

RBE SSC CGL 2025 Live Mock April 06,2025

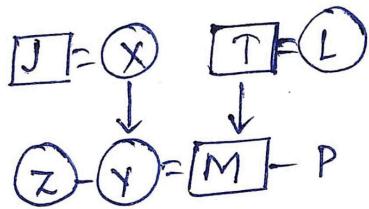
Q. 1	<p>Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.</p> <p>WTQ, NJF, CXS, ?</p> <p>a) PKF <input checked="" type="checkbox"/> ✗</p> <p>b) OJD <input checked="" type="checkbox"/> ✗</p> <p>c) PJD <input checked="" type="checkbox"/> ✓</p> <p>d) OIC <input checked="" type="checkbox"/> ✗</p>
Explanation:	<p>The correct answer is: c</p> <p>Handwritten explanation:</p> <p>W 23 T 20 F 17 ↓ -9 ↓ -10 ↓ -11 N 14 J 10 F 6 ↓ -11 ↓ -12 ↓ -13 C 3 X 24 S 19 ↓ -13 ↓ -14 ↓ -15 P 16 J 10 D 4 [P] [J] [D] (Ans)</p>

Q. 2

Z is the sister of Y. Y is married to M. M is the son of T. T is married to L. L is the mother of P. X is the mother of Y. J is the father of Z. How is X related to J?

- a) Wife ✓
- b) Sister ✗
- c) Daughter ✗
- d) Mother ✗

The correct answer is: a

Explanation:

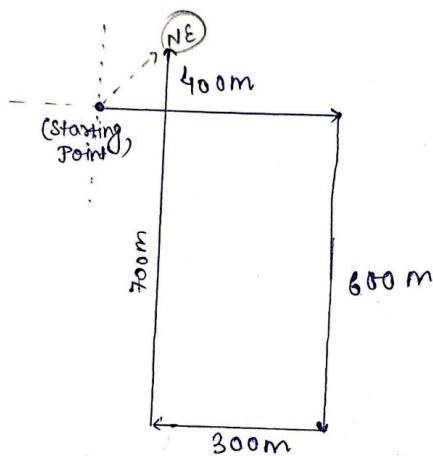
'X' is wife of 'Y'.
($\square \rightarrow$ Male, $\circlearrowleft \rightarrow$ Female)

Q. 3

Piyush walks 400 metres towards the east. From there, he turns right and walks 600 metres. Again, he turns right and walks 300 metres. Finally, he turns right and walks 700 metres. In which direction is he facing and in which direction is he with reference to his starting point?

- a) East, North-East
- b) North, North-West
- c) North, North
- d) North, North-East

The correct answer is: d



Explanation:

He is facing North and with
reference to starting point
he is facing north-east.

Q. 4

In a certain code language,

- ‘P + Q’ means ‘P is the mother of Q’,
- ‘P – Q’ means ‘P is the brother of Q’,
- ‘P * Q’ means ‘P is the father of Q’,
- ‘P @ Q’ means ‘P is the sister of Q’.

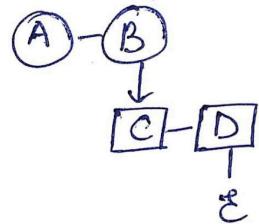
Based on the above, which of the following options represents ‘A’ is the father’s mother’s sister of ‘E’?

- a) A + B - C * D @ E X
- b) A @ B + C - D * E ✓
- c) A @ B * C + D - E X
- d) A + B @ C * D - E X

The correct answer is: b

from option (b),
 $A @ B + C - D * E$
 $(\textcircled{\text{o}} \rightarrow \text{Female}, \square \rightarrow \text{Male})$

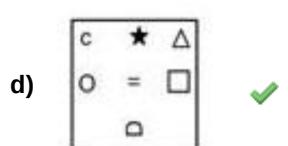
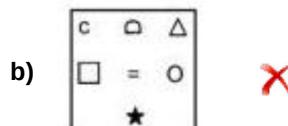
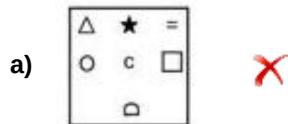
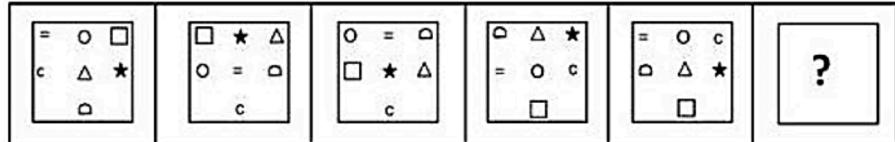
Explanation:



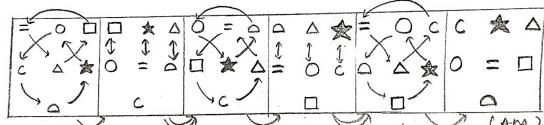
‘A’ is the father’s
mother’s sister of ‘E’.

Q. 5

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



The correct answer is: d

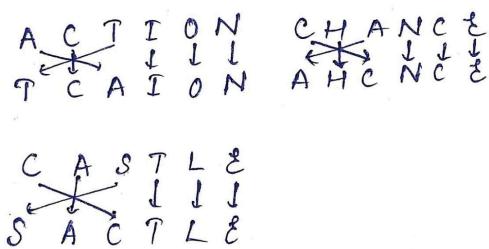
Explanation:

Q. 6

ACTION is related to TCAION in a certain way based on the English alphabetical order. In the same way, CHANCE is related to AHCNCE. To which of the following is CASTLE related, following the same logic?

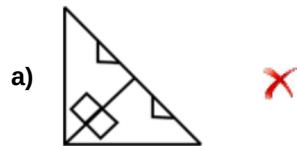
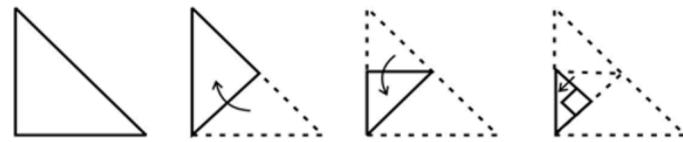
- a) SACLET X
- b) SACTLE ✓
- c) SCAELT X
- d) SACELT X

The correct answer is: b

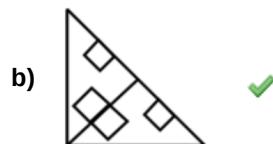
Explanation:

Q. 7

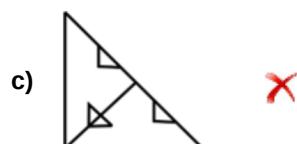
The sequence of folding a paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



X



✓



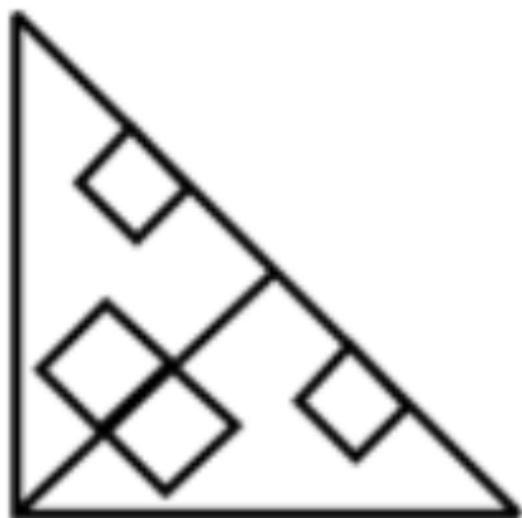
X



X

The correct answer is: b

Explanation:

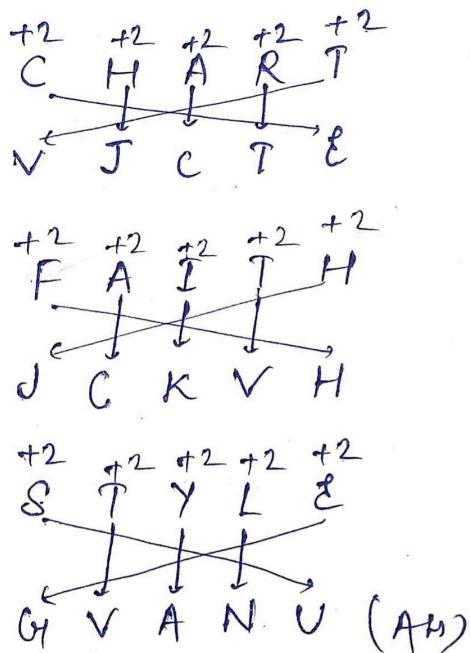


Q. 8

CHART is related to VJCTE in a certain way based on the English alphabetical order. In the same way, FAITH is related to JCKVH. To which of the following is STYLE related, following the same logic?

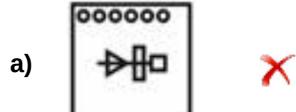
- a) GVBMU X
- b) GUBNU X
- c) GVANU ✓
- d) GUANU X

The correct answer is: c

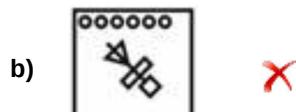


Q. 9

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



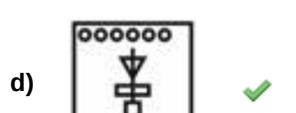
X



X



X



✓

The correct answer is: d

Explanation:



Q. 10**Which of the following numbers will replace the question mark (?) in the given series?****6, 11, ?, 121, 601, 3601**

- a) 29
- b) 35
- c) 31
- d) 27

The correct answer is: c

Explanation:

$$\begin{array}{cccccc} 6, & 11, & (\textcircled{31}), & 121, & 601, & 3601 \\ \times 2-1 & \times 3-2 & \times 4-3 & \times 5-4 & \times 6-5 & \end{array}$$

Q. 11

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

Statements:

No lily is a rose.

All lily are daffodils.

All daffodils are jasmines.

Conclusions:

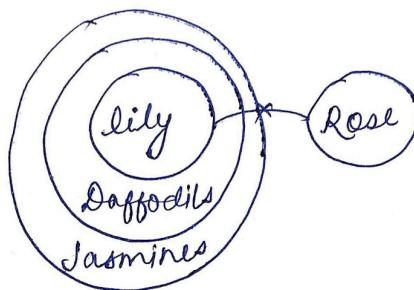
I. All roses are daffodils.

II. Some jasmines are roses.

III. No jasmine is a rose.

- a) Only conclusion II follows X
- b) Only conclusion III follows X
- c) Either conclusion II or III follows ✓
- d) Only conclusion I follows X

The correct answer is: c

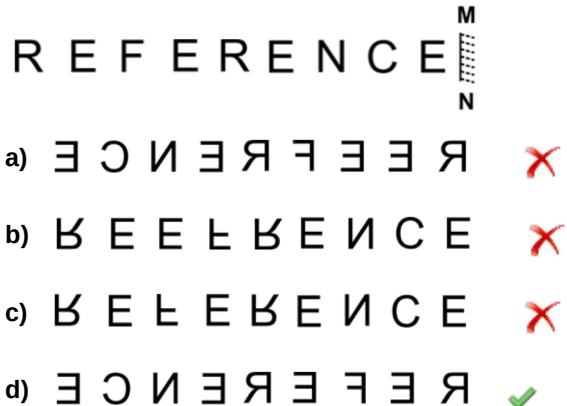


Either conclusion II or
III follows .

Explanation:

Q. 12

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



The correct answer is: d

Explanation:

Э С И Е Я Й Е Е Я

Q. 13

Select the set in which the numbers are related in the same way as are the numbers of the following set.

(54, 27, 37)

(48, 24, 34)

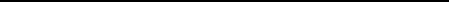
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/deleting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is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

- a) (38, 16, 26)
- b) (44, 22, 33)
- c) (58, 29, 39)
- d) (42, 20, 31)

Explanation: The correct answer is: c

Logic:

1st no.

(a)  = 2nd no.

2

$$(b) \text{ 2nd no.} + 10 = \text{3rd no.}$$

- (54, 27, 37)

$$\frac{54}{2} = 27$$

$$27 + 10 = 37$$

- (48, 24, 34)

48

$$24 + 10 = 34$$

- (58, 29, 39)

$$\frac{58}{2} = 29$$

$$29 + 10 = 39$$

Q. 14

Which letter cluster can replace the question mark (?) to complete the given series?

BAGY, FXIX, ?, NRMV, ROOU

- a) KUJW
- b) KJUW
- c) JKUW
- d) JUKW

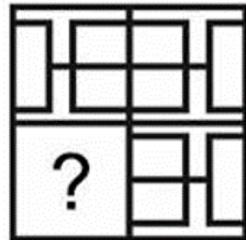
The correct answer is: d

Explanation:

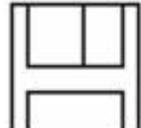
$\begin{array}{cccc} B & A & G & Y \\ \downarrow +4 & \downarrow -3 & \downarrow +2 & \downarrow -1 \\ F & X & I & X \\ \downarrow +4 & \downarrow -3 & \downarrow +2 & \downarrow -1 \\ \boxed{J & U & K & W} & & & (\text{Ans}) \\ \downarrow +4 & \downarrow -3 & \downarrow +2 & \downarrow -1 \\ N & R & M & V \\ \downarrow +4 & \downarrow -3 & \downarrow +2 & \downarrow -1 \\ R & O & O & U \end{array}$

Q. 15

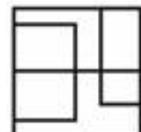
Select the figure from the options that can replace the question mark (?) and complete the pattern (rotation is NOT allowed).



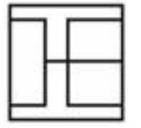
a)



b)



c)



d)



The correct answer is: c

Explanation:

Q. 16

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

g e _ f _ f g _ e e _ e _ g g _ e _ e _ g

- a) e e g e f e f g X
- b) e e g f f e f f ✓
- c) e e g f g e f f X
- d) e e g f f e f e X

The correct answer is: b

Explanation:

geef/efg/geef/efg/geef/efg

The correct combination of letters to fill in the blanks is e e g f f e f f.

Q. 17

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

PLY: DZM :: NIL :BWZ :: MON:?

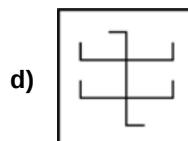
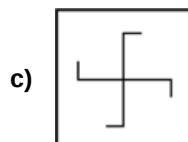
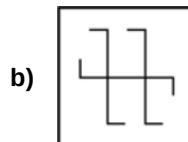
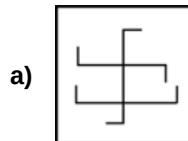
- a) BDA X
- b) ACB ✓
- c) BCD X
- d) ABD X

The correct answer is: b

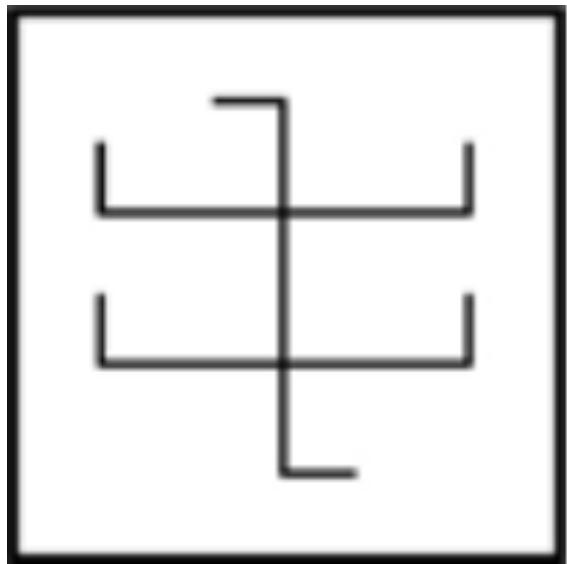
Explanation:

$+14$ P \downarrow D	$+14$ L \downarrow Z	$+14$ Y \downarrow M	$+14$ N \downarrow B	$+14$ I \downarrow W	$+14$ L \downarrow Z
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$+14$ M \downarrow	$+14$ O \downarrow	$+14$ N \downarrow
A C B (Ans)		

Q. 18**Select the option in which the given figure is embedded (rotation is NOT allowed).**

The correct answer is: d

Explanation:

Q. 19

In a certain code language, 'DEVIL' is coded as 'BGTKJ' and 'TAXES' is coded as 'RCVGQ'. How will 'SMART' be coded in the given language?

- a) QPXTR X
- b) QOYTR ✓
- c) QPYUR X
- d) QOXTR X

The correct answer is: b

$$\begin{array}{ccccc}
 -2 & +2 & -2 & +2 & -2 \\
 D & E & V & I & L \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 B & G & T & K & J
 \end{array}$$

$$\begin{array}{ccccc}
 -2 & +2 & -2 & +2 & -2 \\
 T & A & X & E & S \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 R & C & V & G & Q
 \end{array}$$

$$\begin{array}{ccccc}
 -2 & +2 & -2 & +2 & -2 \\
 S & M & A & R & T \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 Q & O & Y & T & R
 \end{array}$$

Explanation:

Q. 20**If A means $-$, B means $+$, C means \times , and D means \div , then what will be the value of the given expression?****96 A 24 B 72 D 9 C 13 B 19 =?****a) 175****b) 186****c) 195****d) 205**

The correct answer is: c

96 A 24 B 72 D 9 C 13 B 19

$$\Rightarrow 96 - 24 + 72$$

9

Explanation:

$$13 + 19$$

$$\Rightarrow 96 - 24 + 104 + 19$$

$$\Rightarrow 219 - 24 = 195$$

Q. 21

43 is related to 1860 by certain logic. Following the same logic, 57 is related to 3260. To which of the following is 63 related, following the same logic? (NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

- a) 3960
- b) 3970
- c) 3980
- d) 3990

The correct answer is: c

Logic: $(\text{1st no.})^2 + 11 = \text{2nd number}$

- $(43)^2 + 11 = 1860$
- $(57)^2 + 11 = 3260$
- $(63)^2 + 11 = 3980$

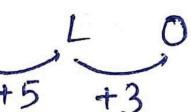
Explanation:

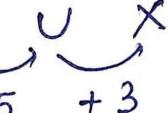
Q. 22

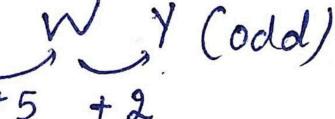
Three of the following four are alike in a certain way and thus form a group. Which is the one that does NOT belong to that group? The odd one out is not based on the number of consonants/vowels or their position in the letter cluster

- a) GLO X
- b) PUX X
- c) RWY ✓
- d) SXA X

The correct answer is: c

G 
L O
+5 +3

P 
U X
+5 +3

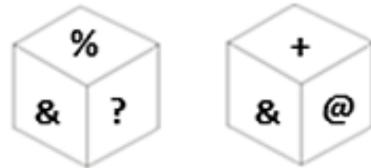
R 
W Y (odd)
+5 +2

S 
X A
+5 +3

Explanation:

Q. 23

Six symbols %, &, ?, +, \$ and @ are written on different faces of a dice. Two positions of this dice are shown in the figure below. Find the symbol on the face opposite to the one having @.

a) % b) ? c) & d) \$ **Explanation:**

The correct answer is: b

Opposites of the given dice are: & - \$, % - + and ? - @.

Q. 24

All of the letters in the word 'HOSTILITY' are arranged in alphabetical order. How many letters are there in the English alphabetical series between the letter which is fourth from the left end and the one which is second from the right end in the new letter-cluster thus formed?

a) Five b) Seven c) Three d) Four **Explanation:**

The correct answer is: b

H O S T I L I T Y

H I I L O S T T Y

The letter which is fourth from the left end is L.

The letter which is second from the right is T.

Letters between L and T are M, N, O, P, Q, R and S.

There are seven letters between L and T.

Q. 25

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

$$63 \times 9 - 8 \div 3 + 18 = ?$$

- a) 11 X
- b) 16 X
- c) 9 X
- d) 13 ✓

The correct answer is: d

$$63 \times 9 - 8 \div 3 + 18 = ?$$

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

$$\Rightarrow 63$$

$$9 + 8$$

Explanation:

$$3 - 18$$

$$\Rightarrow 7 + 24 - 18$$

$$\Rightarrow 31 - 18 = 13$$

Q. 26**Which of the following is NOT one of the three main parts of cell?**

- a) Vacuole ✓
- b) Cytoplasm ✗
- c) Cell Membrane ✗
- d) Nucleus ✗

The correct answer is **Vacuole**, as it is not one of the three main parts of a cell.

The primary components of a cell are the **Cell Membrane, Cytoplasm, and Nucleus**.

The **Cell Membrane** is a protective barrier that regulates what enters and exits the cell, maintaining its integrity.

The **Cytoplasm** is a jelly-like fluid where cellular processes occur, housing organelles.

The **Nucleus** contains DNA and controls cell activities like growth and reproduction.

While **Vacuoles exist in some cells (e.g., plant cells) for storage or waste management**, they are not considered a core component like the others.

Summary:

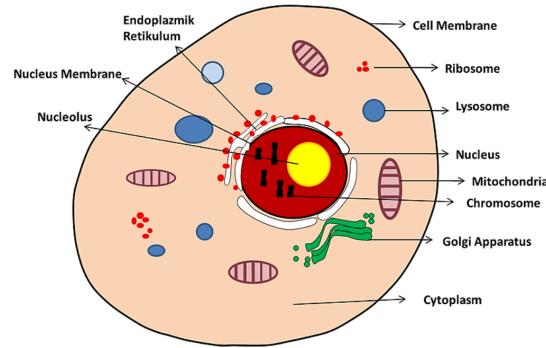
Cell Membrane: Essential for structure and transport.

Cytoplasm: Fills the cell, supports organelles.

Explanation:

Nucleus: Directs cell functions via genetic material.

Vacuole: A specialized organelle, not universal or primary.



Q. 27**Which of the following is also known as the 'White Mountain'?**

- a) Cho Oyo
- b) Makalu
- c) Dhaulagiri I
- d) Lhotse

The Correct Answer is: c

Dhaulagiri I (The "White Mountain"):

Dhaulagiri I, standing at **8,167 meters in Nepal**, is the **seventh-highest** mountain in the world.

Its name derives from Sanskrit, where "Dhavala" means "white" and "Giri" means "mountain," reflecting its snow-covered peaks that gleam brilliantly in sunlight.

This distinguishes it from other Himalayan giants.

Explanation:**Other Options:**

- **Cho Oyu (8,188m)** means "Turquoise Goddess" in Tibetan. Known for being one of the easier 8,000m peaks to climb. (6th highest)
- **Makalu (8,485m)** is known for its pyramid shape. Located in Nepal-China border. (5th highest)
- **Lhotse (8,516m)**, meaning "South Peak," in Tibetan. Connected to Everest via the South Col. (4th highest)

Dhaulagiri's striking snow-clad appearance earns it this unique moniker.

Q. 28	<p>All monetary transfers or kinds sent by migrants to their place of origin are called _____.</p> <p>a) Drafts </p> <p>b) Bills </p> <p>c) Payments </p> <p>d) Remittances </p>
Explanation:	<p>The correct answer is Remittances.</p> <p>Remittances refer to the monetary (bank transfers, money orders) or in-kind transfers (goods like clothing or electronics) that migrants send to their families or communities in their home country or place of origin. These are typically used to support household expenses like food, healthcare, education, or housing.</p> <p>Remittances also contribute significantly to the economy of the recipient countries, especially in developing nations, acting as an essential source of foreign income.</p> <p>Example: Ravi, an Indian working in Dubai, sends \$500 monthly to his family in India. His family uses it for household expenses and education. This monetary transfer by Ravi is an example of a remittance.</p> <p>Other Options:</p> <ul style="list-style-type: none">• Drafts: A draft refers to a financial document, such as a bank draft, that instructs one bank to pay a specified sum to another party, often internationally. It's more of a formal banking instrument used in trade or by individuals for secure money transfers but doesn't typically relate to funds sent by migrants.• Bills: Bills are formal documents requesting payment for goods or services. For example, an electricity bill or medical bill. It doesn't involve the idea of migrants sending money, as it refers to money owed rather than transferred.• Payments: Payments is a general term for the act of transferring money in exchange for goods, services, or settling a debt. While remittances involve payments, they are specifically tied to migrants sending money to their home country for personal or familial purposes.

Q. 29

Which space agency has developed 'SWIM' robot to investigate underwater life on Jupiter's moon Europa in Nov 2024?

a) NASA**b) ISRO****c) ESA****d) JAXA**

The correct answer is NASA.

NASA (National Aeronautics and Space Administration):

NASA is the United States's space agency.

NASA has developed the SWIM (Sensing With Independent Micro-swimmers) robots, which are tiny, autonomous underwater robots designed to explore the subsurface oceans of icy moons like Europa.

These robots aim to search for signs of life by detecting chemical and temperature signals beneath Europa's icy crust.

Future Goals: While still in development, SWIM robots are intended for future missions to ocean worlds like Europa, potentially following NASA's Europa Clipper mission, which launched in October 2024 and will **arrive at Europa in 2030** to study its icy surface and subsurface ocean from orbit.

Other Options:

Explanation:

ISRO:

- Indian Space Research Organisation - ISRO
- ISRO is India's space agency, known for missions like Chandrayaan (lunar exploration) and Mangalyaan (Mars Orbiter).

ESA:

- European Space Agency – ESA
- It is a collaborative space agency of European nations, has worked on mission like the Jupiter Icy Moons Explorer (JUICE), set to study Jupiter's moons including Europa, starting in 2031.

JAXA:

- Japan Aerospace Exploration Agency – JAXA
- JAXA, Japan's space agency, has notable missions like Hayabusa (asteroid sampling) and is collaborating on lunar and Martian exploration projects.

Q. 30	Twenty five percent of the land revenue collected by Marathas in the Deccan was called _____.
	a) Bhoga
	b) Bhaga
	c) Sardeshmukhi
	d) Chauth

The correct answer is: d

Chauth:

It was a tax or tribute imposed by the Marathas, amounting to one-fourth (25%) of the land revenue collected from territories in the Deccan and other regions they controlled or raided. The term "**Chauth**" literally means "one-fourth" in Marathi and Hindi.

Historical Context:

- The Chauth was a key financial mechanism during the rise of the Maratha Empire under **Shivaji (17th century)** and later under the **Peshwas (18th century)**. It was collected from neighboring states or regions that the Marathas subdued or threatened, often as a form of protection money to avoid raids.
- It was typically imposed on areas outside direct Maratha rule, such as Mughal territories or princely states in the **Deccan, Gujarat, and Malwa**.

Explanation:

Purpose: The funds from Chauth were used to maintain the Maratha military, particularly their highly mobile cavalry, which played a critical role in their guerrilla warfare tactics (known as **Ganimi Kava**).

Administration: Local rulers or zamindars were often responsible for collecting and delivering Chauth to Maratha officials, under the threat of military action if they refused.

Other Options:

Bhoga: refers to revenue assignments made by the state to officials and beneficiaries, often in the form of land or resources, or the income generated from such assignments. It can also be interpreted as the food offered to gods and goddesses in Hinduism, or as a general term for taxes or the king's share of produce.

Bhaga: Bhaga means "share" or "portion" in Sanskrit and was historically used in ancient India (e.g., Mauryan or Gupta periods) to denote a ruler's share of agricultural produce, often around one-sixth.

Sardeshmukhi: It was an additional 10% tax collected by the Marathas over and above Chauth. Shivaji justified Sardeshmukhi as his hereditary right as the "Sardeshmukh" (chief headman) of the Deccan.

Q. 31

The Protection of Civil Rights Act 1955 was enacted for supplementing the constitutional provision under Article _____.

- a) 21
- b) 19
- c) 14
- d) 17

The correct answer is: d

Article 17:

Article 17 of the Indian Constitution abolishes "**untouchability**" and forbids its practice in any form. It also states that any disability arising from the practice of untouchability shall be an offense punishable by law.

To supplement and enforce this constitutional mandate, the **Protection of Civil Rights Act, 1955** was enacted.

This Act ensures that the provisions of Article 17 are upheld by penalizing acts of discrimination, denial of access to public places, or other injustices based on untouchability.

Explanation:

It serves as a cornerstone in India's efforts to promote social equality and justice.

Other Options:

Article 21: Article 21 guarantees the right to life and personal liberty. It ensures that no person shall be deprived of their life or personal liberty except according to the procedure established by law.

Article 19: Article 19 enshrines the right to freedom, including the right to speech, assembly, movement, and association. It empowers individuals to express themselves and participate freely in democratic society.

Article 14: Article 14 provides for equality before the law and equal protection of the laws within the territory of India. While it ensures equality for all citizens, it is more general in scope and does not specifically focus on untouchability, which is addressed by Article 17.

Q. 32**Which organophosphate insecticide is used for grain fumigation of pesticide-impregnated gunny bags?**

- a) Resmethrin
- b) DDT
- c) Malathion
- d) Chlorobenzilate

The correct answer is: c

Malathion:

Malathion is an **organophosphate insecticide** widely used in agriculture and pest control due to its effectiveness against a broad spectrum of insects.

Use in Grain Fumigation: It is commonly applied for grain fumigation, including the treatment of pesticide-impregnated gunny bags (sacks) used to store grains. It is effective in controlling stored-grain pests such as beetles, weevils, and moths.

Application: In the context of gunny bags, Malathion can be impregnated into the fabric or applied as a surface treatment to protect stored grains from infestation. Its low mammalian toxicity (compared to other organophosphates) and ability to break down relatively quickly make it suitable for this purpose.

It works by inhibiting acetylcholinesterase in insects, leading to nervous system disruption and death, making it ideal for protecting grains during storage.

Other Options:

Resmethrin:

- Resmethrin is a synthetic pyrethroid insecticide, effective against flying insects like mosquitoes and houseflies. It is not suitable for grain fumigation and is more commonly used in urban pest control.

DDT:

- DDT (Dichlorodiphenyltrichloroethane) is a persistent organochlorine insecticide banned in many countries due to its environmental hazards. Historically used for agricultural and mosquito control.

Chlorobenzilate:

- Chlorobenzilate is an acaricide primarily used to control mites in orchards and citrus crops.

Q. 33	According to the Census of India 2011, what is the literacy rate of the schedule tribe population of India?
	a) 58.95% 
	b) 81.02% 
	c) 46.07% 
	d) 61.72% 

The correct answer is: a) 58.95%

According to the **Census of India 2011**, the literacy rate of the **Scheduled Tribe (ST)** population in India is **58.95%**.

The Census 2011 defines literacy as the **ability of a person aged 7 and above to read and write with understanding in any language**. The ST literacy rate reflects educational attainment among India's tribal communities, which constitute **8.6%** of the total population (approximately **104 million people**).

Comparison: This rate is significantly lower than the national literacy rate of **74.04% in 2011**, highlighting educational disparities faced by tribal groups due to factors like remoteness, poverty, and limited access to schools.

Gender Breakdown: Among Scheduled Tribes, the male literacy rate was **68.5%**, while the female literacy rate was **49.4%**, indicating a notable gender gap.

Significance: The data underscores the need for targeted educational policies to uplift tribal communities, many of whom live in forested or rural areas with challenging socio-economic conditions.

Explanation:

Other castes literacy rates:

- Overall National Literacy rate: **74.04%**
- This is the average literacy rate for India's total population aged 7 and above, including all communities.
- **General Category** (Non-SC/ST/OBC): Approximately 80-85% (estimated)
- Other Backward Classes (**OBC**): Approximately 70-72% (estimated)
- Scheduled Castes (**SC**): 66.1%

Religious Communities: The Census 2011 also provides literacy rates by religion, which offers another lens on "other communities":

- **Jains:** 94.9% (highest among religious groups).
- **Christians:** 84.5%.
- **Sikhs:** 75.4%.
- **Hindus:** 73.3% (close to the national average).
- **Muslims:** 68.5% (lowest among major religious groups).

Q. 34**Which of the following statements is/are correct?****I- Karnataka is the largest producer of coffee in India.****II- Arabica is a variety of coffee.****III- The Arabica variety initially brought from Mexico is produced in India.****a) Only II and III****b) Only I and II****c) Only III****d) All of these**

The correct answer is Only I and II.

Analysis of Statements:

Statement I: Karnataka is the largest producer of coffee in India.

- **True**
- Karnataka is indeed the largest coffee-producing state in India, accounting for approximately 70–75% of the country's total coffee production. The state's Coorg (Kodagu), Chikmagalur, and Hassan districts are renowned for coffee cultivation, benefiting from suitable altitude, rainfall, and soil conditions. According to data from the Coffee Board of India, Karnataka produces over 2 lakh metric tonnes annually, far exceeding other states like Kerala (around 15–20%) and Tamil Nadu (around 5–10%).

Statement II: Arabica is a variety of coffee.

- **True**
- Arabica (*Coffea arabica*) is one of the two primary species of coffee grown globally, the other being Robusta (*Coffea canephora*). Arabica is known for its milder, aromatic flavor and constitutes about 60–70% of the world's coffee production. In India, both Arabica and Robusta are cultivated, with Arabica being prized for its quality and grown extensively in Karnataka.

Statement III: The Arabica variety initially brought from Mexico is produced in India.

- **False**
- The origin of coffee in India, including the Arabica variety, is historically traced to Yemen, not Mexico. Legend states that coffee was introduced to India around the 17th century by Baba Budan, who smuggled seven coffee beans from Yemen and planted them in the Chandragiri hills of Karnataka (now Baba Budan Hills). While coffee cultivation techniques and varieties may have evolved over time with global influences, there is no evidence that the Arabica grown in India was initially brought from Mexico. Mexico is a significant coffee producer today, but India's coffee heritage predates modern exchanges with Mexico.

So the Correct answer is: **Only I and II.**

Explanation:

Q. 35	<p>Select the CORRECT combination of folk music and its respective state / union territory.</p> <p>a) Sohar – Puducherry </p> <p>b) Chakri – Jammu & Kashmir </p> <p>c) Sorathi – Kerala </p> <p>d) Thumri – Meghalaya </p>
<p>The correct answer is: b)</p> <p>Chakri – Jammu & Kashmir:</p> <ul style="list-style-type: none">• This is the correct combination of folk music and its state.• Chakri is a popular form of traditional folk music in Jammu & Kashmir, particularly in the Kashmir Valley. Performed by Kashmiri Muslims and Pandits, it is often linked to storytelling, weddings (e.g., Henna Night), and cultural events, making this pairing accurate. <p>Other Options:</p> <p>Sohar – Puducherry:</p> <ul style="list-style-type: none">• Sohar is a folk song traditionally sung during childbirth, primarily associated with North India, especially states like Bihar, Uttar Pradesh, and parts of Jharkhand in the Bhojpuri and Magadhi-speaking regions. It celebrates the birth of a child, often a son. <p>Sorathi – Kerala:</p> <ul style="list-style-type: none">• It is linked to Gujarat, where Sorathi folk songs and dances are performed, often narrating tales of bravery or romance, such as the story of Sorath and Rai Dyach. Kerala's folk music includes forms like Theyyam songs or Oppana, not Sorathi. <p>Thumri – Meghalaya:</p> <ul style="list-style-type: none">• Thumri is a semi-classical vocal form of Hindustani music, originating from North India, particularly Uttar Pradesh (e.g., Lucknow and Banaras).	

Q. 36**Which acid destroys the bacteria that enter the stomach?**

- a) Hydrochloric acid ✓
- b) Uric acid ✗
- c) Boric acid ✗
- d) Nitric acid ✗

The correct answer is: a

Hydrochloric acid (HCl):

- Hydrochloric acid (HCl) is secreted by parietal cells in the stomach lining and plays a key role in digestion and immunity.
- **Function in Bacteria Destruction:** HCl maintains the stomach's highly acidic environment (pH 1.5–3.5), which destroys most bacteria and pathogens ingested with food or water. This acts as a primary defense mechanism, preventing infections by denaturing bacterial proteins and disrupting their cell structures.
- **Other Functions:** It also activates pepsin (an enzyme) for protein digestion and aids in breaking down food.
- **Production:** The stomach produces about 1.5–2 liters of gastric juice daily, with HCl as a major component.

Other Options:

Uric acid: Uric acid is a waste product formed in the body during the breakdown of purines.

Boric acid: Boric acid is a mild antiseptic and insecticidal compound but is not naturally present in the stomach and does not contribute to bacterial destruction in the digestive system.

Nitric acid: Nitric acid is a highly corrosive mineral acid used in industries.

Q. 37

By which year will Tata Electronics and Tata Consultancy Services (TCS) together develop India's first indigenous chip?

a) 2025



b) 2026



c) 2027



d) 2028



The correct answer is: b) 2026

Tata Electronics, in collaboration with Tata Consultancy Services (TCS), is working to develop India's first indigenous semiconductor chips, with a target rollout by 2026. This timeline is based on statements from **Sreenivasa Chakravarti, Vice-President** and Global Head of TCS's Digital Engineering Division, reported in September 2024.

Tata Electronics **aims to produce the first chips from its Assam facility by late 2025 or early 2026**, with TCS providing expertise in semiconductor design, engineering, and software solutions.

Projects: The initiative includes two facilities: a \$3.26-billion chip assembly and testing plant in Assam (first chips expected late 2025/early 2026) and an \$11-billion wafer fabrication plant in Dholera, Gujarat, with Taiwan's Powerchip Semiconductor Manufacturing Corporation (PSMC), also aligning with the 2026 goal for initial production.

Significance: This marks a milestone in India's push for self-reliance in semiconductor manufacturing, targeting industries like automotive, electronics, and healthcare.

Explanation:

Q. 38**In the context of short-run production function, which of the following statements is CORRECT?**

- a) Technology is assumed to change as labour input changes.
- b) Technology is assumed to be constant for a given production.
- c) Technology is assumed to change positively until diminishing returns set in.
- d) Technology is assumed to change as capital stock changes.

The correct answer is: b

"Technology is assumed to be constant for a given production."

Short-Run Production Function:

- In the short run, at least one factor of production (e.g., capital) is fixed, while others (e.g., labor) are variable.
- The focus is on the relationship between variable input (like labor) and output, assuming other conditions remain constant.

Technology Assumed Constant:

- The short-run production function assumes that the level of technology does not change during the production process.
- This allows for analyzing changes in output solely due to variations in inputs like labor or raw materials, without external factors influencing production.

Example:

Explanation:

Imagine a factory producing shirts. The number of sewing machines (capital) remains constant in the short run, and the productivity of workers depends on the available technology. If more workers are hired, the output increases initially, but only up to a certain point (law of diminishing returns). Since technology remains unchanged, any change in output is due to changes in labor input.

Other Options:

"Technology is assumed to change as labor input changes.":

- Incorrect. Technology does not automatically change with variations in labor input in the short-run analysis. Technology is treated as fixed to isolate the effects of input changes.

"Technology is assumed to change positively until diminishing returns set in.":

- Incorrect. Technology is not assumed to improve or change in the short run. The law of diminishing returns is a result of limitations in fixed inputs (like capital), not technology.

"Technology is assumed to change as capital stock changes.":

- Incorrect. In the short run, capital stock is fixed, and technology does not change due to it. Any production change is attributed to variable inputs, not technological advancements.

Q. 39	<p>The prehistoric period in the early development of human beings is commonly known as the_____.</p> <p>a) Iron age </p> <p>b) Mesolithic age </p> <p>c) New Stone age </p> <p>d) Old Stone age </p>
	<p>The correct answer is Old Stone Age.</p> <p>Explanation:</p> <p>The Old Stone Age, also known as the Paleolithic Age, marks the earliest phase of human development, stretching from around 2.5 million years ago to approximately 10,000 BCE. During this period, humans primarily used stone tools for hunting, gathering, and survival. They lived as nomads, relied on caves or temporary shelters, and practiced basic forms of art, like cave paintings.</p> <p>Other Options:</p> <p>Iron Age: This came much later, following the Bronze Age, and is characterized by the use of iron tools and weapons. It began around 1200 BCE, so it doesn't represent the early development of humans.</p> <p>Mesolithic Age: Also called the Middle Stone Age, this period lies between the Paleolithic and Neolithic Ages. It represents a transitional phase where humans began experimenting with agriculture and domesticating animals.</p> <p>New Stone Age: Known as the Neolithic Age, this followed the Mesolithic Age. It marks advancements in agriculture, permanent settlements, and polished stone tools, but it doesn't represent the earliest phase of human development.</p>

Q. 40

The musical instrument 'Gintong' belongs to _____.

- a) Odisha
- b) Gujarat
- c) Haryana
- d) Assam

The correct answer is: d) Assam

Gintong is a traditional stringed instrument from **Assam**, used by tribal communities like the **Bodo**. Made from bamboo with metal strings, it features a bamboo tube, tensioned strips as strings, and a sound hole. It's part of Assam's folk music heritage.

**Explanation:**

Q. 41

An image of which of the following elements is shown by the map of Cyprus from which the element got its name?

- a) Silver
- b) Sulphur
- c) Copper
- d) Cobalt

The correct answer is: c) Copper

The element copper (chemical symbol: Cu) derives its name from the Latin cuprum, which is linked to Cyprium or aes Cyprium, meaning "metal of Cyprus." Cyprus, an island in the eastern Mediterranean, was a major source of copper in antiquity.

Explanation:

Historical Context: Copper mining on Cyprus dates back to at least 2500 BCE, with significant production during the Bronze Age. The island's rich copper deposits made it a key supplier in the ancient world, especially to the Mediterranean civilizations like the Greeks and Romans.

Q. 42**In which type of farming, the land is used for growing food and fodder crops and rearing livestock?**

- a) Mixed Farming ✓
- b) Dairy Farming ✗
- c) Plantation Farming ✗
- d) Commercial Farming ✗

The correct answer is: a

Mixed Farming:

Mixed farming involves the simultaneous cultivation of food crops (e.g., wheat, rice) and fodder crops (e.g., alfalfa, clover) alongside the rearing of livestock (e.g., cattle, sheep) on the same land.

It aims to diversify production, ensuring food for human consumption, fodder for animals, and income from both crops and livestock products (milk, meat, wool).

Common in regions with moderate land availability, it integrates crop and animal systems, enhancing soil fertility (via manure) and reducing risk through multiple outputs.

Example: A farm in India growing rice and maize while raising cows for milk and manure exemplifies mixed farming.

Explanation:**Other Options:**

Dairy Farming: It focuses primarily on the rearing of cattle for milk production and does not involve growing crops extensively.

Plantation Farming: This is a form of commercial agriculture where a single crop, such as tea, coffee, or rubber, is grown on a large scale, typically for export. Livestock rearing is not part of plantation farming.

Commercial Farming: Commercial farming involves large-scale production of crops or livestock for sale and profit. It is often specialized and doesn't combine multiple activities like mixed farming does.

Q. 43

Which state became the first state in the country to include sign language in police training?

- a) Maharashtra
- b) Uttar Pradesh
- c) Madhya Pradesh
- d) Rajasthan

The correct answer is Madhya Pradesh.

Madhya Pradesh became the first state in India to include sign language in police training.

This initiative **aims to equip police officers with the skills to communicate effectively** with individuals who are hearing or speech impaired.

Explanation:

It is a significant step toward inclusivity and ensuring that the rights of differently-abled individuals are respected and protected.

This training aligns with the provisions of the **Rights of Persons with Disabilities Act, 2016**, and promotes better interaction between law enforcement and the differently-abled community.

Q. 44

Under the Atal Pension Yojana, the pension returns are given after the subscriber turns _____.

- a) 60
- b) 55
- c) 50
- d) 65

The correct answer is: a) 60

Under the Atal Pension Yojana (APY), a government-backed pension scheme in India launched on **May 9, 2015**, subscribers begin receiving pension returns after reaching the **age of 60**.

Explanation:

The scheme targets workers in the unorganized sector, offering a guaranteed minimum monthly pension ranging from **₹1,000 to ₹5,000**, depending on their contributions and entry age (**18–40 years**). Contributions are made via auto-debit from a savings account until age 60, when the pension starts.

Q. 45	<p>Who is the author of the book “Shame”?</p> <p>a) Charles Dickens </p> <p>b) Rudyard Kipling </p> <p>c) Eric Segal </p> <p>d) Salman Rushdie </p>
Explanation:	<p>The correct answer is: d) Salman Rushdie</p> <p>Salman Rushdie is the author of the novel Shame, published in 1983. Born in Bombay, India, in 1947, Rushdie is a renowned British-Indian writer known for his magical realism and socio-political commentary.</p> <p>Shame is a satirical novel exploring themes of power, corruption, and identity in a fictional country resembling Pakistan, drawing on historical events like the partition of India and Pakistan. It's considered one of his major works, following Midnight's Children (1981), which won the Booker Prize.</p> <p>Other Famous books of Salman Rushdie:</p> <p>Midnight's Children (1981), The Satanic Verses (1988), Haroun and the Sea of Stories (1990), The Moor's Last Sigh (1995), Shalimar the Clown (2005), The Enchantress of Florence (2008) & Victory City (2023)</p>

Q. 46

The Battle of Buxar was fought between the forces under the command of the British East India Company led by Hector Munro, and the combined armies of _____.

- a) Mir Qasim, Mughal Emperor Shah Alam II & Shuja-ud-daulah of Awadh ✓
- b) Mir jafar, Siraj-ud-Daulah and Mughal Emperor Shah Alam II ✗
- c) Mir Jafar, Mughal Emperor Bahadur Shah II, Shuja-ud-Daulah ✗
- d) Siraj-ud-Daulah, Shuja-ud-Daulah, Mughal Emperor Shah Alam II ✗

The correct answer is Mir Qasim, Mughal Emperor Shah Alam II & Shuja-ud-Daulah of Awadh.

Explanation:

The Battle of Buxar was fought on **22nd October 1764** between the British East India Company, led by **Hector Munro**, and the combined forces of:

- **Mir Qasim:** The Nawab of Bengal, who sought to regain his authority after being replaced as Nawab by the British.
- **Shah Alam II:** The Mughal Emperor, who joined the alliance to restore his declining empire.
- **Shuja-ud-Daulah:** The Nawab of Awadh, who opposed British dominance in the region.

The **British decisively defeated** this combined alliance, establishing their stronghold in Bengal, Bihar, and Orissa.

The victory further cemented their power after the Battle of Plassey (1757) and led to the **Treaty of Allahabad in 1765**, which granted the British the **Diwani rights (revenue collection)** for Bengal, Bihar, and Orissa.

Explanation:

Other Options:

Mir jafar, Siraj-ud-Daulah and Mughal Emperor Shah Alam II:

- Mir Jafar was a British ally who became Nawab of Bengal after betraying Siraj-ud-Daulah at Plassey (1757) and died in 1765. Siraj-ud-Daulah was defeated and killed in 1757, years before Buxar.

Mir Jafar, Mughal Emperor Bahadur Shah II, Shuja-ud-Daulah:

- Bahadur Shah II was the last Mughal Emperor (reigned 1837–1857), not involved in 1764—Shah Alam II was the emperor then. Mir Jafar was not part of the coalition; he was a British puppet by this time.

Siraj-ud-Daulah, Shuja-ud-Daulah, Mughal Emperor Shah Alam II

- Siraj-ud-Daulah, Nawab of Bengal, was killed in 1757 after the Battle of Plassey, so he couldn't fight in 1764. The correct Nawab opposing the British at Buxar was Mir Qasim.

Q. 47

Through which writ can the court secure the body of a person who has been imprisoned to be brought before itself to obtain knowledge of the reason why he has been imprisoned?

- a) Prohibition
- b) Certiorari
- c) Habeas Corpus
- d) Mandamus

The correct answer is: c)

The **writ of Habeas Corpus** is protected under **Article 32 and Article 226** of the Indian Constitution:

- **Article 32:** Provides the right to approach the Supreme Court for the enforcement of fundamental rights, including filing a writ of Habeas Corpus if a person is unlawfully detained.
- **Article 226:** Allows individuals to approach High Courts for the issuance of writs, including Habeas Corpus, for the enforcement of fundamental rights and other legal rights.

These provisions ensure protection against arbitrary detention and safeguard personal liberty.

Article 32 Right to Constitutional Remedies:

Constitutional remedies for the enforcement of fundamental rights are provided under **Article 32 and Article 226 of the Indian Constitution**. These remedies empower individuals to protect their rights when violated and play a pivotal role in upholding justice and the rule of law. Here's an explanation:

Purpose: This article allows individuals to directly approach the Supreme Court of India for the enforcement of their fundamental rights.

Key Feature: It is often referred to as the "**heart and soul**" of the **Constitution by Dr. B.R. Ambedkar**, as it guarantees access to justice.

Wrts Issued: The Supreme Court can issue the following **five wrts**:

Explanation:

1. **Habeas Corpus:** This writ is issued to produce a person before the court if they are unlawfully detained. It ensures protection of personal liberty against arbitrary detention.
2. **Mandamus:** Mandamus directs a public official, body, or lower court to perform their statutory duty when they fail to do so. For example, it may compel an authority to implement a lawful order.
3. **Prohibition:** A writ of prohibition is issued to a lower court or tribunal to prevent it from exceeding its jurisdiction. It effectively stops ongoing proceedings that lack legal validity.
4. **Certiorari:** Certiorari is issued to quash the order or decision of a lower court or tribunal if it has acted beyond its jurisdiction or violated principles of natural justice.
5. **Quo Warranto:** This writ is issued to question the authority of a person holding a public office. It asks, "By what authority do you hold this position?" and ensures lawful appointments.

Article 226: Powers of High Courts:

- **Purpose:** This article allows individuals to approach High Courts for the enforcement of both fundamental and other legal rights.
- **Key Difference:** Unlike Article 32, which is limited to fundamental rights, Article 226 provides a broader scope as it also deals with other legal violations.
- **Jurisdiction:** High Courts issue writs similar to those under Article 32 but operate within their territorial jurisdiction.

Q. 48

The Communist Party of India was founded at _____ in October 1920.

- a) Britain
- b) Tashkent
- c) Lahore
- d) Calcutta

The correct answer is Tashkent.

Explanation:

The **Communist Party of India (CPI)** was founded in **Tashkent (modern-day Uzbekistan)** in October 1920 by a group of Indian revolutionaries led by **M.N. Roy**. It was established with the objective of promoting communism and Marxist ideology in India and organizing a revolutionary movement against British colonial rule.

Other Important Details:

Founders and Influences:

- The founding leaders included **M.N. Roy, Abani Mukherji**, and others.
- The establishment of the CPI was influenced by the global communist movement, particularly the **Third International (Comintern)**, led by the Soviet Union.

Explanation:

Early Challenges:

- The CPI faced initial difficulties operating in India due to the lack of coordination and suppression by British authorities.
- It **officially established** its presence in India later, around **1925**.

Impact on India's Freedom Struggle:

- The CPI contributed to the labor and peasant movements in India and was actively involved in opposing imperialist policies.
- Although the CPI did not always align with the mainstream Indian National Congress, its activities played a significant role in mobilizing workers and peasants.

Global Context:

- The early 20th century saw a rise in Marxist ideologies worldwide, and the **Bolshevik Revolution of 1917 in Russia** inspired revolutionaries in colonized countries like India to adopt communist principles.

Q. 49	<p>The tenth day after _____ Navratri is celebrated as Dussehra or Vijayadashami.</p> <p>a) Chaitra </p> <p>b) Magha Gupt </p> <p>c) Ashadha Gupt </p> <p>d) Sharad </p>
<p>Explanation:</p> <p>The correct answer is: D) Sharad</p> <p>The Sharad Navratri, observed in the Hindu lunar month of Ashwin (September–October), is the most widely celebrated Navratri in India.</p> <p>It honors Goddess Durga's victory over the demon Mahishasura.</p> <p>The tenth day after this nine-night festival (Navratri) is celebrated as Dussehra or Vijayadashami, marking Lord Rama's triumph over Ravana (symbolized by burning effigies) and Durga's victory.</p> <p>This typically falls on the 10th day of the bright half (Shukla Paksha) of Ashwin, making it a major festival across India.</p> <p>Significance: It symbolizes the victory of good over evil.</p>	

Q. 50

_____ are formed when an opaque object comes in the path of light.

- a) Translucent rays 
- b) Mirror reflections 
- c) Shadows 
- d) Transparent rays 

The correct answer is: c) Shadows

Shadows are formed when an opaque object blocks the path of light, preventing it from passing through and creating a dark area behind the object.

Mechanism: Light travels in straight lines, and when it encounters an opaque object (e.g., a tree), it cannot penetrate, resulting in a shadow on the surface behind (e.g., the ground). The shadow's shape resembles the object's outline.

Types: Shadows can be umbra (fully dark) or penumbra (partially shaded), depending on the light source's size and distance.

Example: During a sunny day, a person standing outdoors casts a shadow on the ground.

Other Options:

Explanation:

Translucent Rays:

- Translucent refers to materials (e.g., frosted glass) that allow some light to pass through diffusely, not a phenomenon formed by blocking light. “Translucent rays” isn’t a standard term, and it doesn’t relate to shadows.

Mirror Reflections:

- Mirror reflections occur when light bounces off a smooth, reflective surface (e.g., a mirror), creating an image. This requires reflection, not obstruction, and is unrelated to shadow formation by opaque objects.

Transparent Rays:

- Transparent objects (e.g., clear glass) let light pass through fully, so they don’t block light to form shadows. “Transparent rays” isn’t a recognized term, and transparency prevents shadow creation.

Q. 51	<p>$\Delta PQR \sim \Delta TUV$ and area(ΔPQR) : area (ΔTUV) = 1:9. If $PQ = 6$ cm, $QR = 10$ cm and $RP = 12$ cm, then UV is equal to:</p> <p>a) 24 cm X</p> <p>b) 22 cm X</p> <p>c) 28 cm X</p> <p>d) 30 cm ✓</p>
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Explanation:

$$\text{As } \Delta PQR \sim \Delta TUV$$

$$\therefore \frac{\text{ar}(\Delta PQR)}{\text{ar}(\Delta TUV)} = \left(\frac{PQ}{UV} \right)^2$$

$$\frac{1}{9} = \left(\frac{10}{UV} \right)^2 \Rightarrow \frac{1}{3} = \frac{10}{UV} \Rightarrow UV = 30 \text{ cm}$$

Q. 52	<p>Meena does half of a task in 12 days. Later, with Ram's help, she completes the remaining work in 8 days. Ram alone can finish the entire work in:</p> <p>a) 32 days X</p> <p>b) 48 days ✓</p> <p>c) 21 days X</p> <p>d) 44 days X</p>
-------	---

Explanation:

Time Taken by Meena to complete full task = $12 \times 2 = 24$ days

Meena + Ram = $8 \times 2 = 16$ days

Total Work = 48 units
 \hookrightarrow (LCM of 24 & 16)

Efficiency of Meena = $\frac{48}{24} = 2$ units

Eff. of Meena + Ram = $\frac{48}{16} = 3$ units

Now Eff. of Ram = $3 - 2 = 1$ unit

Time Taken by Ram to complete whole task = $\frac{48}{1} = 48$ days

Q. 53

The average of 23 numbers is 12. The average of the first 20 numbers is 11 and the 21st number is 3 more than the 23rd and the 22nd number is 2 more than the 23rd number. Find the 22nd number.

a) 19 ✓

b) 20 ✗

c) 29 ✗

d) 39 ✗

The correct answer is: a

Average of 23 no. = 12

Total value of 23 no. = $23 \times 12 = 276$

The average of first 20 no. = 11

Total value of first 20 no. = $11 \times 20 = 220$

Let the 23rd no. be x

So,

=> 22nd no. = x + 2

=> 21st no. = x + 3

Now,

$$X + (x+2) + (x+3) = 276 - 220$$

$$3x + 5 = 56$$

$$3x = 51$$

$$X = 17$$

So,

$$22^{\text{nd}} \text{ no.} = 17 + 2 = 19$$

Explanation:

Q. 54

The following table shows the sale (in thousands) of different types of helmets by a shop over the given years.

Type of Helmet/Year	1998	1999	2000	2001	2002
A	78	45	56	63	88
B	58	64	78	60	68
C	46	54	58	64	68
D	76	65	72	78	82
E	87	66	74	80	84

What was the percentage increase in the sale of Helmets C in 2002 as compared to that in 1999?

- a) 26.39%
- b) 28.26%
- c) 27.62%
- d) 25.93%

The correct answer is: d

Sale of helmet C in 1999 = 54

Sale of helmet C in 2002 = 68

Explanation:

$$\text{Percentage increase} = \frac{68 - 54}{54} \times 100$$

$$= 25.93\%$$

Q. 55

The area of the circle is 616 cm^2 and the ratio of the diameter of the circle to the breadth of the rectangle is 14:3. The length of the rectangle is 4 cm more than its breadth. Find the area of the rectangle in cm^2 .

- a) 55 X
- b) 45 X
- c) 60 ✓
- d) 52 X

The correct answer is: c

$$\text{Area of circle} = \pi r^2 = 616 \text{ cm}^2$$

Diameter : Breadth

$$14 : 3$$

$$\begin{aligned} \text{Diameter} &= 14n & \text{Breadth} &= 3n \\ \text{Radius} &= 7n & \text{Length} &= 3n+4 \end{aligned}$$

Now,

$$\pi r^2 = 616$$

$$\frac{22}{7} \times \pi \times 7n \times 7n = 616$$

$$\pi^2 \times 154 = 616$$

$$\pi^2 = 4$$

$$\pi = 2.$$

$$\therefore \text{Length} = 3 \times 2 + 4 = 10 \text{ cm}$$

$$\text{Breadth} = 3 \times 2 = 6 \text{ cm}$$

$$\begin{aligned} \text{Area} &= 10 \times 6 \text{ cm}^2 \\ &= 60 \text{ cm}^2 \end{aligned}$$

Explanation:

Q. 56

The given table shows the number of pages printed by four printers in three days.

Days	Printers			
	L	M	N	O
Friday	10,230	9580	7560	9600
Saturday	8540	11,230	6580	7890
Sunday	9235	8264	7546	10,325

If the total number of pages printed by all the given printers together on Wednesday was 15% more than the total number of pages printed by all the given printers together on Saturday, what was the total number of pages printed by all the given printers together on Wednesday?

- a) 40,263
- b) 39,376
- c) 38,450
- d) 42,577

The correct answer is: b

Total no. of pages printed on Saturday = 34,240

So,

Explanation:

No. of pages printed on Wednesday =

$$\frac{34240 \times 115}{100}$$

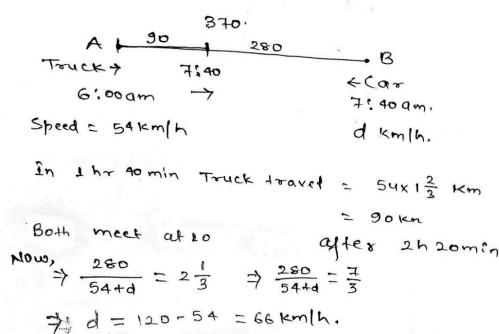
$$= 39,376$$

Q. 57

A truck travels from point A to B at 6.00 AM at the speed of 54 km/hr and a car travels from point B to A at 7.40 AM at the speed of d km/hr and both meet at 10 AM. If the distance between points A and B is 370 km, then find the value of d.

- a) 60 km/h
- b) 62 km/h
- c) 65 km/h
- d) 66 km/h

The correct answer is: d

Explanation:

Q. 58

33x381y is a seven-digit number which is divisible by 88. Then find the value of $x + y + xy$?

- a) 11
- b) 6
- c) 13
- d) 16

The correct answer is: c

A number is divisible by 88 if and only if it is divisible by both 88 and 11, since $88=8\times11$

$\div 8$ = Last three digits of a number is divisible by 8.

$\div 11$ = If the difference between the sum of its digits in the odd positions and the sum of its digits in the even positions is a multiple of 11 (including zero).

The last three digits of the number 33x381y are 81y. For the number to be divisible by 8, 81y must be divisible by 8.

Only $y=6$ makes 816 divisible by 8. So, $y=6$

Now, we know $y=6$.

The number is 33x3816.

To check for divisibility by 11,

Sum of digits in odd positions:

$$3+x+8+6=17+x$$

Sum of digits in even positions:

$$3+3+1=7$$

Difference:

$$(17+x)-7=10+x$$

For the number to be divisible by 11, $10+x$ must be a multiple of 11. Therefore,

Since x is a digit (0 to 9), the only possible value is $x=1$

Now that we have $x=1$ and $y=6$:

$$x+y+xy = 1+6+(1\times6) = 1+6+6=13$$

Explanation:

Q. 59**What is the value of D, if A : C = B : D in the given table?**

A	B	C	D
25	40	30	?

- a) 45 X
- b) 42 X
- c) 56 X
- d) 48 ✓

The correct answer is: d

$$A : B = C : D$$

$$\frac{25}{40} = \frac{30}{D}$$

$$D = 48$$

Explanation:

Q. 60

Ramesh spends 30% of his monthly salary on food, 20% on house rent, 10% on entertainment, and 8% on conveyance. But due to a family function, he has to borrow ₹11,600 from a money lender to meet the function expenses of ₹18,000. His monthly salary is:

- a) 10000
- b) 20000
- c) 30000
- d) 40000

The correct answer is: b

$$\begin{array}{ccccccc}
 \text{Monthly Salary} & = & 100n & & & & \\
 \downarrow 30\% \text{ (Food)} & & \downarrow 20\% \text{ (Rent)} & & \downarrow 10\% \text{ (Entertainment)} & & \downarrow 8\% \text{ (Conveyance)} \\
 30n & & 20n & & 10n & & 8n
 \end{array}$$

Total expenditure = $30n + 20n + 10n + 8n$
 $= 68n$.

Total savings = $100n - 68n$
 $= 32n$.

Expenses = ₹18,000
Borrowed = ₹11,600

$\therefore 32n + 11,600 = 18,000$
 $32n = 18,000 - 11,600$
 $32n = 6,400$
 $n = 200$

Salary = $100n$
 $= 100 \times 200$
 $= 20,000$.

Explanation:

Q. 61

$$(7\sqrt{7}x^3 + 5\sqrt{5}y^3) \div \sqrt{7}x + \sqrt{5}y, \text{ Find: } A^2 + B^2 + C^2?$$

$$= Ax^2 + By^2 + Cxy$$

- a) 119 X
- b) 109 ✓
- c) 129 X
- d) 139 X

The correct answer is: b

Explanation:

$$\begin{aligned} &\Rightarrow \frac{(7\sqrt{7}x^3 + 5\sqrt{5}y^3)}{(\sqrt{7}x + \sqrt{5}y)} = Ax^2 + By^2 + Cxy \\ &\Rightarrow \frac{(\sqrt{7}x)^3 + (\sqrt{5}y)^3}{(\sqrt{7}x + \sqrt{5}y)} \quad \left| \begin{array}{l} \Rightarrow A^2 + B^2 + C^2 \\ \Rightarrow 7^2 + 5^2 + (-\sqrt{35})^2 \\ \Rightarrow 49 + 25 + 35 \\ \Rightarrow 109 \end{array} \right. \\ &\Rightarrow \frac{(\sqrt{7}x + \sqrt{5}y)(7x^2 + 5y^2 - \sqrt{35}xy)}{(\sqrt{7}x + \sqrt{5}y)} \\ &\Rightarrow 7x^2 + 5y^2 - \sqrt{35}xy = Ax^2 + By^2 + Cxy \\ &\therefore A = 7, B = 5, C = -\sqrt{35} \end{aligned}$$

Q. 62

Simplify:

$$\frac{x^3 + 21x^2 + 147x + 343}{x^2 - 49} \times (x - 7)$$

- a) $x^2 + 14x + 49$ ✓
- b) $x^2 + 49 - 14x$ X
- c) $x^2 + 14x - 49$ X
- d) $x^2 - 14x - 49$ X

The correct answer is: a

Explanation:

$$\begin{aligned} &\Rightarrow \frac{x^3 + 21x^2 + 147x + 343}{(x^2 - 49)} (x - 7) \\ &\Rightarrow \frac{(x+7)^3}{(x+7)(x-7)} \times (x-7) \\ &\Rightarrow (x+7)^2 \\ &\Rightarrow x^2 + 14x + 49 \end{aligned}$$

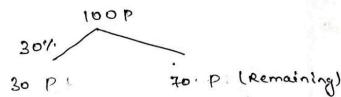
Q. 63

A man had Rs x. He invested 30% of the amount in S.I. at 12% per annum for 3 years and the remaining amount invested in S.I. at 8% per annum for 2 years. If the sum of the interest received by him is Rs.1100, then find the value of x.

- a) 3500
- b) 5000
- c) 8000
- d) 7500

The correct answer is: b

Amount be $100P$.



Now,

$$\Rightarrow 30P \times 12\% \times 3 + 70P \times 8\% \times 2 = 1100$$

$$\Rightarrow \frac{1080P}{100} + \frac{1120P}{100} = 1100$$

$$\Rightarrow 2200P = 1100 \times 100$$

$$\Rightarrow P = \frac{1100 \times 100}{2200}$$

$$\therefore P \approx 50$$

$$100P = \frac{50 \times 100}{2} = 5000$$

Explanation:

Q. 64

A man sold an article for Rs.7000 and incurred a loss. Had he sold the article for Rs.9550, his gain would have been equal to half of the amount of loss that he incurred. At what price should he sell the article to have a 40% profit?

- a) 12000
- b) 12180
- c) 12140
- d) 13000

The correct answer is: b

Explanation:

$$\begin{aligned}
 & \text{ATQ} \\
 \Rightarrow \frac{1}{2} (CP - 7000) &= (9550 - CP) \\
 \Rightarrow CP - 7000 &= 19500 - 2CP \\
 \Rightarrow 3CP &= 26500 \\
 \Rightarrow CP &= 8700 \\
 \therefore SP &= 8700 \times \frac{140}{100} \\
 &\approx 12180
 \end{aligned}$$

Q. 65

If $a = b = 333$, $c = 334$ find $a^3 + b^3 + c^3 - 3abc = ?$

- a) 5000
- b) 1000
- c) 4000
- d) 2000

The correct answer is: b

Explanation:

$$\begin{aligned}
 a^3 + b^3 + c^3 - 3abc &= \frac{1}{2} (a+b+c)[(a+b)^2 + (b+c)^2 + (c+a)^2] \\
 &= \frac{1}{2} (333+333+334) [0^2 + (1)^2 + (1)^2] \\
 &= \frac{1}{2} (1000) \times (3) \\
 &= 1500
 \end{aligned}$$

Q. 66

If $\sin\theta + \sin^2\theta + \sin^3\theta = 1$, then

Find: $\cos^6\theta - 4\cos^4\theta + 8\cos^2\theta$

a) 4 ✓

b) 8 ✗

c) 6 ✗

d) 12 ✗

The correct answer is: a

$$\begin{aligned}
 &\Rightarrow \sin\theta + \sin^2\theta + \sin^3\theta = 1 \\
 &\Rightarrow \sin\theta + \sin^2\theta = 1 - \sin^3\theta \\
 &\Rightarrow \sin\theta (1 + \sin^2\theta) = \cos^2\theta \\
 &\Rightarrow \sin\theta (1 + 1 - \cos^2\theta) = \cos^2\theta \\
 &\Rightarrow \sin\theta (2 - \cos^2\theta) = \cos^2\theta
 \end{aligned}$$

Squaring both sides,

$$\begin{aligned}
 &\Rightarrow \sin^2\theta (2 - \cos^2\theta)^2 = \cos^4\theta \\
 &\Rightarrow \sin^2\theta (4 + \cos^4\theta - 4\cos^2\theta) = \cos^4\theta \\
 &\Rightarrow (1 - \cos^2\theta)(4 + \cos^4\theta - 4\cos^2\theta) = \cos^4\theta \\
 &\Rightarrow 4 + \cos^4\theta - 4\cos^2\theta - 4\cos^6\theta = \cos^6\theta + 4\cos^4\theta - 4\cos^2\theta = \cos^4\theta \\
 &\Rightarrow 4 - 8\cos^2\theta - \cos^6\theta + 4\cos^4\theta = 0 \\
 &\Rightarrow \cos^6\theta - 4\cos^4\theta + 8\cos^2\theta - 4 = 0 \\
 \therefore \cos^6\theta - 4\cos^4\theta + 8\cos^2\theta &= 4
 \end{aligned}$$

Explanation:

Q. 67

If $\tan\theta = \frac{x}{y}$ then, $\frac{x\sin\theta + y\cos\theta}{x\sin\theta - y\cos\theta} = ?$

a) $\frac{x^2 + y^2}{x^2 - y^2}$ ✓

b) $\frac{x^2 - y^2}{x^2 + y^2}$ ✗

c) $\frac{x}{\sqrt{x^2 + y^2}}$ ✗

d) $\frac{y}{\sqrt{x^2 + y^2}}$ ✗

The correct answer is: a

$$\Rightarrow \tan\theta = \frac{x}{y}$$

$$\Rightarrow \frac{x\sin\theta + y\cos\theta}{x\sin\theta - y\cos\theta}$$

Dividing both sides by $\cos\theta$,

$$\Rightarrow \frac{\frac{x\sin\theta}{\cos\theta} + y}{\frac{x\sin\theta}{\cos\theta} - y}$$

$$\Rightarrow \frac{x\tan\theta + y}{x\tan\theta - y}$$

$$\Rightarrow \frac{x \cdot \frac{x}{y} + y}{x \cdot \frac{x}{y} - y}$$

$$\therefore \frac{x^2 + y^2}{x^2 - y^2} \quad (\text{Ans})$$

Explanation:

Q. 68

In two successive years, 90 and 70 employees of a company appeared for a departmental examination.

Respectively, 78% and 62% of them passed. The average rate of pass percentage is:

a) 71%



b) 41%



c) 65(3/8)%



d) 55(3/8)%

**Explanation:**

$$\begin{aligned} \text{Average rate} &= \frac{90 \times 78 + 70 \times 62}{90 + 70} \\ &= \frac{7020 + 4340}{160} = \frac{11360}{160} = 71 \end{aligned}$$

Q. 69

'x', varies directly with the cube of 'y', and inversely with the square of 'z'. If $x = 1/98$ when $y = 3$ and $z = 7$, then what is the value of $800x$ when $y = 3$ and $z = 2$?

a) 100



b) 100/9



c) 200



d) 1/8



The correct answer is: a

$$\Rightarrow x = k \frac{y^3}{z^2}$$

$$\text{Now, } \frac{1}{98} = k \frac{27}{49}$$

$$k = \frac{1}{54}.$$

when $y = 3$, $z = 2$

$$\begin{aligned} x &= \frac{1}{54} \times \frac{y^3}{z^2} \\ &= \frac{1}{54} \times \frac{27}{4} \quad \therefore 800x = \frac{1}{8} \times 800 \\ &\approx \frac{1}{8} \end{aligned}$$

Explanation:

Q. 70

Find the least number of 5 digits such that on dividing by 15,18, 21 and 24; the remainders are 11,14, 17 and 20 respectively.

- a) 10080 X
- b) 10076 ✓
- c) 10084 X
- d) 10088 X

$$\begin{aligned}15 - 11 &= 4 \\18 - 14 &= 4 \\21 - 17 &= 4 \\24 - 20 &= 4\end{aligned}$$

$$\text{LCM of } 15, 18, 21, 24 \Rightarrow 2520$$

Least 5 digit no. $\Rightarrow 10000$

\therefore least 5 digit no divisible by
2520 is 10080

In least 5 digit no which leaves
remainder 11, 14, 17 & 20 resp.
is $10080 - 4 = 10076$

Explanation:**Q. 71**

Find the whole surface area of a cuboid having a length of 17 cm, breadth of 7 cm and height of 3.5 cm.

- a) 354cm^2 X
- b) 306cm^2 X
- c) 406cm^2 ✓
- d) 486cm^2 X

$$l = 17\text{cm}, b = 7\text{cm}, h = 3.5\text{cm}$$

$$\begin{aligned}\text{TSA of cuboid} &= 2(lb + bh + lh) \\&= 2(17 \times 7 + 7 \times 3.5 + 17 \times 3.5) \\&= 2(119 + 24.5 + 59.5) = 406\text{cm}^2\end{aligned}$$

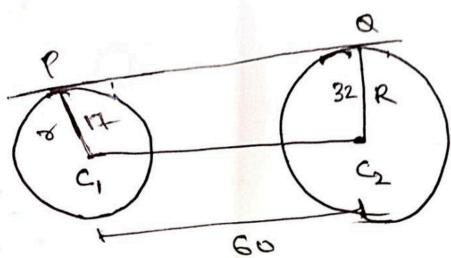
Explanation:

Q. 72

The distance between the centres of two circles of radii 32 cm and 17 cm is 60 cm. If the points of contact of a direct common tangent to these circles are P and Q, then find the length of the line segment PQ.

- a) $13\sqrt{15}$ ✗
- b) $15\sqrt{15}$ ✓
- c) 15 ✗
- d) 13 ✗

The correct answer is: b



Direct commo Tangent =

$$\begin{aligned}
 &= \sqrt{(C_1 C_2)^2 - (R - r)^2} \\
 &= \sqrt{60^2 - (32 - 17)^2} \\
 &= \sqrt{60^2 - 15^2} \\
 &= \sqrt{(60+15)(60-15)} \\
 &= \sqrt{75 \times 45} \\
 &\approx 15\sqrt{15} \text{ cm.}
 \end{aligned}$$

Q. 73

A sum of Rs 7600 was to be divided among A, B, C and D in the ratio 5:4:7:9. But by Mistake, it was divided in the ratio 4:5:3:7. As a result, who got 43.60 % less than her due?

- a) A X
- b) B X
- c) C ✓
- d) D X

The correct answer is: c

Explanation:

$$\begin{array}{l}
 \text{Original} - A : B : C : D \\
 \frac{5}{\times 304} : \frac{4}{\times 304} : \frac{7}{\times 304} : \frac{9}{\times 304} \Rightarrow 25 \rightarrow 7600 \therefore 1 = 304 \\
 \frac{\times 304}{1520} : \frac{\times 304}{1216} : \frac{\times 304}{2112} : \frac{\times 304}{2736} \\
 \text{Mistake} - A : S : Z : T \Rightarrow 19 \rightarrow 7600 \therefore 1 = 400 \\
 \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \\
 \frac{\times 400}{1600} : \frac{\times 400}{2000} : \frac{\times 400}{1200} : \frac{\times 400}{2800} \\
 C \text{ got less} = 2128 - 1200 \\
 = 928 \\
 \% \text{ age} = \frac{928}{2128} \times 100 \\
 = 43.60\%
 \end{array}$$

Q. 74

In a triangle ABC, I is incentre. $\angle BIC = 116^\circ$. Find $\angle A$.

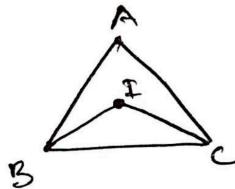
a) 52 ✓

b) 13 ✗

c) 64 ✗

d) 58 ✗

The correct answer is: a



$$\angle BIC = 116^\circ$$

Explanation:

$$\therefore \angle BIC = 90 + \frac{\angle A}{2}$$

$$116 - 90 = \frac{\angle A}{2}$$

$$\angle A = 26 \times 2$$

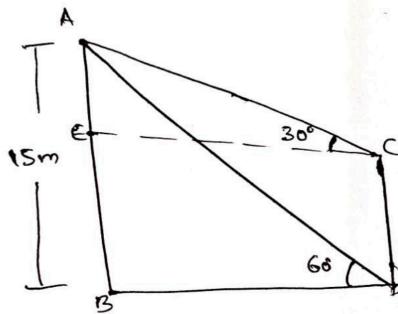
$$\therefore \angle A = 52^\circ$$

Q. 75

The top of a 15 m high tower makes an angle of elevation of 60° with the bottom of an electric pole and an angle of elevation of 30° with the top of the pole. What is the height of the electric pole?

- a) 10 ✓
- b) 15 ✗
- c) $10\sqrt{3}$ ✗
- d) $\frac{15}{\sqrt{3}}$ ✗

The correct answer is: a



Explanation:

$$\tan 60^\circ = \frac{15}{BD}$$

$$\therefore BD = \frac{15}{\sqrt{3}}.$$

$$\tan 30^\circ = \frac{AE}{EC} = \frac{AE}{BD}$$

$$\frac{1}{\sqrt{3}} = \frac{AE}{15/\sqrt{3}}.$$

$$AE = \frac{15}{3}$$

$$\therefore AE = 5 \text{ m.}$$

$$CD = 15 - 5 = 10 \text{ m}$$

Q. 76	<p>Select the most appropriate synonym of the given word. The scientist made a PROFOUND discovery.</p> <p>a) Deep ✓</p> <p>b) Superficial ✗</p> <p>c) Temporary ✗</p> <p>d) Ordinary ✗</p>
Explanation:	<p>The correct answer is: a</p> <p>Explanation:</p> <ul style="list-style-type: none">• The word "profound" means having great depth, intensity, or significance.• Deep is the most appropriate synonym because it conveys the idea of something being intense, significant, or far-reaching. <p>Thus, the correct synonym for "profound" in this context is "deep."</p>
Q. 77	<p>Select the INCORRECTLY SPELT word from the given sentence. But the lawyer deleted that line from the final version of the summery.</p> <p>a) version ✗</p> <p>b) lawyer ✗</p> <p>c) summery ✓</p> <p>d) deleted ✗</p>
Explanation:	<p>The correct answer is: c</p> <p>Explanation: In the given sentence, the word "summery" is incorrect because it refers to something related to summer (e.g., "a summery dress"). The correct word in this context is "summary," which means a brief statement or account of the main points of something.</p> <p>Thus, the error lies in "summery," which should be replaced with "summary" for the sentence to be correct.</p>

<p>Q. 78</p> <p>Choose the option which is ANTONYM of (opposite of) the word EPHEMERAL in the sentence given below:</p> <p>The beauty of the cherry blossoms was ephemeral, lasting only for a few days.</p> <p>a) Transient X</p> <p>b) Short-lived X</p> <p>c) Eternal ✓</p> <p>d) Fleeting X</p>	<p>The correct answer is: c</p> <p>Explanation:</p> <ul style="list-style-type: none"> • The word "ephemeral" means something that lasts for a very short time or is temporary. • Eternal is the antonym of ephemeral because it means something that lasts forever or is timeless. • The other options are incorrect: <ul style="list-style-type: none"> ◦ Transient, short-lived, and fleeting are synonyms of ephemeral, as they all describe something that is temporary or brief. <p>Thus, the correct antonym for "ephemeral" in this context is "eternal."</p>
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<p>Q. 79</p> <p>Select the option that correctly expresses the given sentence in passive voice.</p> <p>The teacher had already explained the lesson before the students arrived.</p> <p>a) The lesson had already been explained by the teacher before the students arrived. ✓</p> <p>b) The lesson was already explained by the teacher before the students arrived. X</p> <p>c) The lesson has already been explained by the teacher before the students arrived. X</p> <p>d) The lesson had already explained by the teacher before the students arrived. X</p>	<p>The correct answer is: a</p> <p>The lesson had already been explained by the teacher before the students arrived.</p> <p>Explanation:</p> <ol style="list-style-type: none"> 1. Active to Passive Conversion: <ul style="list-style-type: none"> ◦ The active sentence is in the past perfect tense ("had explained"). ◦ In the passive voice, the past perfect tense changes to "had been explained." ◦ The subject ("the teacher") becomes the agent in the passive voice, introduced by "by." <p>Thus, the correct passive voice transformation is:</p> <p>The lesson had already been explained by the teacher before the students arrived.</p>
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Q. 80

Choose the option which is ANTONYM of (opposite of) the word AUDACIOUS in the sentence given below:

He made an audacious attempt to climb the Everest without any training.

- a) bold
- b) daring
- c) adventurous
- d) timid

The correct answer is: d

Explanation:

- The word "**audacious**" means bold, daring, or fearless, often to the point of being reckless.
- **Timid** is the antonym of audacious because it means lacking courage or confidence, being shy or hesitant.
- The other options are incorrect:
 - **Bold, daring, and adventurous** are synonyms of audacious, as they all describe someone brave or willing to take risks.

Thus, the correct antonym for "**audacious**" in this context is "**timid**."

Q. 81

Select the most appropriate meaning of the phrase in bold.

Despite facing numerous challenges in life, she remained AS HARD AS A NAIL, never letting anything break her spirit.

- a) Physically strong and unbreakable.
- b) Emotionally tough and resilient.
- c) Extremely frenzy and cold
- d) Stubborn and unwilling to change.

The correct answer is: b

- The idiom "**as hard as a nail**" means **emotionally tough and resilient**, describing someone who remains strong and unyielding in the face of difficulties.

Thus, the correct meaning is "**emotionally tough and resilient**."

Q. 82	<p>Select the option that expresses the following sentence in Passive voice. The committee had approved the new policy before the meeting started.</p> <p>a) The new policy had been approved by the committee before the meeting started. </p> <p>b) The new policy was approved by the committee before the meeting started. </p> <p>c) The new policy had been approved before the committee started the meeting. </p> <p>d) The new policy has been approved by the committee before the meeting started. </p>
Explanation:	<p>The correct answer is: a</p> <p>Explanation:</p> <p>The sentence "The committee had approved the new policy before the meeting started" is in active voice with the past perfect tense.</p> <p>To change it into passive voice, follow these steps:</p> <ol style="list-style-type: none"> Object becomes the subject: "The new policy" (the object) becomes the subject. Use the correct form of the verb: The past perfect tense in passive voice is formed with "had been" + past participle. So, "had approved" becomes "had been approved." Include the original subject: "By the committee" shows who performed the action. <p>The correct passive voice sentence is: "The new policy had been approved by the committee before the meeting started."</p>
Q. 83	<p>Select the option that can be used as a one word substitute for the given group of words. A person preoccupied with an unrealistically optimistic approach to life</p> <p>a) Melancholic </p> <p>b) Quixotic </p> <p>c) Pessimistic </p> <p>d) Pragmatic </p>
Explanation:	<p>The correct answer is: b</p> <p>Explanation:</p> <ul style="list-style-type: none"> Quixotic: This word refers to someone who is overly idealistic, romantic, or impractical in their pursuits, often driven by an unrealistically optimistic approach to life. It perfectly matches the given definition. Melancholic: Incorrect, as it refers to someone who is sad or gloomy, which is unrelated to optimism or idealism. Pessimistic: Incorrect, as it refers to someone who expects negative outcomes and sees the worst in situations, which is the opposite of an optimistic outlook. Pragmatic: Incorrect, as it refers to someone practical and realistic, contrasting with the romantic and unrealistic nature of "quixotic." <p>Thus, Quixotic is the best one-word substitute for the group of words provided.</p>

Q. 84

Select the correct preposition from the below options to complete the below sentence.

We found the perfect venue _____ the wedding.

- a) off
- b) in
- c) for
- d) to

Explanation:

The correct answer is: c

Explanation: The sentence requires a preposition that connects "venue" with "wedding," indicating the purpose or suitability of the venue. The preposition "**for**" fits best here, as it expresses the idea of the venue being chosen or suitable for the wedding.

Thus, the most appropriate preposition is "**for**", completing the sentence as: "**We found the perfect venue for the wedding.**"

Q. 85

Parts of the following sentence have been given as options. Select the option that contains an error.

I love Chennai. / It is a beautiful city located in the Bay of Bengal /, symbolising the unification and / assimilation of culture and integrity.

- a) It is a beautiful city located in the Bay of Bengal
- b) symbolising the unification and
- c) No error
- d) assimilation of culture and integrity

Explanation:

The correct answer is: a

Explanation: This part contains an error because Chennai is not "located in the Bay of Bengal." Chennai is a coastal city located on the **eastern coast of India, along the Bay of Bengal**, but it is not "in" the Bay of Bengal. The correct phrasing should be: "**It is a beautiful city located along the Bay of Bengal.**"

Thus, the error lies in the incorrect use of the preposition "in," which should be replaced with "along" to describe Chennai's location accurately.

Q. 86

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. According to this study, gender equality helps men and women to live longer.
B. Addressing gender inequality and empowering women might help extend the longevity of not only women but men also.
C. So, investing in gender equality may benefit life expectancy of both genders.
D. The first global study to investigate how gender equality is associated with life expectancy has revealed good news.

- a) BACD
- b) ACBD
- c) DABC
- d) BCDA

The correct answer is: c

Explanation:

1. D: "The first global study to investigate how gender equality is associated with life expectancy has revealed good news."
This introduces the topic by mentioning the global study and the positive findings, making it the ideal opening sentence.
2. A: "According to this study, gender equality helps men and women to live longer."
This follows naturally by summarizing one of the key findings of the study.
3. B: "Addressing gender inequality and empowering women might help extend the longevity of not only women but men also."
This elaborates on the importance of addressing gender inequality and connects it to the broader impact on longevity.
4. C: "So, investing in gender equality may benefit life expectancy of both genders."
This concludes the paragraph by summarizing the practical implication of the study's findings.

Thus, the sequence **DABC** forms a logical and coherent flow from introduction to conclusion.

Q. 87	<p>What does the idiom 'a dry run' mean?</p> <p>a) A period of time with no rainfall X</p> <p>b) A challenging situation with no rewards X</p> <p>c) An expensive and luxurious event X</p> <p>d) A rehearsal or practice session before the actual event ✓</p>
Explanation:	<p>The correct answer is: d</p> <p>Explanation: The idiom "a dry run" refers to a practice or trial conducted to ensure that everything goes smoothly during the actual event. It is typically used to describe testing or rehearsing a process, plan, or performance in a controlled environment.</p> <p>Thus, the idiom "a dry run" emphasizes preparation through a practice attempt.</p>
Q. 88	<p>In the following questions, a sentence has been given in direct/indirect speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in indirect/direct speech.</p> <p>Neha said, "Why are you late? I have been waiting for you since morning."</p> <p>a) Neha said why he had been late. She told that she was waiting for him since morning. X</p> <p>b) Neha asked why he was late. She said that she has been waiting for him since morning. X</p> <p>c) Neha asked why he was late. She said she had been waiting for him since morning. ✓</p> <p>d) Neha asked why he had been late. She mentioned that she had been waiting for him since morning. X</p>
Explanation:	<p>The correct answer is (c) Neha asked why he was late. She said she had been waiting for him since morning.</p> <p>Explanation:</p> <ul style="list-style-type: none"> • Direct to Indirect Speech Conversion: <ul style="list-style-type: none"> ◦ The direct question "Why are you late?" becomes "Neha asked why he was late" in indirect speech. The present tense "are" changes to the past tense "was." ◦ The statement "I have been waiting for you since morning" becomes "She said she had been waiting for him since morning" in indirect speech. The present perfect continuous tense "have been waiting" changes to the past perfect continuous tense "had been waiting." <p>Thus, the correct transformation is:</p> <p>Neha asked why he was late. She said she had been waiting for him since morning.</p>

Q. 89

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. That means that these adorable animals must eat about 30 pounds of the stuff each day to get enough nutrients.
- B. They defecate about four-fifths of what they eat (and even what they do digest is not especially easy on their gastrointestinal system).
- C. Pandas basically only eat bamboo, which also happens to be incredibly hard to digest.
- D. These guys should really consider a change in diet.

- a) CBDA
- b) CADB
- c) CBAD
- d) CABD

The correct answer is: c

Explanation:

1. Sentence C introduces the main idea: "**Pandas basically only eat bamboo, which also happens to be incredibly hard to digest.**" This gives us the subject of the paragraph (pandas) and what they eat (bamboo).
2. Sentence B continues with an explanation of the challenges pandas face when eating bamboo: "**They defecate about four-fifths of what they eat (and even what they do digest is not especially easy on their gastrointestinal system).**"
3. Sentence A explains further by discussing how much bamboo pandas need to eat to survive: "**That means that these adorable animals must eat about 30 pounds of the stuff each day to get enough nutrients.**"
4. Sentence D provides a concluding statement or comment on pandas' diet: "**These guys should really consider a change in diet.**"

So, the correct order is **C, B, A, D**, which corresponds to **CBAD**.

Q. 90	<p>Select the most appropriate SYNONYM of the given word below.</p> <p>Vividness</p> <p>a) Weakness </p> <p>b) Mildness </p> <p>c) Clarity </p> <p>d) Ambiguity </p>
Explanation:	<p>The correct answer is: c</p> <p>Explanation: The word "vividness" refers to the quality of being clear, detailed, or striking, often in relation to imagination, description, or memory. The closest synonym to "vividness" in this context is "clarity," which conveys a sense of being vivid or easily perceptible.</p> <p>Here's an analysis of the other options:</p> <ol style="list-style-type: none"> 1. "Weakness": Incorrect, as it refers to the lack of strength or power, which is the opposite of vividness. 2. "Mildness": Incorrect, as it refers to softness or gentleness, which doesn't match the intensity or clarity associated with vividness. 3. "Clarity": Correct, as it aligns with the idea of vividness being detailed and easy to understand. 4. "Ambiguity": Incorrect, as it refers to something being unclear or open to multiple interpretations, which is the opposite of vividness. <p>Thus, "Clarity" is the best synonym for "vividness".</p>

Q. 91	<p>The following sentence has been split into four segments. Identify the segment that contains a grammatical error.</p> <p>If I were your mother / I would take care / of you and your sisters.</p> <p>a) I would take care </p> <p>b) of you and your sisters </p> <p>c) No error </p> <p>d) If I were your mother </p>
Explanation:	<p>The correct answer is: c</p> <p>Explanation: The given sentence is grammatically correct and follows the proper structure for a conditional sentence in the subjunctive mood. Here's why:</p> <ol style="list-style-type: none"> 1. "If I were your mother": This uses the subjunctive "were," which is appropriate when expressing hypothetical situations. 2. "I would take care": This correctly uses the conditional perfect tense to indicate an action that would occur in the past under the stated condition. 3. "of you and your sisters <p>Since the sentence is flawless, there is no error in any of the given parts.</p>

Q. 92

Choose the option which is antonym of (opposite of) the word 'SANGUINE' in the sentence given below
He was sanguine about his chances of winning the election, despite the polls showing otherwise.

- a) pessimistic ✓
- b) hopeful ✗
- c) optimistic ✗
- d) anxious ✗

The correct answer is: a

Explanation: The word "sanguine" means optimistic, confident, or hopeful, often in a cheerful or positive manner. In the given sentence, it refers to someone being confident about their chances of success. The antonym of "sanguine" is "pessimistic," which means having a negative or doubtful outlook, expecting unfavorable outcomes.

Here's an analysis of the options:

Explanation:

1. "**pessimistic**": Correct, as it is directly opposite to the positivity and confidence conveyed by "sanguine."
2. "**hopeful
- 3. "**optimistic**": Incorrect, as it is also a synonym of "sanguine," emphasizing positivity.
- 4. "**anxious**": Incorrect, as it implies worry or nervousness, but it is not the exact opposite of "sanguine."**

Thus, "pessimistic" is the most appropriate antonym for "sanguine."

Q. 93

Identify the synonym of the word "Exquisite".

- a) Rough ✗
- b) Mediocre ✗
- c) Ordinary ✗
- d) Beautiful ✓

The correct answer is: d

Explanation: The word "exquisite" refers to something that is extremely beautiful, delicate, or of exceptional quality. Among the given options, "**Beautiful**" is the most accurate synonym.

Here's an analysis of the incorrect options:

Explanation:

1. "**Rough**": Incorrect, as it is the opposite of "exquisite," which suggests fineness or delicacy.
2. "**Mediocre**": Incorrect, as it refers to something average or not outstanding, which contrasts with the excellence implied by "exquisite."
3. "**Ordinary**": Incorrect, as it describes something common or unremarkable, which is the opposite of something exquisite.

Thus, the synonym "**Beautiful**" perfectly aligns with the meaning of "exquisite" in this context.

Q. 94	<p>Parts of the following sentence have been given as options that contain an error in spelling. Select from the below options that identify the misspelt word.</p> <p>Retirement is a phase in life that everyone looks forward to, but it can be challenging if an individual is not well prepared.</p> <p>a) individual X</p> <p>b) challenging ✓</p> <p>c) Retirement X</p> <p>d) prepared X</p>
Explanation:	<p>The correct answer is: b</p> <p>Explanation: The correct spelling of the word should be "challenging." The error here lies in the addition of an extra "i," which makes the word incorrectly spelt as "challenging."</p> <p>Here's an analysis of the other words:</p> <ol style="list-style-type: none"> 1. "individual": Correctly spelt, referring to a single person. 2. "Retirement": Correctly spelt, denoting the phase of life after one stops working. 3. "prepared": Correctly spelt, meaning being ready or equipped. <p>Thus, the only misspelt word in the given sentence is "challenging," which should be corrected to "challenging."</p>

Q. 95	<p>In the following questions, a sentence has been given in direct/indirect speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in indirect/direct speech.</p> <p>Aarav said, "Will you be attending the event? I was hoping to see you there."</p> <p>a) Aarav asked if he would attend the event. He said that he was hoping to see him there. X</p> <p>b) Aarav asked if he would be attending the event. He said he had been hoping to see him there. ✓</p> <p>c) Aarav asked if he would have attended the event. He said he was hoping to see him there. X</p> <p>d) Aarav asked if he would be attending the event. He mentioned that he had hoped to see him there. X</p>
Explanation:	<p>The correct answer is: b</p> <p>Explanation: When converting the given sentence to indirect speech:</p> <ul style="list-style-type: none"> • The reporting verb "asked" indicates a question. The auxiliary verb "will" changes to "would" to reflect the shift in tense. • "I was hoping" is converted to "he had been hoping" to maintain consistency with the past perspective in indirect speech. • The phrase is structured to retain the original meaning without altering the context. <p>Thus, the correct choice is "Aarav asked if he would be attending the event. He said he had been hoping to see him there."</p>

Q. 96

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Maintaining good health and fitness is essential for a happy and productive life. A balanced diet, regular exercise, and adequate sleep are the (1)_____ of a healthy lifestyle. However, in today's fast-paced world, many people neglect these basics, leading to various health issues. One of the most effective ways to stay fit is by (2)_____ physical activity into your daily routine. This not only improves physical health but also boosts mental well-being. Additionally, it is important to (3)_____ stress, as chronic stress can have serious consequences on both the mind and body. By adopting healthy habits, such as eating nutritious food and avoiding harmful substances, we can (4)_____ our overall quality of life. Remember, small changes in your daily routine can make a (5)_____ difference in the long run.

Select the most appropriate option to fill in blank no. 1

- a) pillars 
- b) obstacles 
- c) distractions 
- d) alternatives 

The correct answer is: a

Explanation:

- The sentence discusses the **essential components** of a healthy lifestyle, which are a balanced diet, regular exercise, and adequate sleep.
- The word "**pillars**" means fundamental or essential parts, which fits perfectly in this context.
- The other options do not fit:
 - **Obstacles** means barriers or hindrances, which is the opposite of what is being described here.
 - **Distractions** means things that divert attention, which is irrelevant in this context.
 - **Alternatives** means other options or choices, which does not fit the idea of essential components.

Thus, the correct sentence is:

"A balanced diet, regular exercise, and adequate sleep are the pillars of a healthy lifestyle."

Q. 97

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Maintaining good health and fitness is essential for a happy and productive life. A balanced diet, regular exercise, and adequate sleep are the (1)_____ of a healthy lifestyle. However, in today's fast-paced world, many people neglect these basics, leading to various health issues. One of the most effective ways to stay fit is by (2)_____ physical activity into your daily routine. This not only improves physical health but also boosts mental well-being. Additionally, it is important to (3)_____ stress, as chronic stress can have serious consequences on both the mind and body. By adopting healthy habits, such as eating nutritious food and avoiding harmful substances, we can (4)_____ our overall quality of life. Remember, small changes in your daily routine can make a (5)_____ difference in the long run.

Select the most appropriate option to fill in blank no. 2.

- a) Avoiding
- b) Incorporating
- c) Ignoring
- d) Delaying

The correct answer is: b

Explanation:

- The sentence discusses the importance of adding physical activity into daily routines to stay fit.
- The word "**incorporating**" means including or integrating something as part of a whole, which fits perfectly in this context.
- The other options do not fit:
 - **Avoiding** means staying away from something, which is the opposite of what is needed here.
 - **Ignoring** means paying no attention to something, which is irrelevant in this context.
 - **Delaying** means postponing or putting something off, which does not fit the idea of adding physical activity.

Thus, the correct sentence is:

"One of the most effective ways to stay fit is by incorporating physical activity into your daily routine."

Q. 98

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Maintaining good health and fitness is essential for a happy and productive life. A balanced diet, regular exercise, and adequate sleep are the (1)_____ of a healthy lifestyle. However, in today's fast-paced world, many people neglect these basics, leading to various health issues. One of the most effective ways to stay fit is by (2)_____ physical activity into your daily routine. This not only improves physical health but also boosts mental well-being. Additionally, it is important to (3)_____ stress, as chronic stress can have serious consequences on both the mind and body. By adopting healthy habits, such as eating nutritious food and avoiding harmful substances, we can (4)_____ our overall quality of life. Remember, small changes in your daily routine can make a (5)_____ difference in the long run.

Select the most appropriate option to fill in blank no. 3.

a) Create



b) Increase



c) Ignore



d) Manage



The correct answer is: d

Explanation:

- The sentence discusses the importance of dealing with stress effectively to avoid its negative effects on health.
- The word "**manage**" means to handle or control something, which fits perfectly in this context.
- The other options do not fit:
 - **Create** means to bring something into existence, which is the opposite of what is needed here.
 - **Ignore** means to pay no attention to something, which is irrelevant in this context.
 - **Increase** means to make something larger or greater, which does not fit the idea of dealing with stress.

Thus, the correct sentence is:

"Additionally, it is important to manage stress, as chronic stress can have serious consequences on both the mind and body."

Q. 99

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Maintaining good health and fitness is essential for a happy and productive life. A balanced diet, regular exercise, and adequate sleep are the (1)_____ of a healthy lifestyle. However, in today's fast-paced world, many people neglect these basics, leading to various health issues. One of the most effective ways to stay fit is by (2)_____ physical activity into your daily routine. This not only improves physical health but also boosts mental well-being. Additionally, it is important to (3)_____ stress, as chronic stress can have serious consequences on both the mind and body. By adopting healthy habits, such as eating nutritious food and avoiding harmful substances, we can (4)_____ our overall quality of life. Remember, small changes in your daily routine can make a (5)_____ difference in the long run.

Select the most appropriate option to fill in blank no. 4.

- a) Reduce
- b) Worsen
- c) Improve
- d) Neglect

The correct answer is: c

Explanation:

- The sentence discusses the positive impact of adopting healthy habits, such as eating nutritious food and avoiding harmful substances, on our overall quality of life.
- The word "**improve**" means to make something better, which fits perfectly in this context.
- The other options do not fit:
 - **Reduce** means to make something smaller or less, which is not relevant here.
 - **Worsen** means to make something worse, which is the opposite of what is needed.
 - **Neglect** means to fail to care for something properly, which is irrelevant in this context.

Thus, the correct sentence is:

"By adopting healthy habits, such as eating nutritious food and avoiding harmful substances, we can improve our overall quality of life."

Q. 100

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Maintaining good health and fitness is essential for a happy and productive life. A balanced diet, regular exercise, and adequate sleep are the (1)_____ of a healthy lifestyle. However, in today's fast-paced world, many people neglect these basics, leading to various health issues. One of the most effective ways to stay fit is by (2)_____ physical activity into your daily routine. This not only improves physical health but also boosts mental well-being. Additionally, it is important to (3)_____ stress, as chronic stress can have serious consequences on both the mind and body. By adopting healthy habits, such as eating nutritious food and avoiding harmful substances, we can (4)_____ our overall quality of life. Remember, small changes in your daily routine can make a (5)_____ difference in the long run.

Select the most appropriate option to fill in blank no. 5.

- a) Minimal
- b) Negative
- c) Negligible
- d) Significant

The correct answer is: d

Explanation:

- The sentence emphasizes that small changes in daily routines can have a **major or important impact** over time.
- The word "**significant**" means having a noticeable or important effect, which fits perfectly in this context.
- The other options do not fit:
 - **Minimal** means very small or negligible, which contradicts the idea of making a meaningful impact.
 - **Negative** means harmful or unfavorable, which is irrelevant here.
 - **Negligible** means so small or unimportant as to be not worth considering, which does not fit the context.

Thus, the correct sentence is:

"Remember, small changes in your daily routine can make a significant difference in the long run."