct answer: B) structural** – these are long-term economic reforms.

- **A) excessive** – doesn't directly relate to long-term policy.
- **B) structural** – relating to the basic, long-term economic changes (like supply-side reforms).
- **C) drastic** – means severe, not specific to economic structures.
- **D) fiscal** – relates to government revenue and taxes, but here it's about supply-side reforms (like infrastructure, education, etc.).

Hindi Meanings

Excessive = अत्यधिक





Structural = संरचनात्मक

Drastic = कठोर / गंभीर

Fiscal = राजकोषीय / वित्तीय

Q. 76

If the selling price of a bed is 3-times of initial, then the profit is 7.5-times of initial. Find the initial profit percentage (in %).





a) 67.5% b) 33.33% c) 44.44% d) 49.66% 

Explanation:

$$\begin{aligned}
 \text{Profit} &= \text{SP} - \text{CP} \\
 \text{Profit is 7.5 times the initial,} \\
 \Rightarrow 7.5 \text{ Profit} &= 7.5 (\text{SP} - \text{CP}) \\
 \Rightarrow 7.5 (\text{SP} - \text{CP}) &= 3\text{SP} - \text{CP} \\
 \Rightarrow 4.5 \text{SP} &= 6.5 \text{CP} \\
 \Rightarrow \frac{\text{SP}}{\text{CP}} &= \frac{6.5}{4.5} \Rightarrow \frac{13}{9} \\
 \therefore \text{profit} &= \frac{4}{9} \times 100 \\
 &\Rightarrow 44.44\% \text{ (Ans)}
 \end{aligned}$$

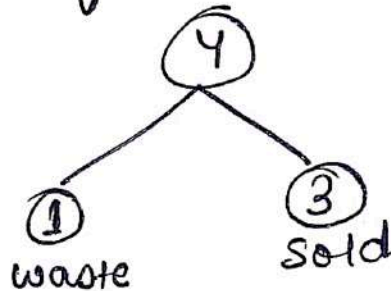
Q. 77

Rajesh purchased some perishable items for sale, but a quarter of those items could not be sold and went bad. However, Rajesh managed to sell the rest of the items at a price that helped him earn an overall profit of 20%. At what percentage above the cost price of each item did Rajesh sell each of the items that did NOT go bad?

- a) 50% 
- b) 75% 
- c) 40% 
- d) 60% 

Explanation:

let total item = 4
CP of each item = 100







overall profit of 20%.





$$\Rightarrow 400 \times 120\% = 480$$





$$\text{SP of each item} = \frac{480}{3}$$

$$\Rightarrow ₹ 160$$

$$\therefore \frac{\text{SP}}{\text{CP}} = \frac{160}{100} = 60\% \text{ profit}$$

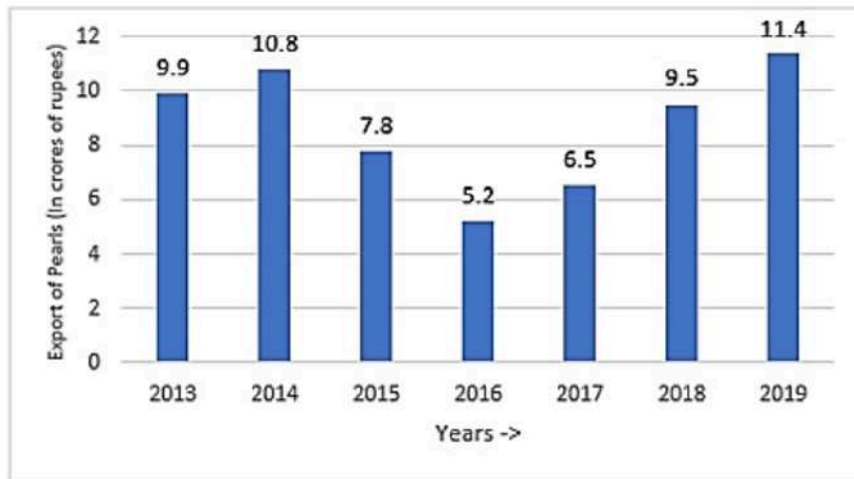
Q. 78	<p>The radius and the height of a right circular cylinder are 14 cm and 21 cm, respectively. How much water (in cm³) will it hold?</p> <p>a) 12984 </p> <p>b) 13174 </p> <p>c) 13026 </p> <p>d) 12936 </p>
Explanation:	<p>Volume of cylinder = $\pi r^2 h$</p> <p>$\Rightarrow \frac{22}{7} \times 14 \times 14 \times 21$</p> <p>$\Rightarrow 12936 \text{ cm}^3$</p>

Q. 79	<p>After allowing a discount of 68%, the value of a water cooler is ₹7,680. If no discount is allowed, then the shopkeeper gains 25%. Find the cost price (in ₹) of the water cooler.</p> <p>a) 19,120 </p> <p>b) 18,900 </p> <p>c) 19,200 </p> <p>d) 18,220 </p>
Explanation:	<p>MP = $\frac{7680}{32\%} \times 100\% \Rightarrow ₹24,000$</p> <p>CP = $\frac{24000}{125\%} \times 100\% \Rightarrow ₹19,200 \text{ (Ans)}$</p>

Q. 80	<p>What sum of money (in ₹) will amount to ₹1950 at 6% per annum simple interest in 5 years?</p> <p>a) 1600 </p> <p>b) 1400 </p> <p>c) 1200 </p> <p>d) 1500 </p>
Explanation:	<p>SI for 5 years = $6\% \times 5 \Rightarrow 30\%$</p> <p>Amount accrued in 5 years = 130%</p> <p>130% \Rightarrow 1950</p> <p>100% $\Rightarrow \frac{1950}{130\%} \times 100\% \Rightarrow ₹1500$</p> <p>Therefore, principal is ₹1500.</p>

Q. 81

Study the given bar-graph carefully and answer the question that follows.



In which year was there maximum percentage increase in the export of pearls to that in the previous year?

- a) 2014 ☒
- b) 2019 ☒
- c) 2018 ☒
- d) 2017 ☒

Explanation:

$$\text{In 2014, increase in pearls} = \frac{10.8-9.9}{9.9} \times 100 \Rightarrow \frac{0.9}{9.9} \times 100 \Rightarrow 9.09\%$$

$$\text{In 2017, increase in pearls} = \frac{6.5-5.2}{5.2} \times 100 \Rightarrow \frac{1.3}{5.2} \times 100 \Rightarrow 25\%$$

$$\text{In 2018, increase in pearls} = \frac{9.5-6.5}{6.5} \times 100 \Rightarrow \frac{3}{6.5} \times 100 \Rightarrow 46.15\%$$

$$\text{In 2019, increase in pearls} = \frac{11.4-9.5}{9.5} \times 100 \Rightarrow \frac{1.9}{9.5} \times 100 \Rightarrow 20\%$$

Therefore, In 2018 there was maximum percentage increase in the export of pearls to that in the previous year.

Q. 82

Mishima travels a certain distance at a speed of 48 km/hr and double the earlier distance at 36 km/hr. She then returns to the starting point through the same route. If her average speed for the entire journey is 54 km/h, then what is her speed (in km/hr) for the return journey?

a) 86.4 ✓

b) 89.8 ✗

c) 84.2 ✗

d) 88.8 ✗

Explanation:

let distance = d

$$\Rightarrow \frac{6d}{\frac{d}{48} + \frac{2d}{36} + \frac{3d}{x}} = 54$$

$$\Rightarrow \frac{1}{\frac{1}{48} + \frac{1}{18} + \frac{3}{x}} = 9$$

$$\Rightarrow 1 = 9\left(\frac{1}{48} + \frac{1}{18} + \frac{3}{x}\right)$$


$$\Rightarrow 1 = \frac{99}{144} + \frac{27}{x}$$


$$\Rightarrow \frac{27}{x} = 1 - \frac{11}{16}$$


$$\Rightarrow x = \frac{27 \times 32}{10} = 86.4 \text{ km/hr}$$


Q. 83

If $a^2 + b^2 = 187$ and $a \times b = 16$, then find $\frac{(a-b)}{(a+b)}$, where $a > b$.

a) $\sqrt{\frac{253}{316}}$ 

b) $\sqrt{\frac{172}{167}}$ 

c) $\sqrt{\frac{155}{219}}$ 





d) $\sqrt{\frac{195}{273}}$ 

Explanation:

$$\begin{aligned} \Rightarrow (a+b)^2 &= a^2 + b^2 + 2ab \\ \Rightarrow (a+b)^2 &= 187 + 2 \times 16 \\ \Rightarrow a+b &= \sqrt{219} \\ (a-b)^2 &= a^2 + b^2 - 2ab \\ \Rightarrow (a-b)^2 &= 187 - 2 \times 16 \\ \Rightarrow (a-b) &= \sqrt{155} \\ \therefore \frac{a-b}{a+b} &= \sqrt{\frac{155}{219}} \end{aligned}$$

Q. 84

The sum of nine times the present age of A and eight times the present age of B is 250 years. Two times the present age of B exceeds two times the present age of A by 20 years. What will be the sum of the ages (in years) of A and B, 6 years from now?

a) 54 b) 48 c) 36 d) 42 **Explanation:**

Let A's age = a, B's age = b

Given:

1. $9a + 8b = 250$

2. $2b = 2a + 20 \Rightarrow b = a + 10$

Substitute $b = a + 10$ into equation (1):

$$9a + 8(a + 10) = 250$$

$$9a + 8a + 80 = 250$$

$$17a = 170 \Rightarrow a = 10$$

$$\text{Then, } b = 10 + 10 = 20$$





In 6 years:

$$A = 10 + 6 = 16$$

$$B = 20 + 6 = 26$$

$$\text{Sum} = 16 + 26 = 42$$

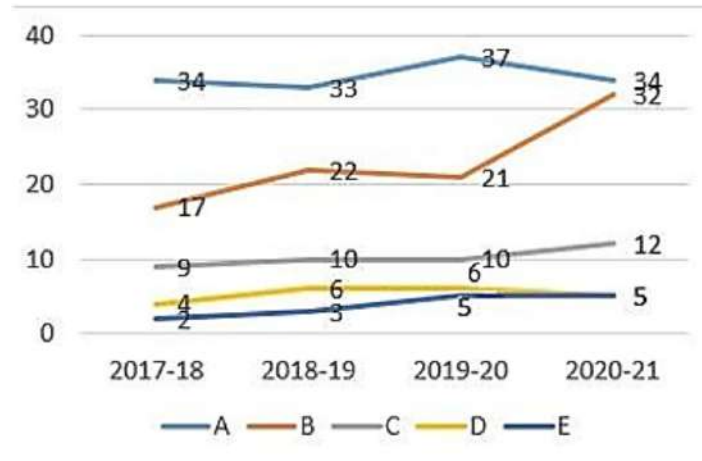
Final Answer: 42 years

Q. 85	<p>Two pipes, A and B, can fill a tank of 9300 litres in 15 hours and 12 hours, respectively. If they are opened together, how many hours will they take to fill an empty tank of 10500 litres?</p> <p>a) $7\frac{49}{93}$ hours </p> <p>b) $8\frac{42}{91}$ hours </p> <p>c) $6\frac{37}{79}$ hours </p> <p>d) $9\frac{47}{89}$ hours </p>
Explanation:	<p>Pipe A fills 9300 L in 15 hrs \Rightarrow Rate = $9300 / 15 = 620$ L/hr Pipe B fills 9300 L in 12 hrs \Rightarrow Rate = $9300 / 12 = 775$ L/hr Combined rate: $620 + 775 = 1395$ L/hr To fill 10500 L: Time = $10500 / 1395 = 700/93 \Rightarrow 7\frac{49}{93}$ (Ans)</p>

Q. 86

Study the given graph and answer the question that follows.

The graph shows the number of projects completed by five companies:



Which company has the highest growth in percentage in completed projects from 2017-18 to 2020-21?

- a) E ☒
- b) C ☐
- c) B ☐
- d) D ☐

Explanation:

$$\text{Growth percentage of company B} = \frac{32-17}{17} \times 100 \Rightarrow \frac{1500}{17} \Rightarrow 88.23\%$$

$$\text{Growth percentage of company C} = \frac{12-9}{12} \times 100 \Rightarrow \frac{300}{12} \Rightarrow 25\%$$

$$\text{Growth percentage of company D} = \frac{5-4}{4} \times 100 \Rightarrow \frac{100}{4} \Rightarrow 25\%$$

$$\text{Growth percentage of company E} = \frac{5-2}{2} \times 100 \Rightarrow \frac{300}{2} \Rightarrow 150\%$$

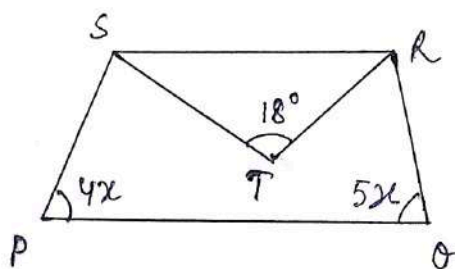
E has the highest growth in percentage in completed projects from 2017-18 to 2020-21.

Q. 87

In quadrilateral PQRS, the bisectors of $\angle R$ and $\angle S$ meet at point T (inside the quadrilateral), and $\angle STR = 18^\circ$. If the ratio of $\angle P$ to $\angle Q$ is 4:5, then what is the difference between the measures of $\angle Q$ and $\angle P$?

- a) 2° ☒
- b) 7° ☒
- c) 5° ☒
- d) 4° ☒

Explanation:



$$\frac{\angle P + \angle Q}{2} = 18^\circ$$

$$\Rightarrow 9x = 36^\circ$$

$$\Rightarrow x = 4^\circ$$

\therefore Difference between the measures of $\angle Q$ & $\angle P$ is 4° .

Q. 88

Find the area of the quadrilateral ABCD, the coordinates of whose vertices are A(1, 1), B(7, -3), C(12, 2) and D(7, 21)?

a) 156 unit² 

b) 132 unit² 

c) 124 unit² 

d) 136 unit² 

Explanation:

Given the coordinates of quadrilateral ABCD:

A(1, 1), B(7, -3), C(12, 2), D(7, 21)

Step-by-step Calculation:

$x_1 = 1, y_1 = 1$

$x_2 = 7, y_2 = -3$

$x_3 = 12, y_3 = 2$

$x_4 = 7, y_4 = 21$

Using the Shoelace Formula to calculate area of quadrilateral:

$\text{Area} = \frac{1}{2} \times |x_1y_2 + x_2y_3 + x_3y_4 + x_4y_1 - (y_1x_2 + y_2x_3 + y_3x_4 + y_4x_1)|$



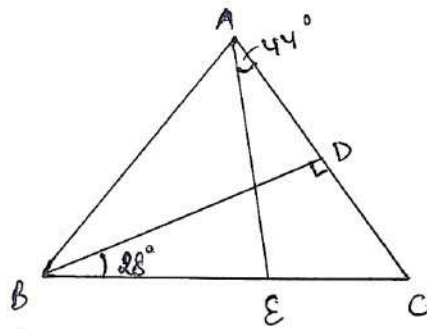

$x_1y_2 + x_2y_3 + x_3y_4 + x_4y_1 = 1*(-3) + 7*2 + 12*21 + 7*1 = -3 + 14 + 252 + 7 = 270$

$y_1x_2 + y_2x_3 + y_3x_4 + y_4x_1 = 1*7 + (-3)*12 + 2*7 + 21*1 = 7 - 36 + 14 + 21 = 6$

$\text{Area} = \frac{1}{2} \times |270 - 6| = \frac{1}{2} \times 264 = 132 \text{ square units}$

Q. 89

In $\triangle ABC$, $BD \perp AC$ at D and $\angle DBC = 28^\circ$. E is a point on BC such that $\angle CAE = 44^\circ$. What is the measure of $\angle AEB$?


a) 101° b) 103° c) 106° d) 104° 


Explanation:


In $\triangle BCD$,
 $\Rightarrow \angle BCD = 180^\circ - (28^\circ + 90^\circ)$
 $\Rightarrow \angle BCD = 62^\circ$
 $\angle AEB = \angle EAC + \angle ACE$
 (exterior angle)
 $\Rightarrow 44^\circ + 62^\circ \Rightarrow 106^\circ$ (Ans)

Q. 90

If $x = \sqrt{5} + 2$ and $y = \sqrt{5} - 2$, then what is the value of $\left(\frac{x}{y} + \frac{y}{x}\right)^2 + 5$?

a) 329 

b) 16 

c) 324 


d) 23 


Explanation:


$$\begin{aligned}
 x &= \sqrt{5} + 2 \\
 y &= \sqrt{5} - 2 \\
 \Rightarrow x + y &= 2\sqrt{5}, \quad xy = 1 \\
 \Rightarrow (x + y)^2 &= x^2 + y^2 + 2xy \\
 \Rightarrow (2\sqrt{5})^2 &= x^2 + y^2 + 2 \\
 \Rightarrow x^2 + y^2 &= 18 \\
 \therefore \left(\frac{x}{y} + \frac{y}{x}\right)^2 + 5 \\
 \Rightarrow \left(\frac{x^2 + y^2}{xy}\right)^2 + 5 \\
 \Rightarrow \left(\frac{18}{1}\right)^2 + 5 &\Rightarrow 329 \text{ (Ans)}
 \end{aligned}$$

Q. 91

A cuboid of dimension 12 cm x 16 cm x 20 cm is cut into small cubes of edge length 4 cm. What is the difference between the total surface area of the original cuboid and the sum of the surface area of all the small cubes?

a) 5002 cm^2 

b) 4256 cm^2 

c) 1406 cm^2 

d) 3281 cm^2 

Explanation:

TSA of cuboid:

$$= 2 \times (12 \times 16 + 16 \times 20 + 20 \times 12)$$

$$= 2 \times (192 + 320 + 240) = 2 \times 752 = 1504 \text{ cm}^2$$

$$\text{Volume of cuboid} = 12 \times 16 \times 20 = 3840 \text{ cm}^3$$

$$\text{Volume of 1 cube} = 4 \times 4 \times 4 = 64 \text{ cm}^3$$

$$\text{No. of cubes} = 3840 / 64 = 60$$


$$\text{TSA of 1 cube} = 6 \times 4^2 = 6 \times 16 = 96 \text{ cm}^2$$


$$\text{TSA of 60 cubes} = 60 \times 96 = 5760 \text{ cm}^2$$


$$\text{Difference} = 5760 - 1504 = 4256 \text{ cm}^2$$


Q. 92

If $5 \tan A = 12$, then find the value of $\sqrt[4]{\frac{(1 - \operatorname{cosec} A)(1 + \operatorname{cosec} A)}{(1 - \sec A)(1 + \sec A)}}$

a) $\frac{144}{25}$ 

b) $\frac{169}{25}$ 

c) $\frac{12}{5}$ 

d) $\frac{5}{12}$ 

Explanation:

$$\sqrt[4]{\frac{(1 - \operatorname{cosec} A)(1 + \operatorname{cosec} A)}{(1 - \sec A)(1 + \sec A)}} = \sqrt[4]{\frac{(1 - \operatorname{cosec}^2 A)}{(1 - \sec^2 A)}}$$

$$= \sqrt[4]{\frac{(-\cot^2 A)}{(-\tan^2 A)}} = \sqrt[4]{\cot^4 A} = \cot A = \frac{1}{\tan A} = \frac{5}{12}$$

Q. 93

From a bucket full of water, $\frac{3}{10}$ th of water is taken out. Now, 4 litres of water is added to the bucket. Then, $\frac{1}{5}$ th of water is taken out leaving only $\frac{2}{3}$ rd of the bucket full. What is the capacity of the bucket?

a) 25 litres ✗

b) 30 litres ✓

c) 27.5 litres ✗

d) 20 litres ✗

Explanation:

$$(7x/10 + 4) * 4/5 = 2x/3$$

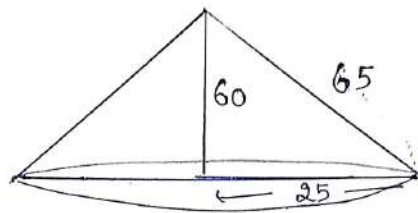
$$X = 30$$

Q. 94

A right triangle with sides 25 cm, 60 cm and 65 cm is rotated about the side of 60 cm to form a cone. The total surface area (in cm^2) of the cone so formed is:

a) 2500π ✗b) 2750π ✗c) 2250π ✓d) 1750π ✗

Explanation:







Surface area of a Cone





$$= \pi r(l+r)$$

$$= \pi \times 25(25+65)$$

$$= 25\pi \times 90$$





$$= 2250\pi (\text{Ans})$$

Q. 95	<p>The percentage profit earned by selling a table lamp for ₹324 is equal to the percentage loss incurred by selling the same table lamp for ₹176. At what price (in ₹) should the table lamp be sold to make 65% profit?</p> <p>a) 425.5 </p> <p>b) 422.5 </p> <p>c) 412.5 </p> <p>d) 410.5 </p>
Explanation:	$324 - x = x - 176$ $\rightarrow 324 + 176 = 2x$ $\rightarrow 500 = 2x$ $\rightarrow x = 250$ <p>Selling Price for 65% profit</p> $\text{S.P.} = x + 65\% \text{ of } x = x \times 1.65$ $= 250 \times 1.65 = \text{₹}412.5$

Q. 96	<p>A letter is chosen at random from the word 'ASSASSINATION'. Find the probability that letter is a vowel.</p> <p>a) 5/13 </p> <p>b) 8/13 </p> <p>c) 6/13 </p> <p>d) 4/13 </p>
Explanation:	<p>Total Number of letters in the given word = 13</p> <p>Total number of vowels = 6</p> <p>Probability of vowel = 6/13</p>

Q. 97

$\sin(A+B) = 9 \sin(A-B)$ and $m = \tan A / \tan B$, then what is the value of m ?





- a) $\frac{3}{5}$ 
- b) $\frac{5}{4}$ 
- c) $\frac{5}{3}$ 
- d) $\frac{4}{5}$ 

Explanation:

$$\begin{aligned} \sin(A+B) &= 9 \sin(A-B) \\ \frac{\sin(A+B)}{\sin(A-B)} &= \frac{9}{1} \\ \Rightarrow \frac{\sin A \cos B + \cos A \sin B}{\sin A \cos B - \cos A \sin B} &= \frac{9}{1} \\ \text{Applying componendo, dividendo} \\ \Rightarrow \frac{\sin A \cos B}{\cos A \sin B} &= \frac{10}{8} \Rightarrow \frac{5}{4} \\ \Rightarrow \frac{\tan A}{\tan B} &= \frac{5}{4} \end{aligned}$$

Q. 98

A man spends 30% of his monthly salary on house rent. If every month, he also spends ₹563 on conveyance and ₹10,117 on grocery and saves the remaining ₹954, his monthly salary is:

- a) ₹16,650 
- b) ₹16,750 
- c) ₹16,620 
- d) ₹16,640 

Explanation:





$$70\% \Rightarrow ₹563 + ₹10117 + ₹954 \Rightarrow 11634$$

$$100\% \Rightarrow \frac{11634}{70\%} \times 100\% \Rightarrow ₹16,620$$

$$\text{Monthly salary} = ₹16,620$$

Q. 99

Mode = 66 and Median = 42. Find mean using empirical relation.

a) 54 b) 26 c) 66 d) 30 

Explanation:

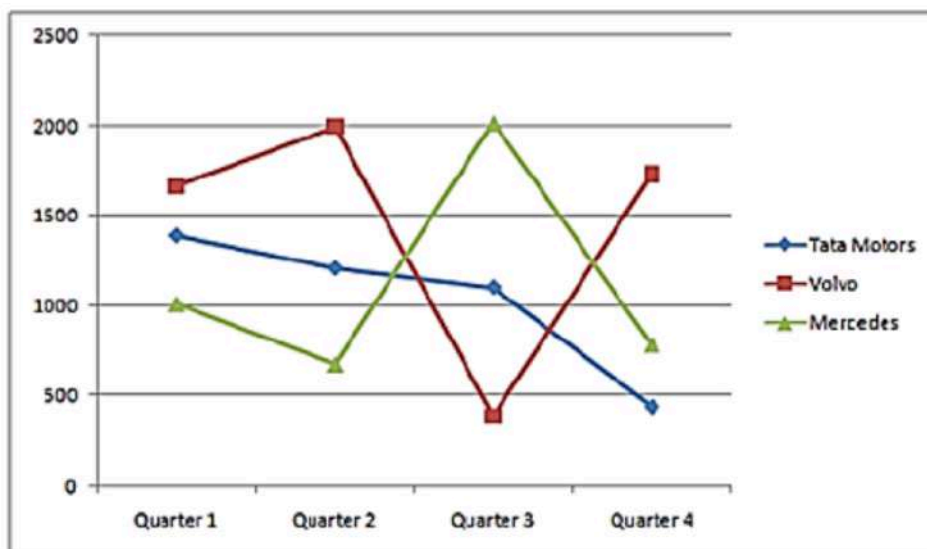
$$\text{Mode} = 3\text{Median} - 2\text{Mean}$$

$$66 = 3 \times 42 - 2\text{Mean}$$

$$\text{Mean} = \frac{126 - 66}{2} = \frac{60}{2} = 30$$

Q. 100

The line graph given below shows the sales of trucks of few automobile companies in four quarters of the year 2014. Based on this information, answer the questions that follow.



What is the ratio of sales in second quarter by Volvo to sales in first quarter by Mercedes?

- a) 5 : 4 ☐
- b) 3 : 2 ☐
- c) 4 : 3 ☐
- d) 2 : 1 ☒

Explanation:

Sales in second quarter by Volvo = 2000

Sales in first quarter by Mercedes = 1000

Ratio = 2000 : 1000 \Rightarrow 2 : 1