

RBE SSC CGL 2025 Live Mock June 01,2025

Q. 1

'DESK' is related to 'FGQI' in a certain way based on the English alphabetical order. In the same way, 'RAIN' is related to 'TCGL'. To which of the following is 'KNOW' related, following the same logic?

- a) IPMU X
- b) MPMU ✓
- c) IQNU X
- d) MQNU X

The correct option is: b

$$\begin{array}{cccc}
 +2 & +2 & -2 & -2 \\
 D & F & S & K \\
 \downarrow & \downarrow & \downarrow & \downarrow \\
 F & Q & Q & I
 \end{array}$$

$$\begin{array}{cccc}
 +2 & +2 & -2 & -2 \\
 R & A & I & N \\
 \downarrow & \downarrow & \downarrow & \downarrow \\
 T & C & O & L
 \end{array}$$

$$\begin{array}{cccc}
 +2 & +2 & -2 & -2 \\
 K & N & O & W \\
 \downarrow & \downarrow & \downarrow & \downarrow \\
 M & P & M & U
 \end{array}$$

Explanation:

Q. 2

Each of the letters in the word 'COMPLAIN' are arranged in the English alphabetical order. How many letters are in the English alphabetical order between the letter which is the fourth from the left end and the second from the right end in the group of letters thus formed?

- a) Three
- b) One
- c) Four
- d) Two

The correct option is: d

C O M P L A I N
A C I \bigcirc L M N \bigcirc O P
4th letter 2nd letter
from the left from the
right
letters b/w L & O = M, N
 \therefore There are 2 letters b/w them.

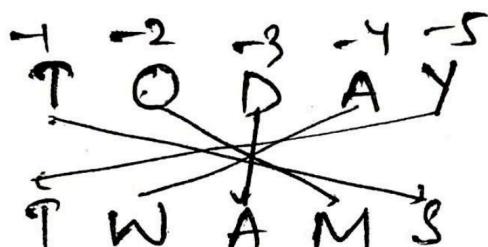
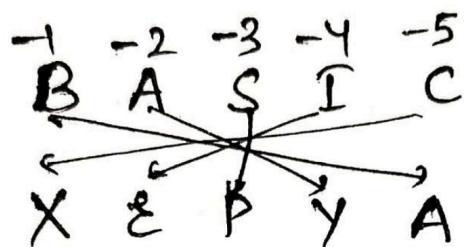
Explanation:

Q. 3

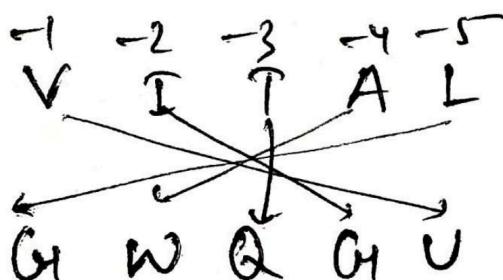
In a certain code language, 'BASIC' is written as 'XEPYA' and 'TODAY' is written as 'TWAMS'. How will 'VITAL' be written in that language?

- a) GVPHU X
- b) GWPHU X
- c) GVRIU X
- d) GWQGU ✓

The correct option is: d

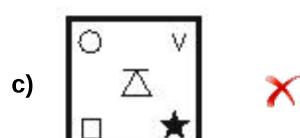
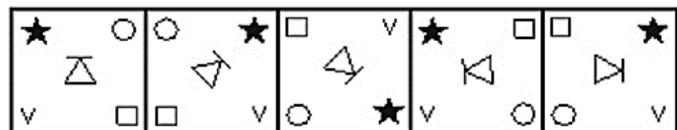


Explanation:



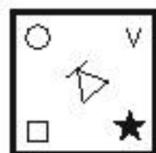
Q. 4

Select the figure that will come next in the following series.



The correct answer is: b

Explanation:



Q. 5

Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which is the letter-cluster that DOES NOT belong to that group?
 (Note: The odd man out is not based on the number of consonants/vowels or their position in the letter-cluster.)

- a) PVS X
- b) DJG X
- c) FKH ✓
- d) IOL X

The correct option is: c

P → V → S
 +6 -3

D → J → G
 +6 -3

F → K → H (odd)
 +5 -3

I → O → L
 +6 -3

Explanation:

Q. 6

Six letters I, O, A, Y, Z and X are written on different faces of a dice. Two positions of this dice are shown in the figures below. Find the letter on the face opposite to O.



- a) Y ✓
- b) Z ✗
- c) X ✗
- d) A ✗

The correct answer is: a

$$I \Rightarrow A \Rightarrow O$$

Explanation:

$$I \Rightarrow Z \Rightarrow Y$$

Opposite faces of the given dice is: A – Z, O – Y and I – X.

Q. 7

Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.

$$16 : 42 :: 11 : 32 :: 9 : ?$$

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- a) 29 ✗
- b) 26 ✗
- c) 28 ✓
- d) 32 ✗

The correct option is: c

Logic: (first no. $\times 2 + 10$) =second no.

$$\Rightarrow 16 \times 2 + 10 = 42$$

$$\Rightarrow 11 \times 2 + 10 = 32$$

Similarly,

$$\Rightarrow 9 \times 2 + 10 = 28$$

Explanation:

Q. 8

Which of the following terms will replace the question mark (?) in the given series?
RISE, DUEQ, PGQC, BSCO, ?

- a) NEOA ✓
- b) NOEA ✗
- c) NIPB ✗
- d) NEPB ✗

The correct option is: a

Explanation:

18	9	19	5
R	I	S	E
↓+12	↓+12	↓+12	↓+12
21	5	17	
D	V	E	Q
↓+12	↓+12	↓+12	↓+12
16	7	17	3
P	G	Q	C
↓+12	↓+12	↓+12	↓+12
2	19	3	15
B	S	C	O
↓+12	↓+12	↓+12	↓+12
14	5	15	2
N	E	O	A (Ans)

Q. 9

Select the correct mirror image of the given figure when the mirror is placed at the right side.



- a)  ✓
- b)  ✗
- c)  ✗
- d)  ✗

The correct answer is: a

Explanation:



Q. 10

What will come in place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

$$1325 \times 5 + 55 - 189 \div 19 = ?$$

- a) 3801 ✓
- b) 3784 ✗
- c) 3824 ✗
- d) 3482 ✗

Explanation:

The correct option is: a

$$1325 \times 5 + 55 - 189 \div 19 = ?$$

'+' and '-' are interchanged and '×' and '÷' are interchanged, then

$$\Rightarrow 1325 \div 5 - 55 + 189 \times 19$$

$$\Rightarrow 265 - 55 + 3591$$

$$\Rightarrow 3856 - 55$$

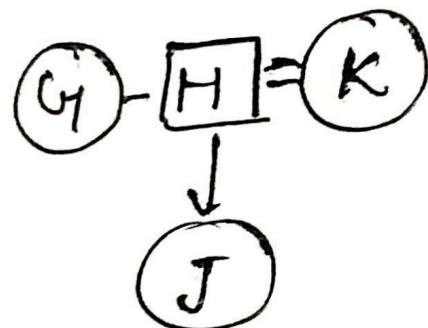
$$\Rightarrow 3801$$

Q. 11

M + N means 'M is the father of N',
 M - N means 'M is the wife of N',
 M × N means 'M is the sister of N',
 M ÷ N means 'M is the daughter of N'.
 If G × H + J ÷ K, then which of the following is true?

- a) G is the mother of J X
- b) J is the sister of G X
- c) J is the daughter of G X
- d) G is the aunt (father's sister) of J ✓

The correct answer is: d



Explanation:

G is the aunt
 (father's sister) of
 J.

Q. 12

DESIGNER - EDISNGRE

AUDIENCE - Uайднек

REOWNED -

Using the same logic as applied for the first two pairs of terms, select the term that can replace the question mark (?) in the third pair.

a) ERONNDWE Xb) ERNONWDE Xc) ERONNWDE ✓d) ERONNWED X

The correct option is: c

D E S I G N E R
 X X X X X
 E D I S N O R E

A U D I E N C E
 X X X X X
 U A I D N E E C

R E N O W N E D
 X X X X X
 E R O N N W D E (Ans)

Explanation:

Q. 13

Which number will come in the place of the question mark (?) in the following equation if '+' and '-' are interchanged and '×' and '÷' are interchanged?
 $65 + 56 \times 4 - 6 \div 8 = ?$

- a) 99 ✓
- b) 106 ✗
- c) 96 ✗
- d) 109 ✗

Explanation:

The correct option is: a

$$65 + 56 \times 4 - 6 \div 8 = ?$$

If '+' and '-' are interchanged and '×' and '÷' are interchanged, then

$$\Rightarrow 65 - 56 \div 4 + 6 \times 8$$

$$\Rightarrow 65 - 14 + 48$$

$$\Rightarrow 65 + 34 = 99$$

Q. 14

A farmer is selling five varieties of Vegetables, which consists of potatoes, onions, ginger, garlic and spinach on a staircase. He has placed them in such a way that spinach is above potatoes, garlic is below onions and onions are under potatoes. Garlic is between onions and ginger.

Which vegetable has been placed on the bottom-most part of the staircase?

- a) Ginger ✓
- b) Spinach ✗
- c) Onions ✗
- d) Garlic ✗

The correct answer is: a

The correct order of five vegetables are:

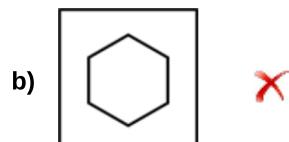
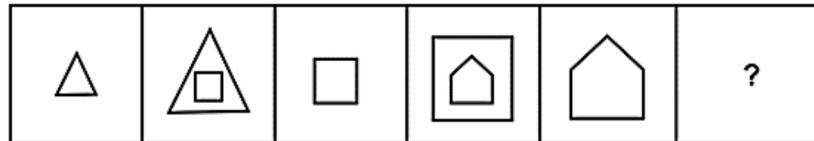
spinach
↓
potato
↓
onion
↓
garlic
↓
ginger

Explanation:

Ginger is at the bottom-most part of the staircase.

Q. 15

Select the figure from among the given options that can replace the question mark (?) in the following series.



The correct answer is: c

A polygon having one more side than the previous is added and inscribed into the existing figure.

Explanation:



Q. 16

'Resilient' is related to 'Durable' in the same way as 'Transitory' is related to:
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)

- a) Everlasting X
- b) Temporary ✓
- c) Immutable X
- d) Persistent X

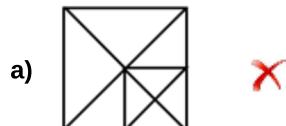
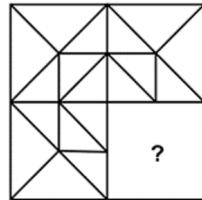
The correct answer is: b

- Explanation:**
- **Resilient** (able to recover quickly) is related to **Durable** (able to withstand wear and damage).
 - **Transitory** (temporary) is related to **Temporary** (lasting for a short time).

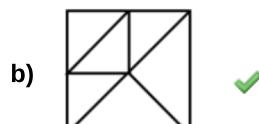
In both pairs, the words are synonyms, meaning they have similar meanings. So, in the analogy, 'Resilient' : 'Durable' :: 'Transitory' : 'Temporary'.

Q. 17

Select the figure from the options that can replace the question mark (?) and complete the pattern.



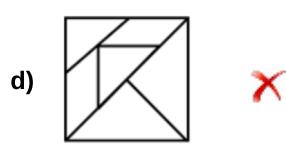
X



✓



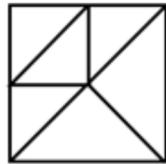
X



X

The correct answer is: b

Explanation:



Q. 18

In a certain code language, 'LIGHT' is coded as '74285' and 'THRILL' is coded as '587449'. What is the code for 'R' in the given code language?

a) 1

b) 9

c) 8

d) 3

The correct option is: b

Explanation:

L,I,H,T is common coded as 5,8,7,4

So, the code for R is 9.

Q. 19

Select the option that represents the letters that when placed from left to right in the blanks below will complete the given letter series.

C _ F O C _ D F O C C D _ O C C D F _ C _ D

- a) COFDC X
- b) DCFOC ✓
- c) CDFOC X
- d) DOFCC X

The correct answer is: b

Explanation:

C D F O C / C D F O C / C D F O C / C D F O C / C D

The correct letter combination to replace the blanks is DCFOC.

Q. 20

57 is related to 121 following a certain logic. Following the same logic, 43 is related to 79. To which of the following is 49 related, following the same logic? (NOTE: Operations should be performed on all numbers without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- a) 97 ✓
- b) 98 X
- c) 99 X
- d) 96 X

The correct option is: a

Logic: (1^{st} no. \times 3 - 50)

$$\Rightarrow 57 \times 3 - 50 = 121$$

$$\Rightarrow 43 \times 3 - 50 = 79$$

Similarly,

$$\Rightarrow 49 \times 3 - 50 = 97$$

Explanation:

Q. 21

The same operation(s) are followed in all the given number pairs except one. Find that odd number pair.

(NOTE: Operations should be performed on all numbers without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- a) 43: 7
- b) 55: 9
- c) 35: 6
- d) 31: 5

Explanation:

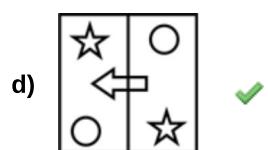
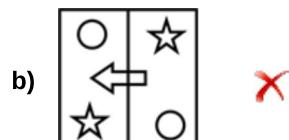
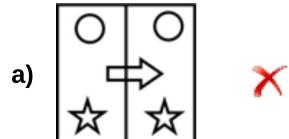
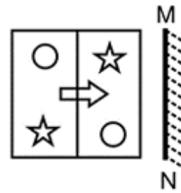
The correct option is: c
Logic: (2^{nd} no. \times 6 + 1 = 1^{st} no.)

- (A) $7 \times 6 + 1 = 43$
- (B) $9 \times 6 + 1 = 55$
- (C) $6 \times 6 + 1 = 37 \neq (35)$
- (D) $5 \times 6 + 1 = 31$

So the odd one is 35: 6.

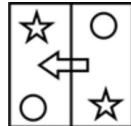
Q. 22

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



The correct answer is: d

Explanation:



Q. 23

Two sets of numbers are given below. In each set of numbers, certain mathematical operation(s) on the first number result(s) in the second number. Similarly, certain mathematical operation(s) on the second number result(s) in the third number and so on. Which of the given options follows the same set of operations as in the given sets?

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
 $14 - 17 - 11 - 20; 16 - 19 - 13 - 22$

- a) $7 - 10 - 4 - 13$ ✓
- b) $9 - 7 - 2 - 8$ ✗
- c) $6 - 9 - 13 - 19$ ✗
- d) $8 - 12 - 18 - 25$ ✗

The correct option is: a

I) $14 - 17 - 11 - 20$
 $+3 \quad -6 \quad +9$

II) $16 - 19 - 13 - 22$
 $+3 \quad -6 \quad +9$

III) option (a)

$7 - 10 - 4 - 13$
 $+3 \quad -6 \quad +9$

Explanation:

Q. 24

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

5, 29, 143, 569, ?, 3401

- a) 1697 X
- b) 1703 ✓
- c) 1709 X
- d) 1712 X

The correct option is: b

Explanation:

$$\begin{array}{ccccccccc} 5 & , & 29 & , & 143 & , & 569 & , & 1703 & , & 3401 \\ \times 6-1 & & \times 5-2 & & \times 4-3 & & \times 3-4 & & \times 2-5 & & \\ ? & = & 1703 & (\text{Ans}) & & & & & & & \end{array}$$

Q. 25

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

Statements:

Some easts are souths.

All souths are norths.

No north is a west.

Conclusions:

(I) Some norths are easts.

(II) No west is a south.

a) Both conclusions I and II follow. ✓

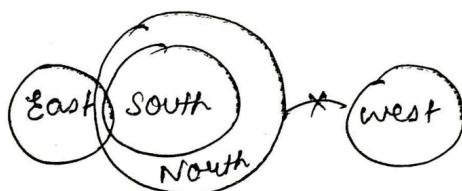
b) Only conclusion I follows. ✗

c) Neither conclusion I nor II follows. ✗

d) Only conclusion II follows. ✗

Explanation:

The correct option is: a



Both conclusion I & II follows.

Q. 26	<p>Which of the following is NOT correct about Directive Principles of State Policy?</p> <p>a) They ensure social and economic development. </p> <p>b) They are justiciable in nature. </p> <p>c) They provide guidelines for the governance of the country. </p> <p>d) They are morally binding on the government. </p>
Explanation: <p>Here are some key points about DPSP :</p> <ul style="list-style-type: none"> They focus on ensuring social and economic justice, paving the way for an equitable society. They direct the government to work toward goals such as reducing inequality, promoting education, improving public health, and fostering a welfare state. These principles are morally binding, indicating that governments should strive to implement them, but there's no legal compulsion. 	<p>The correct answer is: They are justiciable in nature.</p> <p>The Directive Principles of State Policy (DPSP) are enshrined in Part IV of the Indian Constitution. They are guidelines to the central and state governments, aiming to establish a just society in India. While they are fundamental in shaping policies and legislation, they differ from Fundamental Rights as they are non-justiciable, meaning individuals cannot approach the courts to enforce them.</p>

Q. 27	<p>What is the rank of India in the recently released Corruption Perceptions Index (CPI) 2024?</p> <p>a) 85th </p> <p>b) 96th </p> <p>c) 102nd </p> <p>d) 110th </p>
Explanation: <p>The correct answer is: 96th.</p> <p>India ranked 96th out of 180 countries in the Corruption Perceptions Index (CPI) 2024, with a score of 38. This marks a slight decline from its rank of 93 in 2023.</p> <p>The Corruption Perceptions Index (CPI) is an annual ranking published by Transparency International. It evaluates the perceived levels of corruption in the public sector across 180 countries and territories worldwide. The index scores countries on a scale from 0 (highly corrupt) to 100 (very clean).</p>	

Q. 28	<p>Which of the following places receives rainfall from the Bay of Bengal branch of southwest monsoon?</p> <p>a) Surat </p> <p>b) Panaji </p> <p>c) Kolkata </p> <p>d) Ratnagiri </p>
Explanation:	<p>The correct answer is: Kolkata.</p> <p>The Bay of Bengal branch of the southwest monsoon primarily affects the eastern and northeastern regions of India. As a city in eastern India, Kolkata receives significant rainfall from this branch. The other locations mentioned, such as Surat, Panaji, and Ratnagiri, are influenced more by the Arabian Sea branch of the southwest monsoon.</p>
Q. 29	<p>Which of the following is NOT an example of inertia at rest?</p> <p>a) Falling down backward when a vehicle starts immediately </p> <p>b) Falling down of dust particle while dusting a cloth </p> <p>c) The detachment of leaves/fruits due to shaking </p> <p>d) The sudden application of brakes in a vehicle </p>
Explanation:	<p>The correct answer is: The sudden application of brakes in a vehicle.</p> <p>Let's break it down:</p> <ul style="list-style-type: none"> • Inertia at rest is the tendency of an object to remain at rest unless acted upon by an external force. Examples include situations where objects initially at rest resist movement due to inertia. • Falling down backward when a vehicle starts immediately: This occurs because your body, initially at rest, resists the forward motion of the vehicle due to inertia. • Falling down of dust particles while dusting a cloth: Dust particles at rest are dislodged due to the force applied on the cloth, showcasing inertia at rest. • The detachment of leaves/fruits due to shaking: The leaves or fruits initially at rest detach due to the force of shaking, again highlighting inertia at rest. <p>However, the sudden application of brakes in a vehicle does not demonstrate inertia at rest. Instead, it relates to inertia of motion, where a moving body resists changes to its state of motion. Upon braking, passengers in a moving vehicle tend to lurch forward, which is an example of inertia in motion rather than at rest.</p>

Q. 30	<p>With which country did the Odisha government sign MoU to set up a Global Competency Centre in Bhubaneswar?</p> <p>a) UK </p> <p>b) Japan </p> <p>c) Singapore </p> <p>d) Germany </p>
Explanation:	<p>The correct answer is: Singapore.</p> <p>The Odisha government signed a Memorandum of Understanding (MoU) with Singapore's Global Finance & Technology Network (GFTN) to establish a Global Competency Centre in Bhubaneswar. This initiative aims to foster FinTech collaboration and innovation, focusing on areas like InsureTech and financial inclusion.</p>
Q. 31	<p>Who among the following was one of the co-founders of the Swaraj Party within the Congress to argue for a return to council politics?</p> <p>a) Gopal Krishna Gokhale </p> <p>b) Mahatma Gandhi </p> <p>c) Rabindranath Tagore </p> <p>d) Chittaranjan Das </p>
Explanation:	<p>The correct answer is: Chittaranjan Das.</p> <p>Chittaranjan Das, also known as Deshbandhu, co-founded the Swaraj Party in 1923 along with Motilal Nehru. The party aimed to enter legislative councils and use them as platforms to challenge British policies and advocate for self-rule. Das served as the first president of the Swaraj Party, marking a significant shift in India's independence movement.</p> <p>The Swatantra Party was a political party in India, founded in 1959 by C. Rajagopalachari, a prominent leader and the last Governor-General of India. It emerged as a reaction to the socialist policies of the Indian National Congress under Jawaharlal Nehru. The party advocated for free-market economics, individual liberty, and minimal government intervention in business and personal lives.</p> <p>Key features of the Swatantra Party:</p> <ul style="list-style-type: none"> • It opposed the centralization of power and the dominance of the Congress Party. • The party supported private enterprise, foreign investment, and free trade. • It was critical of the license-permit-quota system that characterized India's economy at the time. • The Swatantra Party gained significant traction in the 1960s, particularly among the middle class, business communities, and rural elites.

Q. 32

Which of the following options is correctly matched?

- a) Decomposers – Bacteria ✓
- b) Omnivorous – Green plants ✗
- c) Herbivores – Secondary consumers ✗
- d) Carnivores – Primary consumers ✗

Explanation:

The correct answer is: **Decomposers – Bacteria**.

Here's an explanation of each term for clarity:

1. **Decomposers – Bacteria:** This is correctly matched. Decomposers like bacteria and fungi break down dead organic matter into simpler substances, recycling nutrients back into the ecosystem.
2. **Omnivorous – Green plants:** This is incorrect. Green plants are producers, not omnivores. Omnivores are organisms that eat both plants and animals (e.g., humans, bears).
3. **Herbivores – Secondary consumers:** This is incorrect. Herbivores are primary consumers because they feed directly on producers (plants).
4. **Carnivores – Primary consumers:** This is incorrect. Carnivores are secondary or tertiary consumers, as they feed on herbivores or other carnivores.

Q. 33

Palladium on barium sulphate (Pd/BaSO_4) is also known as:

- a) A Hillman reaction catalyst X
- b) A Cannizzaro reaction catalyst X
- c) The Rosenmund catalyst ✓
- d) An aldol reaction catalyst X

The correct answer is: **The Rosenmund catalyst.**

Palladium on barium sulphate (Pd/BaSO_4) is referred to as the **Rosenmund catalyst**. It is used in the **Rosenmund reduction** process, which involves the selective hydrogenation of acyl chlorides to produce aldehydes. Barium sulfate acts as a support material that limits the activity of palladium, ensuring controlled reduction and preventing over-hydrogenation to alcohols.

Here's a breakdown of the other options:

1. **Hillman reaction catalyst:**

- The Hillman reaction involves the coupling of aldehydes or ketones with activated alkenes, leading to the formation of β -hydroxy compounds.
- It uses specific catalysts like tertiary amines or specialized organocatalysts, not Palladium on Barium Sulfate. This makes it unrelated to the Rosenmund catalyst.

2. **Cannizzaro reaction catalyst:**

- The Cannizzaro reaction occurs with **aldehydes lacking an alpha hydrogen atom**, where one molecule of the aldehyde is oxidized, and another is reduced. This reaction happens in the presence of a **strong base, like concentrated NaOH**.
- This is completely different from the palladium-based Rosenmund catalyst used in reduction processes.

3. **Aldol reaction catalyst:**

- The Aldol reaction involves the reaction of aldehydes or ketones with enolate ions, forming β -hydroxy aldehydes or ketones.
- It requires **basic or acidic catalysts**, such as dilute NaOH or acids like HCl, and is not associated with Pd/BaSO_4 .

Explanation:

Q. 34	<p>Who among the following was granted the title of 'Chief of the Merchants' or Malikut-Tujjar by the Bahamani ruler, Humayun Shah?</p> <p>a) Ahmad III </p> <p>b) Aladdin Imad Shah </p> <p>c) Mahmud Gawan </p> <p>d) Yusuf Adil Shah </p>
Explanation:	<p>The correct answer is: Mahmud Gawan.</p> <p>Mahmud Gawan was an extraordinary figure in the Bahmani Sultanate, serving as a statesman and prime minister under multiple rulers. His contributions spanned administration, military strategy, and economic development. The title 'Chief of the Merchants' or Malikut-Tujjar granted by Humayun Shah reflected his deep involvement in expanding trade and commerce, crucial for the prosperity of the kingdom.</p> <p>Why was Mahmud Gawan significant?</p> <ol style="list-style-type: none">Trade and Commerce: As Malikut-Tujjar, Mahmud Gawan oversaw merchant activities and ensured efficient trade networks, strengthening the economy. His diplomatic efforts also fostered commercial ties with foreign regions.Administrative Reforms:<ul style="list-style-type: none">He introduced a system to divide the kingdom into administrative units (tarafs) for better governance.He regulated land revenue collection to ensure fairness and avoid exploitation.Military Strategy: He modernized the Bahmani army, integrating advanced weaponry and improving discipline, which enhanced the kingdom's defense capabilities.Cultural and Educational Legacy:<ul style="list-style-type: none">He established the renowned Madrasa of Mahmud Gawan in Bidar, which became a center for learning and attracted scholars from across the Islamic world. <p>Despite his immense contributions, Mahmud Gawan faced internal opposition and false accusations, leading to his tragic execution. However, his legacy endures as one of the most visionary leaders in medieval Indian history.</p>

Q. 35

What is the atomic number of Boron according to the modern periodic table?

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

The correct answer is: **5**.

The atomic number of Boron is **5**, which means it has 5 protons in its nucleus. Here's a brief explanation:

Explanation:

- The **atomic number** of an element represents the number of protons present in the nucleus of an atom of that element. It is a unique identifier for each element in the periodic table.
- **Boron** belongs to Group 13 and Period 2 in the modern periodic table. It is a metalloid, exhibiting properties of both metals and non-metals.

Q. 36	<p>According to which of the following constitutional articles in India does the government need to present the estimated receipts and expenditures before the parliament?</p> <p>a) Article 212 X</p> <p>b) Article 112 ✓</p> <p>c) Article 312 X</p> <p>d) Article 412 X</p>
Explanation:	<p>The correct answer is: Article 112.</p> <p>Article 112 (Correct Answer):</p> <ul style="list-style-type: none">Article 112 of the Indian Constitution mandates the presentation of the Annual Financial Statement (commonly referred to as the Union Budget) to the Parliament.This statement is prepared by the government and provides detailed estimates of:<ol style="list-style-type: none">Receipts (tax revenues, non-tax revenues, borrowings, etc.).Expenditures (on various schemes, departments, and sectors).It serves as a key mechanism for maintaining financial accountability and transparency in governance. <p>Explanation of Other Options:</p> <ol style="list-style-type: none">Article 212:<ul style="list-style-type: none">Article 212 deals with the courts' non-intervention in proceedings of the Legislature of a State.It states that courts cannot question the validity of any proceedings in a State Legislature based on procedural irregularities.This is unrelated to the presentation of budgets.Article 312:<ul style="list-style-type: none">Article 312 pertains to the creation of All-India Services, such as the Indian Administrative Service (IAS) or Indian Police Service (IPS).It states that Parliament can, by law, create new All-India Services if the Rajya Sabha passes a resolution by a two-thirds majority in favour.This is completely unrelated to the financial process or budget presentation.

Q. 37	<p>The Palas were:</p> <p>a) a dynasty that appeared in Puri X</p> <p>b) a dynasty that first appeared in Cambodia X</p> <p>c) a dynasty that united eastern India and Burma X</p> <p>d) a dynasty that appeared in eastern India ✓</p>
<p>Explanation:</p> <p>The correct answer is: a dynasty that appeared in eastern India.</p> <p>The Pala dynasty was a prominent ruling dynasty in eastern India, particularly in Bengal and Bihar, from the 8th to the 12th century CE. It was founded by Gopala, who was elected by local chieftains to bring stability to the region after a period of political turmoil. The name "Pala" means "protector" in Sanskrit, and it was added to the names of their rulers.</p> <p>Key Features of the Pala Dynasty:</p> <ol style="list-style-type: none">1. Territorial Expansion:<ul style="list-style-type: none">◦ The Palas controlled vast areas of the eastern Gangetic Plain, including parts of present-day Bangladesh, Bihar, and West Bengal.◦ At its peak, the empire extended into Assam, Odisha, and parts of Nepal.2. Religion and Culture:<ul style="list-style-type: none">◦ The Palas were staunch supporters of Mahayana Buddhism and contributed significantly to its spread in India and Southeast Asia.◦ They established famous Buddhist monasteries like Nalanda, Vikramashila, and Somapura Mahavihara (now a UNESCO World Heritage Site).3. Art and Architecture:<ul style="list-style-type: none">◦ The Pala period is considered a golden era for Bengali art and architecture. They created exquisite sculptures, stupas, and temples, many of which showcased Buddhist themes.4. Political Struggles:<ul style="list-style-type: none">◦ The Palas were involved in a tripartite struggle with the Pratiharas and Rashtrakutas for control over Kannauj, a strategic city in northern India. <p>The dynasty eventually declined due to internal conflicts and invasions, paving the way for the rise of the Sena dynasty. The Palas left a lasting legacy in Indian history, particularly in the fields of education, art, and religion.</p>	

Q. 38	<p>Sea ice helps determine Earth's climate. According to this, what percentage of the sunlight falling on sea ice is reflected back into space?</p> <p>a) 80% </p> <p>b) 75% </p> <p>c) 85% </p> <p>d) 70% </p>
<p>Explanation:</p> <p>The correct answer is: 80%.</p> <p>Sea ice plays a crucial role in regulating Earth's climate by reflecting a significant portion of sunlight back into space. This phenomenon is known as albedo. The albedo effect of sea ice is very high, reflecting approximately 80% of the sunlight that falls on its surface, thereby preventing excessive heat absorption by the planet.</p> <p>Why is this important for Earth's climate?</p> <ol style="list-style-type: none">Temperature Regulation: Sea ice acts as a natural coolant, maintaining lower temperatures in polar regions and helping to moderate global climate.Melting and Climate Impact: When sea ice melts due to rising temperatures, its reflective surface is replaced by darker ocean water, which absorbs more sunlight, leading to further warming and accelerating climate change.Feedback Loop: Reduced ice cover decreases albedo, contributing to the "polar amplification" effect, where warming is more intense in polar regions. <p>Sea ice and its reflective properties are vital for maintaining the Earth's energy balance.</p>	

Q. 39	<p>According to sympatric speciation, the rising of a new species occurs when:</p> <ul style="list-style-type: none"> a) One species is separated into different groups due to geologic events like mountain formation X b) Organisms from the same species start to show different behavioural characteristics X c) Two groups of the same species cannot interbreed among themselves despite living in the same geographic location ✓ d) The two groups of organisms from the same species would phenotypically look different X
Explanation:	<p>The correct answer is: Two groups of the same species cannot interbreed among themselves despite living in the same geographic location.</p> <p>Sympatric Speciation Explained:</p> <p>Sympatric speciation refers to the process by which new species arise from a single ancestral species without any geographic isolation. Unlike allopatric speciation, which involves physical barriers like mountains or rivers, sympatric speciation occurs within the same geographic area.</p> <p>How does it happen?</p> <ol style="list-style-type: none"> 1. Reproductive Isolation: <ul style="list-style-type: none"> ◦ This is the key factor in sympatric speciation. Even though groups of the same species live in the same area, certain barriers—like genetic, behavioural, or ecological differences—prevent them from interbreeding. ◦ Over time, these isolated groups evolve independently, resulting in the formation of new species. 2. Mechanisms Behind Reproductive Isolation: <ul style="list-style-type: none"> ◦ Behavioural differences: Changes in mating habits or preferences, such as distinct courtship behaviours. ◦ Ecological divergence: Groups adapt to different ecological niches in the same environment, leading to specialization. ◦ Chromosomal changes: Polyploidy (extra sets of chromosomes) in plants can create immediate reproductive barriers. 3. Examples: <ul style="list-style-type: none"> ◦ Sympatric speciation is observed in certain species of cichlid fish in lakes, where dietary specialization and mating preferences drive divergence. ◦ In plants, polyploidy often leads to sympatric speciation by creating genetic incompatibilities with the parent population.

Q. 40	<p>Which of the following is NOT considered a method of conservation of natural resources?</p> <p>a) Extraction ✓</p> <p>b) Recycling ✗</p> <p>c) Terrace farming ✗</p> <p>d) Afforestation ✗</p>
Explanation:	<p>The correct answer is: Extraction.</p> <p>Explanation:</p> <p>Extraction refers to the process of removing natural resources from the Earth, such as mining minerals, drilling for oil, or harvesting timber. While it is a necessary activity for human development, extraction is not considered a conservation method because it often depletes resources and can harm the environment.</p> <p>Conservation Methods (Other Options):</p> <ol style="list-style-type: none">1. Recycling:<ul style="list-style-type: none">◦ Recycling involves reprocessing waste materials into new products to reduce the demand for raw resources. It helps conserve resources like metals, paper, and plastics by reducing waste and the need for extraction.2. Terrace Farming:<ul style="list-style-type: none">◦ Terrace farming prevents soil erosion in hilly areas by creating step-like structures for agriculture. This method conserves soil and water, contributing to sustainable land use.3. Afforestation:<ul style="list-style-type: none">◦ Afforestation involves planting trees in barren or deforested areas to restore ecosystems, improve air quality, and conserve biodiversity. It helps combat deforestation and protects natural resources.

Q. 41

Which Act was passed by the British Parliament in the year 1773 AD to regulate the activities of the East India Company?

- a) Pitt's India Act 
- b) Indian Slavery Act 
- c) Age of Consent Act 
- d) Regulating Act 

The correct answer is: **Regulating Act**.

Explanation:

The **Regulating Act of 1773** was the first significant legislation passed by the British Parliament to regulate the affairs of the **East India Company** in India. By the early 1770s, the East India Company faced severe financial and administrative challenges, including corruption and mismanagement. The British government intervened to address these issues and ensure better governance.

Key Provisions of the Regulating Act:

1. Governor-General of Bengal:

- The Act elevated the Governor of Bengal to the position of **Governor-General of Bengal**. The first Governor-General was **Warren Hastings**.
- The Governor-General was assisted by an executive council of four members.

2. Centralized Administration:

- The Act made the governors of the Madras and Bombay presidencies subordinate to the Governor-General of Bengal, establishing a centralized authority.

3. Supreme Court:

- A **Supreme Court** was established at **Fort William in Calcutta** in 1774 to administer British legal principles.

4. Regulation of Company Officials:

- The Act prohibited company officials from engaging in private trade or accepting bribes.

Other Options Explained:

Explanation:

Pitt's India Act (1784):

- Passed after the Regulating Act of 1773, Pitt's India Act sought to address the weaknesses of its predecessor. It established a dual system of governance: the East India Company retained control over commercial affairs, while political oversight was vested in the British government.
- A new body called the **Board of Control** was created to supervise political matters, ensuring British interests were protected. This Act marked a significant step in tightening British parliamentary control over India.

Indian Slavery Act (1843):

- The Indian Slavery Act abolished slavery within British India. It prohibited the trade, sale, or ownership of slaves and aimed to ensure the freedom and dignity of individuals.
- Though primarily symbolic for many regions where slavery was already diminishing, the Act underscored a humanitarian effort by the British administration. However, it had limited practical impact in eradicating systemic exploitation.

Age of Consent Act (1891):

- This Act was a social reform law that raised the age of consent for girls from 10 to 12 years within British India. It was enacted to address issues of child marriage and improve the welfare of women, especially young brides.
- The Age of Consent Act was met with resistance from orthodox communities, but it marked the beginning of legal interventions targeting social issues in colonial India.

Q. 42

Identify the INCORRECT pair of cropping season and related crop from the following.

- a) Rabi - Wheat
- b) Kharif - Maize
- c) Rabi - Paddy
- d) Kharif – Soyabean

The correct answer is: **Rabi - Paddy**.

Explanation:

Crops in India are classified based on their growing seasons, primarily **Rabi** and **Kharif**. Here's a breakdown:

Rabi Crops:

- Rabi crops are grown in **winter** (sown in October-November and harvested in April-May).
- Common examples include **wheat, barley, gram, and mustard**.
- **Paddy (rice)** is NOT a Rabi crop; it is typically grown during the Kharif season.

Kharif Crops:

- Kharif crops are grown in **monsoon season** (sown with the onset of the rains in June-July and harvested in September-October).
- Examples include **maize, paddy (rice), soybean, and cotton**.

Explanation:

Q. 43	Which of the following exchange rates is determined by the market forces of demand and supply?
	a) Soft pegged exchange rate X
	b) Floating exchange rate ✓
	c) Fixed exchange rate X
	d) Hard pegged exchange rate X

The correct answer is: **Floating exchange rate.**

Explanation:

A **floating exchange rate** is determined entirely by the **market forces of demand and supply**. In this system:

- The value of a country's currency fluctuates freely based on its demand in the foreign exchange market (e.g., trade, investments, speculation).
- There is **no direct government intervention** to fix or manipulate the currency's value.
- Examples: The currencies of major economies like the United States (USD) and the Eurozone (Euro) largely operate on a floating exchange rate system.

Other Options explained:

1. Soft Pegged Exchange Rate:

- In this system, the currency is **partially controlled by the government**, but market forces still play a role.
- The central bank intervenes occasionally to stabilize or adjust the currency within a specific range.
- Example: Many developing countries follow soft pegs to prevent excessive currency volatility.

2. Fixed Exchange Rate:

- Also known as a **pegged exchange rate**, this system involves the government or central bank fixing the currency's value to another currency (e.g., USD) or a basket of currencies.
- The currency does not freely fluctuate based on market forces, and the central bank actively intervenes to maintain the fixed rate.
- Example: The Chinese Yuan was historically pegged to the US Dollar.

3. Hard Pegged Exchange Rate:

- A hard peg is a stricter version of a fixed exchange rate, where the currency is firmly and permanently pegged to another currency.
- The country loses flexibility in monetary policy as it prioritizes maintaining the peg.
- Example: Some countries that use the US Dollar as their currency (like Panama) essentially follow a hard peg.

Explanation:

Q. 44	<p>Emani Sankara Sastry was one of the first Carnatic maestros to use a contact microphone to harness the full potential of which musical instrument?</p> <p>a) Veena ✓</p> <p>b) Sitar ✗</p> <p>c) Mridangam ✗</p> <p>d) Violin ✗</p>
Explanation:	<p>The correct answer is: Veena.</p> <p>Explanation:</p> <p>Emani Sankara Sastry, a legendary Carnatic musician, was renowned for his mastery of the Veena. He was one of the first maestros to experiment with and use a contact microphone to amplify the instrument's sound. This innovation allowed the Veena's intricate tonal qualities and subtle nuances to be fully appreciated by larger audiences, especially in concert settings.</p>
Q. 45	<p>In which of the following places are Reh and Boori Boot predominantly celebrated?</p> <p>a) Nagaland ✗</p> <p>b) Mizoram ✗</p> <p>c) Arunachal Pradesh ✓</p> <p>d) Manipur ✗</p>
Explanation:	<p>The correct answer is: Arunachal Pradesh.</p> <p>Explanation:</p> <p>The Reh Festival and Boori Boot Festival are two prominent cultural celebrations in Arunachal Pradesh, showcasing the rich traditions of its indigenous tribes.</p> <p>1. Reh Festival:</p> <ul style="list-style-type: none"> ◦ Celebrated by the Idu Mishmi tribe, the Reh Festival is a significant event that honours their divine mother, Nanyi Inyitaya. ◦ It involves rituals, sacrifices (often buffaloes), and prayers to seek blessings for prosperity, health, and unity. ◦ The festival is a vibrant display of the Idu Mishmi culture, with traditional dances, music, and feasts. <p>2. Boori Boot Festival:</p> <ul style="list-style-type: none"> ◦ Celebrated by the Nyishi tribe, the Boori Boot Festival is a joyous occasion to mark the arrival of spring and a successful harvest. ◦ It is observed with rituals, traditional dances, and community feasts, symbolizing unity and gratitude to the deities for their blessings.

Q. 46	<p>In which year was Micro Units Development and Refinance Agency (MUDRA) introduced?</p> <p>a) 2017 </p> <p>b) 2013 </p> <p>c) 2009 </p> <p>d) 2015 </p>
<p>The correct answer is: 2015.</p> <p>Explanation:</p> <p>The Micro Units Development and Refinance Agency (MUDRA) was introduced on April 8, 2015, by the Government of India under the Pradhan Mantri MUDRA Yojana (PMMY). The initiative was launched to provide financial support to small and micro-enterprises, which are critical for employment generation and economic growth.</p> <p>Key Features of MUDRA:</p> <p>Explanation:</p> <ul style="list-style-type: none">1. Objective:<ul style="list-style-type: none">◦ To promote entrepreneurship by offering loans to non-corporate, non-farm small/micro enterprises.◦ To ensure financial inclusion by providing easy access to credit for small businesses.2. Loan Categories:<ul style="list-style-type: none">◦ Shishu: Loans up to ₹50,000 for budding entrepreneurs.◦ Kishore: Loans between ₹50,001 and ₹5,00,000 for growing businesses.◦ Tarun: Loans between ₹5,00,001 and ₹10,00,000 for established enterprises. <p>Tarun Plus: Loans above ₹10 lakh and up to ₹20 lakh, specifically for entrepreneurs who have successfully repaid previous loans under the Tarun category.</p>	

Q. 47	<p>Rajashree Shirke was awarded Sangeet Natak Akademi for her contribution to which of the following dance forms?</p> <p>a) Mohiniyattam </p> <p>b) Kathak </p> <p>c) Odissi </p> <p>d) Bharatnatyam </p>
Explanation: <p>Rajashree Shirke is a renowned Indian classical dancer and choreographer who has made significant contributions to the field of Kathak. She was honoured with the Sangeet Natak Akademi Award in recognition of her excellence in this dance form. Kathak, one of the eight classical dance forms of India, is known for its intricate footwork, graceful movements, and storytelling through expressions and gestures.</p> <p>Rajashree Shirke's Contributions:</p> <ul style="list-style-type: none"> She has been instrumental in preserving and promoting Kathak through her performances, teaching, and research. Her work often blends traditional Kathak with innovative themes, making it accessible to contemporary audiences. She has also explored the abhinaya (expressive) aspect of Kathak, enriching its narrative and emotional depth. 	

Q. 48	<p>Handstand, Cast, Splits, Handspring on Vault, Back Handspring, Split Leap and Tap Swing on Bars are terms used in ____.</p> <p>a) Parkour </p> <p>b) Figure Skating </p> <p>c) Gymnastics </p> <p>d) Pole vaulting </p>
Explanation: <p>The listed terms—Handstand, Cast, Splits, Handspring on Vault, Back Handspring, Split Leap, and Tap Swing on Bars—are fundamental elements or techniques used in gymnastics, a sport that combines athletic strength, agility, flexibility, and artistic expression. These terms are commonly associated with different gymnastics disciplines, such as floor exercises, vault, uneven bars, and balance beam.</p>	

Q. 49	<p>Which state government has recently launched 'Deendayal Upadhyay Bhoomiheen Krishi Majdoor Kalyana Yojana'?</p> <p>a) Madhya Pradesh </p> <p>b) Chhattisgarh </p> <p>c) Uttar Pradesh </p> <p>d) Rajasthan </p>
<p>Explanation:</p> <p>The correct answer is: Chhattisgarh.</p> <p>The Deendayal Upadhyay Bhoomiheen Krishi Majdoor Kalyana Yojana launched by the Chhattisgarh government is a welfare initiative aimed at improving the livelihood of landless agricultural labourers. Here's a detailed look:</p> <p>Objective:</p> <p>The scheme addresses the needs of agricultural labourers who do not own any land, providing them with financial aid to alleviate their economic hardships. It focuses on empowering marginalized groups, including those from Scheduled Castes, Scheduled Tribes, and other disadvantaged communities.</p> <p>Key Features:</p> <ol style="list-style-type: none">1. Annual Financial Assistance:<ul style="list-style-type: none">Beneficiaries receive ₹10,000 annually under this scheme. The funds can be utilized for daily expenses, healthcare, education, or other essential needs.2. Target Beneficiaries:<ul style="list-style-type: none">The scheme specifically benefits landless agricultural workers who depend solely on farming-related activities for their income but lack property ownership.It includes communities such as Baigas and Gunias, ensuring inclusion of vulnerable groups.	

Q. 50	Recently, which writer has received the Vyas Samman for the year 2024 for her novel ' Kaun Des Ko Vasi: Venu Ki Diary '?
	a) Anamika
	b) Mamta Kalia
	c) Suryabala
	d) Mridula Garg

Explanation:	<p>The correct answer is: Suryabala.</p> <p>Explanation:</p> <p>Suryabala, a distinguished Hindi writer, was awarded the Vyas Samman for 2024 for her novel 'Kaun Des Ko Vasi: Venu Ki Diary'. This prestigious literary award, instituted by the K.K. Birla Foundation, recognizes outstanding Hindi literary works published in the last decade. The novel, published in 2018, delves into themes of cultural conflicts and identity struggles faced by Indian youth living abroad, particularly in America.</p> <p>About the Novel:</p> <ul style="list-style-type: none"> • 'Kaun Des Ko Vasi: Venu Ki Diary' explores the alienation and identity crisis experienced by overseas Indians as they navigate their connection to their roots while adapting to a foreign culture. • The narrative is deeply insightful, reflecting the emotional and social challenges of diaspora communities.
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Q. 51	<p>The percentage distribution of expenditure over various items of Saloni's monthly income is given in the following table. Study the table carefully and answer the question that follows.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Items</th><th>Rent</th><th>Food</th><th>Education</th><th>Bills</th><th>Miscellaneous</th></tr> </thead> <tbody> <tr> <td>Percentage distribution</td><td>30%</td><td>20%</td><td>25%</td><td>20%</td><td>5%</td></tr> </tbody> </table> <p>If Saloni's monthly income is ₹75,000, how much money (in ₹) does she spend on Rent and Education?</p> <p>a) 40,150 </p> <p>b) 42,150 </p> <p>c) 41,250 </p> <p>d) 43,250 </p>	Items	Rent	Food	Education	Bills	Miscellaneous	Percentage distribution	30%	20%	25%	20%	5%
Items	Rent	Food	Education	Bills	Miscellaneous								
Percentage distribution	30%	20%	25%	20%	5%								

Explanation:	<p>The correct answer is: c</p> <p>Money spent on Rent and Education:</p> $30\% + 25\% = 75000 \times \frac{55}{100} = 41,250$
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Q. 52

Mahesh has ₹3234 with him. He divided it amongst his sons Vijay and Ajay and asked them to invest it at 10% rate of interest compounded annually. It was seen that Vijay and Ajay got same amount after 26 and 27 years respectively. How much (in ₹) did Mahesh give to Vijay?

- a) 1684 X
- b) 1674 X
- c) 1654 X
- d) 1694 ✓

The correct answer is: d

$$\text{Vijay} = P$$

$$\text{Ajay} = 3234 - P$$

ATQ,

$$P \left(1 - \frac{1}{10}\right)^{26} = (3234 - P) \left(1 - \frac{1}{10}\right)^{27}$$

Explanation:

$$\frac{P}{3234 - P} = \frac{11}{10}$$

$$10P = 11 \times 3234 - 11P$$

$$21P = 11 \times 3234$$

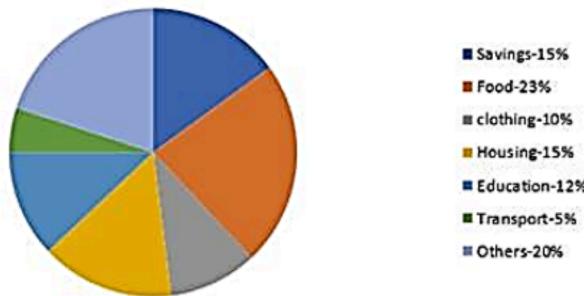
Therefore

$$P = 1694$$

Q. 53

The pie chart given here shows the spending by a family on various items during the year 1999. Study the graph and answer these questions.

percentage of money spent by a family on various items during 1999



If the total amount spent during the year 1999 was ₹46,000, the amount spent on food was:

- a) ₹23,450 X
- b) ₹10,580 ✓
- c) ₹2,000 X
- d) ₹23,000 X

Explanation:

$$\begin{aligned}
 \text{Amount spent on} \\
 \text{food} &= \frac{23}{100} \times 46000 \\
 &= 10,580 \text{ Rs}
 \end{aligned}$$

Q. 54

The speed of a train is 60 km per hour. In 25 minutes and 15 seconds, the train will cover _____ km and _____ metres.

- a) 30 km and 350 m 
- b) 25 km 254 m 
- c) 25 km and 300 m 
- d) 25 km and 250 m 

Explanation:

The correct answer is: d

$$\text{Speed} = 60 \text{ km/hr}$$

$$\text{Distance covered in 25 min} = 60 \times \frac{25}{60} = 25 \text{ km}$$

$$\text{Distance covered in 15 seconds} = \frac{15}{3600} \times 60 = 250 \text{ m}$$

So, train will cover 25 km and 250 m

Q. 55

To finish a work in 16 days, 20 men are required, or 30 women are required. If 'x' men and 'y' women are required to finish the work in 24 days, then which of the following equations is correct?

- a) $3x + 2y = 20$ X
- b) $3x - 2y = 40$ X
- c) $3x + 2y = 40$ ✓
- d) $3x - 2y = 20$ X

The correct answer is: c

$$\Rightarrow 16 \times 20 M = 16 \times 30 W$$

$$\Rightarrow \frac{M}{W} = \frac{3}{2} \text{ (efficiency)}$$

$$T.W = 16 \times 20 \times 3$$

Explanation:

'n' men and 'y' men

$$\begin{aligned} \text{ATQ,} \\ \frac{16 \times 20 \times 3}{3n + 2y} &= 24 \end{aligned}$$

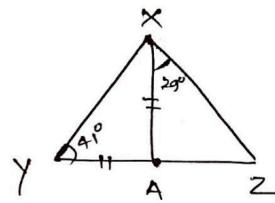
$$\Rightarrow 3n + 2y = 40$$

Q. 56

In triangle XYZ, A is a point on YZ such that $XA = YA$. If $\angle XYA = 41^\circ$ and $\angle AXZ = 29^\circ$, what is the degree measure of $\angle XZA$?

- a) 59 X
- b) 69 ✓
- c) 68 X
- d) 79 X

The correct answer is: b



$$\therefore XA = YA$$

$$\therefore \angle AYX = \angle AXY = 41^\circ$$

Now,

$$\begin{aligned} \angle XAZ &= \angle AYX + \angle AXY \text{ [Exterior angle]} \\ &\approx 2 \times 41^\circ \\ &= 82^\circ \end{aligned}$$

In $\triangle AXZ$

$$\begin{aligned} \angle XZA &= 180^\circ - (82 + 29) \\ &\approx 180^\circ - 111^\circ \\ &= 69^\circ \end{aligned}$$

Q. 57

The average weight of the group of 12 players increases by 1.5 kg when a player who weighs 63 kg is replaced by a new player. What is the weight of the new player?

- a) 79 kg
- b) 81 kg
- c) 84 kg
- d) 83 kg

Explanation:

1.5 kg increased on 12
players.

$$\therefore \text{Total increase} = 12 \times 1.5 = 18 \text{ kg}$$

Thus the weight of new player
 $= 18 + 63 = 81 \text{ kg}$

Q. 58

If $x = a \sec \theta \cos \phi$, $y = b \sec \theta \sin \phi$, $z = c \tan \theta$, then the value of $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = ?$

a) 1 ✓

b) 0 ✗

c) $\sec \theta$ ✗d) $\tan \theta$ ✗

The correct answer is: a

$$\Rightarrow x = a \sec \theta \cos \phi$$

$$\frac{x}{a} = \sec \theta \cos \phi$$

$$\therefore \frac{x^2}{a^2} = \sec^2 \theta \cos^2 \phi$$

$$\Rightarrow y = b \sec \theta \sin \phi$$

$$\frac{y}{b} = \sec \theta \sin \phi$$

$$\therefore \frac{y^2}{b^2} = \sec^2 \theta \sin^2 \phi$$

$$\Rightarrow z = c \tan \theta$$

$$\frac{z}{c} = \tan \theta$$

$$\therefore \frac{z^2}{c^2} = \tan^2 \theta$$

Now,

$$\begin{aligned}\Rightarrow \frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} &= \sec^2 \theta \cos^2 \phi + \sec^2 \theta \sin^2 \phi - \tan^2 \theta \\ &= \sec^2 \theta (\cos^2 \phi + \sin^2 \phi) - \tan^2 \theta \\ &= \sec^2 \theta - \tan^2 \theta \\ &= 1\end{aligned}$$

Explanation:

Q. 59

800 chickooes were bought at ₹2520 per hundred and were sold at a profit of ₹1720. Find the selling price (in ₹) per dozen of chickooes.

- a) 323.1
- b) 328.2
- c) 452
- d) 320

Explanation:

The correct answer is: b

Price of chickooes = Rs. 2520 per hundred

Price of 800 chickooes = $Rs. 2520 \times 8 = 20,160$

Selling price of 800 chickooes = $20160 + 1720 = 21880$

Selling price per dozen = $\frac{21880}{800} \times 12 = 328.2$

Q. 60

If $\frac{x}{x^2-2x+1} = \frac{1}{7}$, then the value of $x^3 + \frac{1}{x^3}$ is:

- a) 722 X
- b) 729 X
- c) 756 X
- d) 702 ✓

The correct answer is: d

$$\Rightarrow \frac{x}{x^2 - 2x + 1} = \frac{1}{7}$$

$$\Rightarrow x^2 - 2x + 1 = 7x$$

$$\Rightarrow x + \frac{1}{x} = 9$$

$$\begin{aligned}\therefore x^3 + \frac{1}{x^3} &= 9^3 - 3 \times 9 \\ &= 729 - 27 \\ &= 702\end{aligned}$$

Explanation:

Q. 61**Simplify the following expression.**

$$(60 + 96 \div 4 \text{ of } 4) \times [1000 \div \{(5 \text{ of } (1+1) \times 10 \text{ of } 5\} - 28 + (10 \times 3 \text{ of } 3)].$$

- a) 4223
- b) 5224
- c) 4224
- d) 3224

The correct answer is: c

$$(60 + 96 \div 4 \text{ of } 4) \times [1000 \div \{(5 \text{ of } (1+1) \times 10 \text{ of } 5\} - 28 + (10 \times 3 \text{ of } 3)]$$

$$(60+6) \times [1000 \div \{10 \times 50\} - 28 + (90)]$$

$$66 \times [1000 \div 500 - 28 + 90]$$

$$66 \times 64$$

$$4224$$

Explanation:**Q. 62**

There are 34 members in group A, 37 members in group B and 29 members in group C. All the members of these groups went to a restaurant. The average amount spent on each member of group A, B and C is ₹103, ₹101 and ₹106, respectively. The approximate total average amount (in ₹) spent per member is:

- a) 102.39
- b) 103.13
- c) 107.39
- d) 106.41

The correct answer is: b

Explanation:

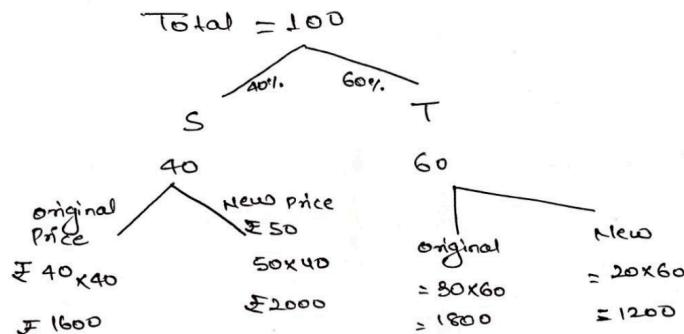
$$\text{Average} = \frac{1134 \times 103 + 37 \times 101 + 106 \times 29}{34 + 37 + 29} = 103.13$$

Q. 63

A medicine has 40% substance S and 60% substance T. If the cost price of S is increased from ₹40 to ₹50 per unit and the cost price of T is decreased to ₹20 from ₹30 per unit, then the cost of the medicine will _____ by _____ %.

- a) Decrease 5.48
- b) Increase 5.48
- c) Decrease 5.88
- d) Increase 5.88

The correct answer is: c



Explanation:

$$\text{Original cost of medicine} = 1600 + 1800 \\ = ₹3400$$

$$\text{New cost} = 2000 + 1200 \\ = ₹3200$$

$$\text{Decrease} = 200$$

$$\% \text{age} = \frac{200}{3400} \times 100 \\ = 5.88 \% \text{ decrease}$$

Q. 64

Ramesh purchased 110 books at the rate of Rs. 220 each and sold half of them at the rate of Rs. 250 each, one-fifth of them at the rate of Rs. 320 each and the rest at the cost price. Find his approximate profit percentage.

- a) 15.90 ✓
- b) 15.09 ✗
- c) 14.90 ✗
- d) 14.09 ✗

The correct answer is: a

Explanation:

$$\begin{array}{c}
 \text{110} \\
 \swarrow Y_2 \quad \searrow Y_1 \\
 55 \quad 22 \quad 33 \\
 | \quad | \quad | \\
 250 \times 55 \quad 320 \times 22 \quad 88 \times 220 \\
 \Downarrow \quad \Downarrow \quad \Downarrow \\
 \text{₹} 13,750 \quad \text{₹} 4040 \quad \text{₹} 7260 = \text{₹} 28,050 (\text{SP})
 \end{array}$$

$$\begin{aligned}
 CP &= 110 \times 220 \\
 &= ₹ 24200 \\
 \text{Profit \%} &= \frac{3850}{24200} \times 100 \\
 &= 15.90\%
 \end{aligned}$$

Q. 65

The circumference of the base of the cylinder vessel is 176 cm and its height is 21mm. How many litres of water can it hold? (use $\pi=22/7$).

- a) 5.2742 X
- b) 5.3473 X
- c) 5.14 X
- d) 5.1744 ✓

The correct answer is: d

$$\text{Circumference} = 176 \text{ cm.}$$

$$2 \times \pi \times r = 176$$

$$r = \frac{176 \times 7}{2 \times 22}$$

$$r = 28 \text{ cm.}$$

$$\text{Height} = h = 21 \text{ mm}$$

$$= \frac{21}{10} \text{ cm.}$$

Explanation:

$$\begin{aligned} \text{Volume (in litres)} &= \pi r^2 h \times \frac{1}{1000} \text{ l} \\ &= \frac{22}{7} \times 28 \times 28 \times \frac{21}{10} \times \frac{1}{1000} \\ &= \frac{66 \times 784}{10} \times \frac{1}{1000} \\ &= \frac{51744}{10000} \\ &= 5.174 \text{ l.} \end{aligned}$$

Q. 66

When the numbers 7809, 8024 and 8669 were divided by the greatest number x, then the remainder in each case was the same. The sum of the digits of x is:

- a) 7 X
- b) 8 ✓
- c) 9 X
- d) 6 X

The correct answer is: b

$$\begin{array}{ccc} 7809 & , & 8024 & , & 8669 \\ \text{diff.} & & \text{diff.} & & \\ 215 & & 645 & & \end{array}$$

$$\text{HCF of } (215, 645) = 215$$

Explanation: $\Rightarrow \frac{7809}{215} = \text{Remainder} = 69$ so the no. is 215

$$\Rightarrow \frac{8024}{215} = \text{Remainder} = 69$$

$$\text{sum of digits} = 2 + 1 + 5 = 8$$

$$\Rightarrow \frac{8669}{215} = \text{Remainder} = 69$$

Q. 67

Which of the following statements is sufficient to conclude that two triangles are congruent?

a) All three angles of one triangle are equal to all three angles of the other triangle. X

b) Two sides and the included angle of one triangle are equal to two sides and the included angle of the other triangle. ✓

c) Two sides of one triangle are equal to two sides of the other triangle. X

d) One side and one angle of one triangle are equal to one side and one angle of the other triangle. X

Explanation:

The correct answer is: b

1. Two sides and the included angle of one triangle are equal to two sides and the included angle of the other triangle.
 - This is the **SAS** rule, which is sufficient to prove congruence.
2. All three angles of one triangle are equal to all three angles of the other triangle.
 - This is not sufficient to prove congruence. Triangles with equal angles are similar, but their sides may not be equal (e.g., two triangles of different sizes can have the same angles).
3. Two sides of one triangle are equal to two sides of the other triangle.
 - This is not sufficient to prove congruence. The angles between the sides must also be equal for the triangles to be congruent.
4. One side and one angle of one triangle are equal to one side and one angle of the other triangle.
 - This is not sufficient to prove congruence. At least two sides and one angle (or two angles and one side) are required.

Q. 68

If $\cos(3\alpha) = \sin(\alpha - 22^\circ)$, where $3\alpha < 90^\circ$, then what is the value of α ?

- a) 26° X
- b) 29° X
- c) 27° X
- d) 28° ✓

$$\cos 3\alpha = \sin(\alpha - 22)$$

$$\sin(90 - 3\alpha) = \sin(\alpha - 22)$$

Explanation:

$$\Rightarrow 90 - 3\alpha = \alpha - 22$$

$$\therefore 112 = 4\alpha$$

$$\Rightarrow \alpha = 28^\circ$$

Q. 69

If $\text{cosec}31 = x$, then, $\sin^2 59 + \frac{1}{\text{cosec}^2 31} + \tan^2 59 - \frac{1}{\sin^2 59 \text{cosec}^2 59} = ?$

- a) $x + 1$ X
- b) $x^2 - 1$ ✓
- c) $x^2 + 1$ X
- d) $x - 1$ X

The correct answer is: b

$$\Rightarrow \sin^2 59^\circ + \frac{1}{\text{cosec}^2 31^\circ} + \tan^2 59^\circ - \frac{1}{\sin^2 59^\circ \cdot \text{cosec}^2 59^\circ}$$

$$\Rightarrow \sin^2 59 + \cos^2 59 + \tan^2 59 - 1$$

$$\Rightarrow 1 + \tan^2 59 - 1$$

$$\Rightarrow \tan^2 59$$

$$\Rightarrow \cot^2 31 = (\text{cosec}^2 31 - 1)$$

$$= x^2 - 1$$

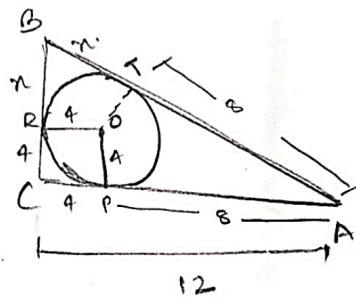
Explanation:

Q. 70

A circle of radius 4 cm is drawn inscribed in a right angle triangle ABC, right angled at C. If AC = 12 cm, then the value of CB is:

- a) 12 X
- b) 16 ✓
- c) 18 X
- d) 15 X

The correct answer is: b



$$\Rightarrow (4+n)^2 + 12^2 = (8+n)^2$$

$$\Rightarrow 12^2 = (8+n)^2 - (4+n)^2$$

$$\Rightarrow 144 = (8+n-4-n)(8+n+4+n)$$

$$\Rightarrow 144 = 4 \times (12+2n)$$

$$\Rightarrow 12+2n = 36$$

$$\Rightarrow 2n = 24$$

$$\therefore n = 12 \text{ cm.}$$

$$\begin{aligned}CB &= 12+4 \\&= 16 \text{ cm.}\end{aligned}$$

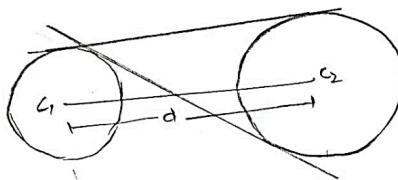
Explanation:

Q. 71

If the length of a common external tangent to two circles is 18 and that of a common internal tangent is 10, then the product of the radii of the two circles is:

- a) 28 X
- b) 55 X
- c) 56 ✓
- d) 60 X

The correct answer is: c



$$\text{Direct common tangent} = \sqrt{d^2 - (r_1 - r_2)^2}$$

$$18 = \sqrt{d^2 - (r_1 - r_2)^2}$$

$$324 = d^2 - (r_1 - r_2)^2$$

$$d^2 = 324 + (r_1 - r_2)^2 \rightarrow (i)$$

$$\text{Transverse common tangent} = \sqrt{d^2 + (r_1 + r_2)^2}$$

$$10 = \sqrt{d^2 + (r_1 + r_2)^2}$$

$$d^2 = 100 + (r_1 + r_2)^2 \rightarrow (ii)$$

Solve (i) and (ii) we get.

$$\Rightarrow r_1 \times r_2 = 56$$

Explanation:

Q. 72

Which of the following is the largest 5-digit number divisible by 47?

- a) 99999 X
- b) 99875 X
- c) 99897 X
- d) 99969 ✓

The correct answer is: d

99969 is the largest 5digit no. divisible by 47

99875 is also divisible but it is not the largest no.

Explanation:

Q. 73

If $\sqrt{x} + \frac{1}{\sqrt{x}} = 7$, then the value of $x^2 + \frac{1}{x^2}$ is:

- a) 47 X
- b) 2207 ✓
- c) 2209 X
- d) 49 X

The correct answer is: b

$$\sqrt{x} + \frac{1}{\sqrt{x}} = 7$$

So,

$$x + \frac{1}{x} = 7^2 - 2 = 47$$

Now,

$$x^2 + \frac{1}{x^2} = 47^2 - 2 = 2207$$

Q. 74

The concentrations of three acids, A, B and C, are specified as 30%, 40%, and 50%, respectively. They are blended in a ratio of 3 : 5 : a, yielding a solution with a concentration of 40%. What is the value of 'a'?

- a) 2 X
- b) 4 X
- c) 8 X
- d) 3 ✓

The correct answer is: d

$$\Rightarrow 30\% \times 3 + 40\% \times 5 + 50\% \times a = 40\% (3+5+a)$$

$$\Rightarrow 90\% + 200\% + 50\% \times a = 120\% + 200\% + 40\% \times a$$

$$\Rightarrow 30\% = 10\% a$$

$$\therefore a = 3$$

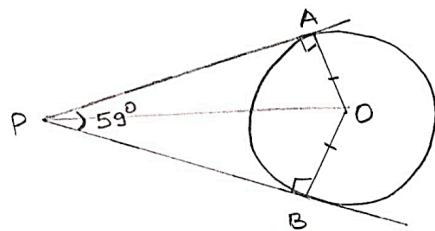
Explanation:

Q. 75

Let C be a circle with centre O and P be an external point to C. Let PA and PB be two tangents to C with A and B being the points of tangency, respectively. If PA and PB are inclined to each other at an angle of 59° , then find $\angle POA$.

- a) 60 X
- b) 60.5 ✓
- c) 61 X
- d) 63 X

The correct answer is: b



Explanation:

$$PA = PB \quad [\text{Tangent from same point}]$$

$$\angle PAO = \angle PBO = 90^\circ$$

$$\angle APO + \angle AOB = 180^\circ$$

$$\therefore \angle AOB = 180^\circ - 59^\circ \\ = 121^\circ$$

$$\angle POA = \frac{121^\circ}{2} \\ = 60.5^\circ$$

Q. 76	<p>Select the most appropriate synonym of the given word. Speculation</p> <p>a) Certainty </p> <p>b) Guesswork </p> <p>c) Assurance </p> <p>d) Fact </p>
Explanation:	<p>The correct answer is: Guesswork</p> <p>Explanation:</p> <p>Speculation refers to the act of forming a theory or assumption about something without sufficient evidence or knowledge. It involves uncertainty and conjecture.</p> <p>Let's look at the other options:</p> <ul style="list-style-type: none"> • Certainty is the opposite of speculation, as it refers to something that is known for sure and not based on guesses. • Assurance means confidence or certainty, which also contrasts with the idea of speculation, as it implies a firm belief or guarantee. • Fact refers to something that is proven to be true, which is the opposite of speculation, as speculation involves guessing or assuming without solid proof.
Q. 77	<p>In question, four alternatives are given for the idiom under the sentence. Choose the alternative which best expresses the meaning of the underlined idiom.</p> <p>During the recession, many workers were <u>left high and dry</u> by their employers.</p> <p>a) To be promoted to higher positions </p> <p>b) To be abandoned without support or resources </p> <p>c) To receive generous severance packages </p> <p>d) To be trained for new job opportunities </p>
Explanation:	<p>The correct answer is: To be abandoned without support or resources</p> <p>Explanation:</p> <p>The idiom "left high and dry" means to be abandoned or left in a difficult situation without help, support, or resources. In the given sentence, workers being left high and dry suggests they were left without any support from their employers during the recession.</p>

Q. 78

Select the option that expresses the given sentence in indirect speech.
"We need to raise taxes to fund infrastructure," the minister said.

- a) The minister was saying that they were needing to raise taxes to fund infrastructure. X
- b) The minister had said that we need to raise taxes to fund infrastructure. X
- c) The minister said that they needed to raise taxes to fund infrastructure. ✓
- d) The minister said that they had needed to raise taxes to funding infrastructure. X

The correct answer is: c

The minister said that they needed to raise taxes to fund infrastructure.

Explanation:

In indirect speech, we need to follow specific rules to report what someone has said.

Explanation: "The minister said" introduces the indirect speech, and "that" is used to introduce the reported speech.

The verb "need" in the original direct speech needs to be changed to the past tense "needed" in indirect speech because the reporting verb ("said") is in the past tense.

The pronoun "we" changes to "they" because the minister is the one being reported, and we need to adjust for the third person.

Q. 79

Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

- A. Goblin sharks are a rare species of deep-sea shark that are sometimes referred to as 'living fossils'.
B. Goblin sharks are notable for their distinctive elongated jaws, which are filled with nail-like teeth.
C. They are the only known remaining members of the ancient Mitsukurinidae family of sharks.
D. They are able to detect electrical currents emitted by other animals and rapidly extend their jaws in order to snatch up prey.

- a) ABDC X
b) ACDB X
c) ABCD X
d) ACBD ✓

The correct answer is: ACBD

Explanation:

- A (Goblin sharks are a rare species of deep-sea shark that are sometimes referred to as 'living fossils'): This sentence introduces the topic of goblin sharks and gives context to why they are considered unique.
- C (They are the only known remaining members of the ancient Mitsukurinidae family of sharks.): After introducing the sharks, it makes sense to mention their place in the broader evolutionary context. This connects goblin sharks to their ancient lineage.
- B (Goblin sharks are notable for their distinctive elongated jaws, which are filled with nail-like teeth.): Now that we know what goblin sharks are, this sentence gives a specific feature that sets them apart—distinctive jaws.
- D (They are able to detect electrical currents emitted by other animals and rapidly extend their jaws in order to snatch up prey.): Finally, the paragraph wraps up with an explanation of how goblin sharks use their specialized jaws to catch prey, making the conclusion more detailed.

Thus, the correct order is ACBD.

Q. 80	<p>Select the most appropriate ANTONYM of the word 'stable' in the given sentence and choose the correct option:</p> <p>The economy remained stable despite the volatile fluctuations in oil prices.</p> <p>a) Remained X</p> <p>b) Volatile ✓</p> <p>c) Stationary X</p> <p>d) Fixed X</p>
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The correct answer is: **Volatile**

Explanation:

- "Stable" means something that is steady, unchanging, or secure. In the context of the sentence, it describes the economy as being steady despite challenges.
- The opposite (antonym) of "stable" would be something that is unsteady, changeable, or prone to fluctuation.

Explanation:

Now, let's look at the options:

- Remained is just the verb in the sentence and does not express the opposite of "stable."
- Fixed means something that is set and unchanging, which is similar to stable, so it is not the opposite.

Q. 81	<p>Select the option that expresses the given sentence in passive voice.</p> <p>The government is implementing new tax reforms this year.</p> <p>a) New tax reforms were being implemented by the government this year. X</p> <p>b) The new tax reforms are implementing by the government this year. X</p> <p>c) The government is being implementing new tax reforms this year. X</p> <p>d) New tax reforms are being implemented by the government this year. ✓</p>
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The correct answer is: New tax reforms are being implemented by the government this year.

Explanation:

- To convert a sentence into passive voice, the object of the active sentence becomes the subject of the passive sentence, and the verb is changed to a passive form.
- In the active voice sentence "The government is implementing new tax reforms this year," the subject is "The government," and the object is "new tax reforms."
- In passive voice, the object "new tax reforms" becomes the subject, and we use the correct passive construction with "are being implemented" to match the present continuous tense used in the active sentence.

Q. 82	<p>Select the most appropriate synonym of the bracketed word in the following sentence to fill in the blank.</p> <p>The manager's decision to _____ (curtail) spending saved the company from bankruptcy.</p> <p>a) Increase X</p> <p>b) Reduce ✓</p> <p>c) Expand X</p> <p>d) Promote X</p>
Explanation: <p>The correct answer is: Reduce</p> <p>Explanation: The word "curtail" means to shorten, limit, or reduce something. In the context of the sentence, the manager's decision to curtail spending refers to reducing the amount of spending to prevent bankruptcy.</p>	

Q. 83	<p>Select the option that expresses the given sentence in active voice.</p> <p>The budget will be prepared by the finance team next week.</p> <p>a) The finance team will prepare the budget next week. ✓</p> <p>b) The finance team prepares the budget next week. X</p> <p>c) The finance team prepared the budget next week. X</p> <p>d) The finance team has prepared the budget next week. X</p>
Explanation: <p>The correct answer is: The finance team will prepare the budget next week.</p> <p>Explanation: In active voice, the subject of the sentence performs the action. In the given sentence, "The budget will be prepared by the finance team next week," the finance team is the one performing the action (preparing the budget), but the sentence is in passive voice, meaning the subject (the budget) is acted upon by the finance team. To convert it to active voice, we switch the focus back to the finance team (the doer of the action) and adjust the sentence to say that they will perform the action. The correct active voice form is:</p> <p>"The finance team will prepare the budget next week."</p>	

Q. 84

Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.

1. Suddenly, the figure stepped into the light, revealing himself to be an old friend she had not seen in years.
2. Rachel walked alone through the deserted streets.
3. They caught up on old times and walked together, laughing and chatting until they reached Rachel's doorstep.
4. She had just left her job and was on her way home when she heard footsteps behind her.

- a) 1324
- b) 3412
- c) 3214
- d) 2413

The correct answer is: **2413**

Explanation:

Let's break down the order and structure of the sentences logically:

- Sentence 2: "Rachel walked alone through the deserted streets." This sets the scene, introducing Rachel and her surroundings.
- Sentence 4: "She had just left her job and was on her way home when she heard footsteps behind her." This builds on sentence 2, explaining why Rachel is walking alone and how she hears footsteps behind her. It progresses the story logically from walking alone to hearing someone approach.
- Sentence 1: "Suddenly, the figure stepped into the light, revealing himself to be an old friend she had not seen in years." This follows the footsteps behind her and reveals the figure as an old friend, advancing the plot.
- Sentence 3: "They caught up on old times and walked together, laughing and chatting until they reached Rachel's doorstep." After revealing the old friend, they catch up and walk together, concluding the sequence with their arrival at Rachel's doorstep.

Thus, the correct sequence of sentences is 2413.

Q. 85	<p>Select the option that can be used as a one-word substitute for the underlined words. A situation in which there is not enough of something, especially resources affected the market.</p> <p>a) Scarcity ✓</p> <p>b) Surplus ✗</p> <p>c) Stability ✗</p> <p>d) Speculation ✗</p>
Explanation:	<p>The correct answer is: Scarcity</p> <p>Explanation:</p> <p>Scarcity refers to a situation in which there is not enough of something, especially resources, to meet demand. This fits perfectly with the context of the sentence, which describes a situation where there is an insufficient supply of something, leading to an impact on the market.</p>

Q. 86	<p>Select the option that expresses the given sentence in reported (or indirect) speech. She said, "I will complete the project by tomorrow."</p> <p>a) She said that she will complete the project by tomorrow. ✗</p> <p>b) She said that she would complete the project by the next day. ✓</p> <p>c) She said that she would have completed the project by tomorrow. ✗</p> <p>d) She said that she completes the project by tomorrow. ✗</p>
Explanation:	<p>The correct answer is: She said that she would complete the project by the next day.</p> <p>Explanation: In reported (or indirect) speech, certain changes are made to the original sentence:</p> <p>The pronouns change (e.g., "I" to "she").</p> <p>The tense of the verb changes. In this case, "will" changes to "would" because the reporting verb ("said") is in the past tense.</p> <p>Time expressions often change, like "tomorrow" becoming "the next day".</p> <p>So, the sentence "She said that she would complete the project by the next day" correctly reflects these changes.</p>

Q. 87	<p>The following sentence has been split into four segments. Identify the segment that contains a grammatical error.</p> <p>Investing in technology / have helped the firm grow, / attracting new clients who seek / innovative solutions.</p> <p>a) Investing in technology X</p> <p>b) have helped the firm grow, ✓</p> <p>c) attracting new clients who seek X</p> <p>d) innovative solutions. X</p>
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Explanation:	<p>The correct answer is: b</p> <p>Explanation:</p> <ul style="list-style-type: none"> • "Investing in technology" is singular, so it requires "has" (not "have"). <p>Therefore, the correct form of the sentence is:</p> <p>"Investing in technology has helped the firm grow, attracting new clients who seek innovative solutions."</p>
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Q. 88	<p>Select the sentence that has NO spelling errors.</p> <p>a) The company announced a merger to boost its competitive edge in the market. X</p> <p>b) The company announced a merger to boost its competitive edge in the market. ✓</p> <p>c) The company announced a merger to boost its competitve edge in the market. X</p> <p>d) The company anounced a merger to boost its competitive edge in the market. X</p>
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Explanation:	<p>The correct answer is: The company announced a merger to boost its competitive edge in the market.</p> <p>Explanation:</p> <ul style="list-style-type: none"> • In "anounced," the correct spelling is "announced". • In "competative" and "competetive," the correct spelling is "competitive". <p>Therefore, the correct sentence without any spelling errors is "The company announced a merger to boost its competitive edge in the market."</p>
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Q. 89	<p>Select the most appropriate meaning of the given idiom. In the red</p> <p>a) Operating at a financial loss ✓</p> <p>b) Earning a large profit ✗</p> <p>c) Maintaining a balanced budget ✗</p> <p>d) Investing in new opportunities ✗</p>
Explanation:	<p>The correct answer is: Operating at a financial loss</p> <p>Explanation: The idiom "in the red" is commonly used to describe a situation where a business or individual is operating at a financial loss. The term comes from the practice of using red ink to show negative numbers or losses in accounting.</p>
Q. 90	<p>Select the option that will improve the (bracketed) part of the sentence. In case of no improvement select the option 'No improvement'. During the recession, (companies lays off workers to cuts costs).</p> <p>a) companies lays off workers to cutting costs ✗</p> <p>b) companies lay off workers to cutting costs ✗</p> <p>c) companies laid off workers to cut costs ✓</p> <p>d) No improvement ✗</p>
Explanation:	<p>The correct answer is: companies laid off workers to cut costs</p> <p>Explanation:</p> <ul style="list-style-type: none">• The sentence refers to an event that happened during the recession, so the past tense "laid off" is needed instead of the present tense "lays off."• "To cut costs" is the correct form because it uses the infinitive verb "cut" after "to," which expresses the purpose of the action.

Q. 91

Select the option that can be used as a one-word substitute for the given below sentence.

The act of reducing expenditure to improve financial health was the board's priority.

a) Extravagance

b) Expansion

c) Economy

d) Exuberance

The correct answer is: **Economy**

Explanation:

Explanation:

The act of reducing expenditure to improve financial health refers to a practice of saving or being frugal with resources, which is best described by the word "economy." This refers to the careful management of resources, particularly finances.

Q. 92

Identify the Antonym for "Monopoly."

a) Dominance

b) Competition

c) Control

d) Exclusivity

The correct answer is: **Competition**

Explanation:

Explanation:

- Monopoly refers to a situation where a single company or entity has exclusive control over a particular product or service in the market, eliminating competition.
- The opposite (antonym) of monopoly is competition, where multiple companies or entities are competing with each other in the same market or industry.

Q. 93	<p>The following sentence has been split into four segments. Identify the segment that contains a grammatical error.</p> <p>The company launched a new product last year, / which gain significant attention / from investors and customers, / boosting its market share rapidly.</p> <p>a) The company launched a new product last year </p> <p>b) boosting its market share rapidly </p> <p>c) from investors and customers </p> <p>d) which gain significant attention </p>
Explanation:	<p>The correct answer is: which gain significant attention</p> <p>Explanation:</p> <ul style="list-style-type: none">In this segment, the verb "gain" is in the present tense, but the sentence refers to an event that happened in the past ("last year"), so it should be in the past tense to maintain consistency with the rest of the sentence.The correct form should be "which gained significant attention" to match the past tense of "launched."

Q. 94	<p>Select the most appropriate idiomatic expression to fill in the blank.</p> <p>The merger talks fell apart because the two firms were ____.</p> <p>a) on the same page </p> <p>b) at loggerheads </p> <p>c) in the black </p> <p>d) over the moon </p>
Explanation:	<p>The correct answer is: at loggerheads</p> <p>Explanation:</p> <p>"At loggerheads" means to be in strong disagreement or conflict. In the context of the sentence, the merger talks fell apart because the two firms were in disagreement or conflict, which fits perfectly.</p>

Q. 95

Select the most appropriate option to fill in the blank.

The company's new factory was built on a ___ previously used for agriculture.

- a) Sight
- b) Cite
- c) Syte
- d) Site

Explanation:

The correct answer is: Site

Explanation:

"Site" refers to a location or a place where something is or will be located or built. In this context, it refers to the piece of land where the new factory was built.

Q. 96

Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.

The habit of excessive smartphone scrolling among youths has become a growing (1)___ in modern society. Hours spent mindlessly swiping through social media feeds often (2)___ their ability to focus on studies or meaningful activities. Experts warn that this behaviour, if left unchecked, can (3)___ to serious issues like anxiety and poor academic performance. Parents and educators are now searching for ways to (4)___ this trend, encouraging teens to limit screen time and engage in real-world interactions. Without such efforts, the next generation risks becoming overly dependent on technology, losing the skills needed to thrive in a (5)___ world.

Select the most appropriate option to fill in the blank number 1.

- a) Solution
- b) Concern
- c) Benefit
- d) Reward

Explanation:

The correct answer is: Concern

Explanation:

The passage discusses a growing issue related to excessive smartphone use among youths. The word "concern" fits best here as it indicates something that is worrying or troubling in society, which aligns with the idea of excessive smartphone use becoming a significant problem.

Q. 97

Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.

The habit of excessive smartphone scrolling among youths has become a growing (1)_____ in modern society. Hours spent mindlessly swiping through social media feeds often (2)_____ their ability to focus on studies or meaningful activities. Experts warn that this behaviour, if left unchecked, can (3)_____ to serious issues like anxiety and poor academic performance. Parents and educators are now searching for ways to (4)_____ this trend, encouraging teens to limit screen time and engage in real-world interactions. Without such efforts, the next generation risks becoming overly dependent on technology, losing the skills needed to thrive in a (5)_____ world.

Select the most appropriate option to fill in the blank number 2.

- a) Bolster
- b) Enhance
- c) Diminish
- d) Stagnate

The correct answer is: **diminish**

Explanation:

- "Diminish" means to reduce or lessen something. In the context of the passage, excessive smartphone scrolling is negatively affecting the youths' ability to focus, so "diminish" is the most appropriate word, as it implies a decrease in their ability to concentrate.

Let's look at the other options:

Explanation:

- Bolster means to support or strengthen, which is the opposite of what is described in the passage. The passage talks about a decline in focus, so bolster is not a fitting choice.
- Enhance means to improve or increase, which is also the opposite of what is happening in this case. The habit of excessive smartphone use is described as weakening their ability to focus.
- Stagnate means to stop developing or progressing, which doesn't fit as well as diminish, as the passage is specifically addressing the loss of focus, not a lack of progress.

Therefore, "diminish" is the most appropriate choice, as it correctly conveys the idea that excessive smartphone scrolling is reducing their ability to focus.

Q. 98

Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.

The habit of excessive smartphone scrolling among youths has become a growing (1)_____ in modern society. Hours spent mindlessly swiping through social media feeds often (2)_____ their ability to focus on studies or meaningful activities. Experts warn that this behaviour, if left unchecked, can (3)_____ to serious issues like anxiety and poor academic performance. Parents and educators are now searching for ways to (4)_____ this trend, encouraging teens to limit screen time and engage in real-world interactions. Without such efforts, the next generation risks becoming overly dependent on technology, losing the skills needed to thrive in a (5)_____ world.

Select the most appropriate option to fill in the blank number 3.

- a) Bring
- b) Ensure
- c) Lead
- d) Support

The correct answer is: **Lead**

Explanation:

Explanation:

"Lead" means to result in or cause something. In this context, the passage talks about how unchecked smartphone scrolling can result in or cause serious issues like anxiety and poor academic performance, making "lead" the most appropriate choice.

Q. 99

Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.

The habit of excessive smartphone scrolling among youths has become a growing (1)_____ in modern society. Hours spent mindlessly swiping through social media feeds often (2)_____ their ability to focus on studies or meaningful activities. Experts warn that this behaviour, if left unchecked, can (3)_____ to serious issues like anxiety and poor academic performance. Parents and educators are now searching for ways to (4)_____ this trend, encouraging teens to limit screen time and engage in real-world interactions. Without such efforts, the next generation risks becoming overly dependent on technology, losing the skills needed to thrive in a (5)_____ world.

Select the most appropriate option to fill in the blank number 4.

- a) Promote
- b) Reverse
- c) Analyse
- d) Stimulate

The correct answer is: **Reverse**

Explanation:

- "Reverse" means to undo or change something to its opposite. In this context, the passage is talking about parents and educators trying to stop or change the growing trend of excessive smartphone use. "Reverse" is the most suitable word here as it directly implies trying to change or counteract this negative trend.

Let's look at the other options:

Explanation:

- Promote means to encourage or support something. This would not work here because the passage is about trying to reduce or stop excessive smartphone use, not encourage it.
- Analyse means to examine something in detail, which doesn't fit the context of changing or combating the trend of excessive smartphone use.
- Stimulate means to encourage or encourage growth or activity. This doesn't fit the context of trying to counteract a negative habit like excessive smartphone use.

Thus, "Reverse" is the best word to fill in the blank, as it suggests the goal of changing the trend and reducing excessive smartphone use.

Q. 100

Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.

The habit of excessive smartphone scrolling among youths has become a growing (1)_____ in modern society. Hours spent mindlessly swiping through social media feeds often (2)_____ their ability to focus on studies or meaningful activities. Experts warn that this behaviour, if left unchecked, can (3)_____ to serious issues like anxiety and poor academic performance. Parents and educators are now searching for ways to (4)_____ this trend, encouraging teens to limit screen time and engage in real-world interactions. Without such efforts, the next generation risks becoming overly dependent on technology, losing the skills needed to thrive in a (5)_____ world.

Select the most appropriate option to fill in the blank number 5.

a) Competitive ✓

b) Beautiful ✗

c) Neutral ✗

d) Utopian ✗

The correct answer is: **Competitive**

Explanation:

- "Competitive" fits the context best because it describes a world where individuals must constantly strive to perform better, develop skills, and stay ahead in various aspects of life, which aligns with the idea of the next generation needing to thrive in such an environment.

Let's break down the other options:

- Beautiful refers to something aesthetically pleasing, but it doesn't align with the passage's focus on technological dependence and the need to develop necessary skills.
- Neutral refers to being unbiased or impartial, which doesn't fit the context of thriving in a world that requires skills to succeed.
- Utopian refers to an ideal, perfect world, which is unrealistic in this context. The passage talks about the challenges and risks of technology dependence, which doesn't align with the idea of a perfect world.

Therefore, "competitive" is the most appropriate word as it conveys the idea of a world where success requires constant effort and skill, which ties directly into the passage's message about the need for the next generation to adapt and develop the skills needed to succeed.