





## RBE NTPC 2025 Live Mock May 29,2025

Q. 1

What is 'Pradakshina-Patha' in the structure of the Stupa?

- a) The circumambulatory path 
- b) The semi-circular mound 
- c) The richly carved gateways 
- d) A balcony like structure 

**Explanation:**

The correct answer is: a

**Explanation:**

In the architectural design of a **Stupa**, the **Pradakshina-Patha** refers to the **circumambulatory path** around the central mound. This path is meant for devotees to perform **pradakshina**, or ritualistic clockwise circumambulation, which is a sacred practice in Buddhist worship.

A **Stupa** is a sacred Buddhist structure with distinct architectural elements, each serving symbolic and functional purposes. Here are its key components:

**1. Anda (Dome or Hemispherical Mound)**

- Represents the cosmos and the universe.
- Symbolizes the burial mound covering the relics of the Buddha or revered monks.

**2. Harmika**

- A square **balustrade** atop the Anda.
- Represents the sacred space where the relics are enshrined.

**3. Chhatra (Umbrella or Three-Tiered Structure)**

- Positioned above the Harmika.
- Symbolizes the Three Jewels of Buddhism: **Buddha, Dharma, and Sangha**.

**4. Pradakshina-Patha (Circumambulatory Path)**

- A path around the stupa for ritualistic **clockwise** circumambulation.
- Encircles the Anda, allowing devotees to express reverence.

**5. Torana (Ornate Gateways)**

- Richly carved gateways situated in the cardinal directions.
- Depict Jataka tales, episodes from Buddha's life, and symbols of spiritual enlightenment.

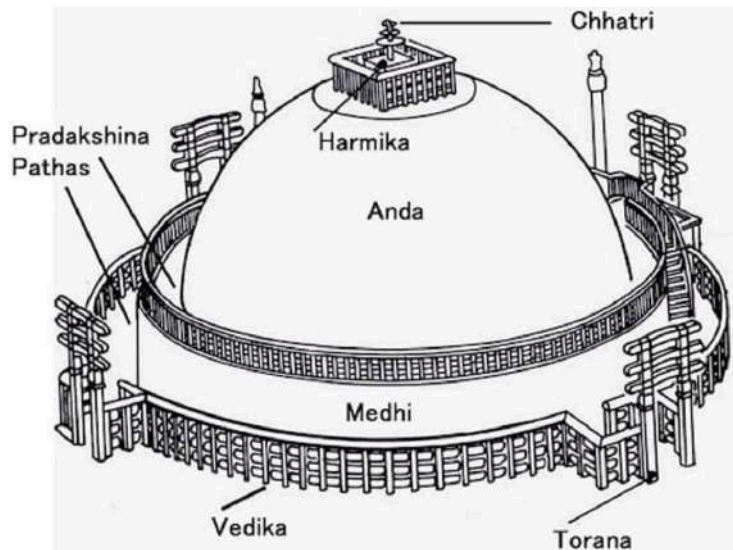
**6. Medhi (Platform or Terrace)**

- A raised **circular platform** surrounding the stupa.
- Often used for ceremonial rituals and offerings.

**7. Vedika (Fence or Railings)**

- Surrounds the stupa and defines the sacred boundary.
- Provides structural support and guidance for devotees performing pradakshina.

These elements together create a symbolic and spiritual space for Buddhist worship and meditation.







Q. 2

If  $x = 8 - 3\sqrt{7}$ , then find the value of  $(x^2 + \frac{1}{x^2})$ .

- a) 194 ✗  
 b) 322 ✗  
 c) 254 ✓  
 d) 223 ✗

Explanation:

$$\begin{aligned}
 x &= 8 - 3\sqrt{7} \\
 \frac{1}{x} &= 8 + 3\sqrt{7} \\
 \therefore x + \frac{1}{x} &= 16 \\
 \Rightarrow x^2 + \frac{1}{x^2} &= 256 - 2 \\
 \Rightarrow x^2 + \frac{1}{x^2} &= 254
 \end{aligned}$$

Q. 3	<p>The terrifying evening thunderstorms in Bengal are called:</p> <p>a) Mango Shower </p> <p>b) Kaal Baisakhi </p> <p>c) Loo </p> <p>d) Blossom Shower </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p><b>Kaal Baisakhi</b> refers to the <b>violent thunderstorms</b> that occur in <b>West Bengal and surrounding eastern states</b> during the <b>pre-monsoon season</b>, typically between <b>April and May</b>. These storms bring <b>strong winds, lightning, heavy rains, and occasional hail</b>, causing significant damage but also benefiting agriculture by cooling down temperatures and replenishing moisture in the soil.</p> <p><b>Why Other Options Are Incorrect:</b></p> <ul style="list-style-type: none"><li>• <b>Mango Shower:</b> Pre-monsoon <b>light rainfall</b> occurring in <b>Kerala and Karnataka</b>, known for helping <b>mango ripening</b>.</li><li>• <b>Loo:</b> Extremely <b>hot and dry winds</b> that blow across <b>northern India</b> during summer.</li><li>• <b>Blossom Shower:</b> A term used for <b>summer rainfall</b> in <b>Kerala</b> that aids in the blooming of coffee flowers.</li></ul>

Q. 4





A \* B means 'A is the father of B',

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

A \$ B means 'A is the sister of B' and

A @ B means 'A is the daughter of B'.

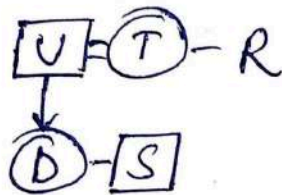
Based on the above information, which of the following means that D is the sister's daughter of R?

a) D \$ U \* S - T @ R b) D \* U @ S \$ T - R c) D @ U - S \* T \$ R d) D @ U \* S - T \$ R 

Explanation:

The correct answer is: d

From option (d),



'D' is the sister's daughter of 'R'.


(□ → Male, ○ → Female)


Q. 5

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 









Explanation:





The correct answer is: b

Total number of pages printed by all the given printers together on Wednesday are









$$\frac{(8540+11230+6580+7890)}{100} \times 115 \Rightarrow \frac{34240}{20} \times 23$$









$$\Rightarrow 1712 \times 23 = 39376 \text{ (Ans)}$$









Q. 6	<p>_____ is a high-speed device used in CPU that is utilised to store data temporarily during processing.</p> <p>a) Auxiliary memory </p> <p>b) Arithmetic and Logic Unit (ALU) </p> <p>c) Registers </p> <p>d) Control Unit </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p>Registers are <b>high-speed storage locations</b> within the <b>Central Processing Unit (CPU)</b> used to store data temporarily during processing. They allow rapid access to instructions and data, significantly improving computational speed.</p> <p><b>Other Options Explained:</b></p> <ul style="list-style-type: none"> <li>• <b>Auxiliary memory:</b> This refers to secondary storage (like HDDs, SSDs, or flash drives), which provides long-term storage but is much slower than registers.</li> <li>• <b>Arithmetic and Logic Unit (ALU):</b> This performs arithmetic and logical operations but <b>does not</b> store data permanently—it only processes it.</li> <li>• <b>Control Unit:</b> This manages the execution of instructions and directs operations within the CPU but <b>does not store</b> temporary data directly.</li> </ul>
Q. 7	<p>If each entry of a piece of data is increased by 7, then the arithmetic mean:</p> <p>a) increases by 7 </p> <p>b) remains the same </p> <p>c) increases by 49 </p> <p>d) decreases by 7 </p>
Explanation:	<p>The correct answer is: a</p> <p>The arithmetic mean is also increased by 7</p>





Q. 8	<p>Consider the given statement and decide which of the given assumptions is/are implicit in the statement.</p> <p>Statement by an environmentalist:</p> <p>“High percentage of carbon dioxide in the environment creates a high degree of the greenhouse effect.”</p> <p>Assumptions:</p> <ol style="list-style-type: none"> <li>1. There should be minimum carbon dioxide in the environment.</li> <li>2. Minimum greenhouse effect should be maintained.</li> </ol> <p>a) Only assumption (1) is implicit </p> <p>b) Neither assumption (1) nor (2) is implicit. </p> <p>c) Both assumptions (1) and (2) are implicit. </p> <p>d) Only assumption (2) is implicit. </p>
Explanation:	<p>The correct answer is: b</p> <p>Neither assumption (1) nor (2) is implicit.</p> <p><b>Assumption (1): "There should be minimum carbon dioxide in the environment."</b></p> <p>The statement explains the relationship between carbon dioxide and the greenhouse effect but does not explicitly suggest that carbon dioxide levels should be minimized. It only describes the impact of high carbon dioxide levels, without prescribing any action or ideal level for carbon dioxide in the environment. Thus, this assumption is <b>not</b> implicit.</p> <p><b>Assumption (2): "Minimum greenhouse effect should be maintained."</b></p> <p>While the statement points to the harmful effects of a high greenhouse effect, it does not imply that maintaining a minimal greenhouse effect is desirable or necessary. There's no indication in the statement that suggests a specific level of the greenhouse effect should be preserved. Hence, this assumption is also <b>not</b> implicit.</p>







Q. 9	<p>Rani spent 6.25% of what she had. If her expenditure amounted to ₹75, what amount did she have?</p> <p>a) ₹1000 </p> <p>b) ₹120 </p> <p>c) ₹100 </p> <p>d) ₹1200 </p>
Explanation:	<p>The correct answer is: d</p> <p><math>6.25\% = \frac{1}{16}</math></p> <p>Total = 16 units</p> <p>Spent = 1 unit <math>\rightarrow 75</math></p> <p>Total amount she has = <math>16 \times 75 = \text{Rs. } 1200</math></p>
Q. 10	<p>Which of the following was a piece of land in the Bahmani kingdom, which was used to meet the expenses of the king and the royal household?</p> <p>a) Parauti </p> <p>b) Polaj </p> <p>c) Khalisa </p> <p>d) reward </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p>In the <b>Bahmani kingdom</b>, <b>Khalisa</b> referred to the lands directly controlled by the <b>state treasury</b>, and the revenue from these lands was used to cover <b>the expenses of the king and the royal household</b>. These lands were <b>not assigned</b> to nobles or feudal lords but instead remained under the direct administration of the sovereign.</p> <ul style="list-style-type: none"> <li>• <b>Parauti</b>: These were tax-free lands granted to religious figures or institutions for maintenance.</li> <li>• <b>Polaj</b>: This term was used for cultivable land that was frequently plowed and sowed, ensuring agricultural productivity.</li> </ul>





<p><b>Q. 11</b></p>	<p>Select the option that is related to the third word in the same way as the second word is related to the first word.</p> <p><b>Shrub : Prune :: Hair : ?</b></p> <p>a) Shave </p> <p>b) Mow </p> <p>c) Trim </p> <p>d) Shear </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: c</p> <p><b>Trim</b></p> <p><b>Explanation:</b></p> <p><b>Shrub : Prune</b></p> <ul style="list-style-type: none"> <li>Pruning refers to trimming or cutting a shrub to shape it or promote healthy growth. It's a careful and precise action performed to maintain or enhance the shrub.</li> </ul> <p><b>Hair : ?</b></p> <ul style="list-style-type: none"> <li>Just as pruning involves cutting a shrub, the equivalent action for hair would be trimming it. Trimming hair refers to carefully cutting it for maintenance, style, or health (like removing split ends). This matches the relationship between "Shrub" and "Prune."</li> </ul> <p><b>Trim</b> is the most appropriate option. It aligns with the specific and careful nature of "Prune" in the first pair.</p>
<p><b>Q. 12</b></p>	<p>Which of the following is a movable, concealable icon bar that is set on the very edge of the graphical user interface (GUI) desktop and serves as a launching pad for applications?</p> <p>a) Task bar </p> <p>b) Start menu </p> <p>c) Application </p> <p>d) Icon </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p>The <b>task bar</b> is a movable and concealable icon bar located at the edge of the <b>Graphical User Interface (GUI) desktop</b>. It serves as a launching pad for applications, allowing users to quickly access, switch between, and manage programs.</p>





Q. 13	<p>If White is called Black, Black is called Red, Red is called Yellow, Yellow is called is Green, Green is called Blue, Blue is called Violet and Violet is called Orange, what would be the colour of human blood?</p> <p>a) Green </p> <p>b) Black </p> <p>c) Red </p> <p>d) Yellow </p>
Explanation:	<p>The correct answer is: d</p> <p>The actual colour of human blood is <b>Red</b>.</p> <p>According to the problem, <b>Red is called Yellow</b>.</p> <p>This means that, in this context, the colour of human blood would be referred to as <b>Yellow</b>.</p>
Q. 14	<p>27 mango trees, 54 apple trees and 72 orange trees have to be planted in rows such that each row contains the same number of trees of one variety only. Find the minimum number of rows in which the above mentioned trees may be planted.</p> <p>a) 15 </p> <p>b) 17 </p> <p>c) 19 </p> <p>d) 21 </p>
Explanation:	<p>HCF of (27, 54, 72)</p> <p><math>\Rightarrow 9</math></p> <p><math>\Rightarrow</math> Minimum No. of Rows = <math>\frac{27}{9} + \frac{54}{9} + \frac{72}{9}</math></p> <p><math>\Rightarrow 3 + 6 + 8 = 17</math> (Ans)</p>

Q. 15	<p>360 is related to 18 following a certain logic. Following the same logic, 399 is related to 19. To which of the following is 4095 related, following the same logic?</p> <p>a) 61 </p> <p>b) 53 </p> <p>c) 63 </p> <p>d) 66 </p>
Explanation:	<p>The correct answer is: c</p> <p><math>\Rightarrow (18)^2 + 18 \times 2 = 360</math></p> <p><math>\Rightarrow (19)^2 + 19 \times 2 = 399</math></p> <p><math>\Rightarrow (63)^2 + 63 \times 2 = 4095</math></p>

Q. 16	<p>What was the decadal growth rate of India's population from 2001 to 2011?</p> <p>a) 16.1% </p> <p>b) 27.9% </p> <p>c) 17.7% </p> <p>d) 20.4% </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p>According to the <b>Census 2011</b>, India's population grew by <b>17.7%</b> during the decade <b>2001-2011</b>. This was a decline compared to the previous decade (1991-2001), which had a growth rate of <b>21.5%</b>. The total population increased by <b>181 million people</b>, reaching <b>1.21 billion</b>.</p>

Q. 17	<p>The diameter of a hemisphere is 7 cm. What will its total surface area be?</p> <p>a) <math>105.50 \text{ cm}^2</math> </p> <p>b) <math>154 \text{ cm}^2</math> </p> <p>c) <math>77 \text{ cm}^2</math> </p> <p>d) <math>115.50 \text{ cm}^2</math> </p>
Explanation:	<p>The correct answer is: D</p> <p>Diameter of hemisphere = 7 cm</p> <p>Radius of hemisphere = <math>r = \frac{7}{2} \text{ cm}</math></p> <p>Total surface area of hemisphere = <math>3\pi r^2</math></p> $= 3 \times \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2} = 115.5 \text{ cm}^2$

**Q. 18****Which Article of the Constitution of India deals with Equality before Law?**a) Article 17 b) Article 13 c) Article 16 d) Article 14 

**Explanation:**

The correct answer is: d

**Explanation:**

**Article 14** of the **Indian Constitution** guarantees "**Equality before Law**" and "**Equal Protection of the Laws**" to all individuals within the territory of India. It ensures that the state shall not **discriminate** against any person and that everyone is treated equally under similar circumstances.

**Articles 12 to 35** of the Indian Constitution form the foundation of **Fundamental Rights**, ensuring protection, equality, and freedoms for all citizens. Here's a breakdown:

**Fundamental Rights (Articles 12-35)****1. General Provisions**

- **Article 12:** Defines "State" as government bodies, local authorities, and any institution under government control.
- **Article 13:** Declares that laws violating Fundamental Rights are void and subject to judicial review.

**2. Right to Equality (Articles 14-18)**

- **Article 14:** Ensures "Equality before Law" and "Equal Protection of the Laws."
- **Article 15:** Prohibits discrimination based on religion, race, caste, sex, or place of birth.
- **Article 16:** Guarantees equal opportunity in public employment.
- **Article 17:** Abolishes untouchability and prohibits its practice.
- **Article 18:** Prohibits titles (except military and academic distinctions) to ensure equality.

**3. Right to Freedom (Articles 19-22)**

- **Article 19:** Grants fundamental freedoms—speech, assembly, association, movement, residence, and profession.
- **Article 20:** Protects individuals from self-incrimination and double jeopardy.
- **Article 21:** Ensures the right to life and personal liberty.
- **Article 21A:** Provides free and compulsory education for children aged 6-14.
- **Article 22:** Grants protection against arbitrary detention.

**4. Right Against Exploitation (Articles 23-24)**

- **Article 23:** Prohibits human trafficking, forced labour, and beggar.
- **Article 24:** Prohibits child labour in hazardous industries.

**5. Right to Freedom of Religion (Articles 25-28)**

- **Article 25:** Guarantees freedom of religion and religious practices.
- **Article 26:** Grants religious groups the right to manage institutions.
- **Article 27:** Prohibits forced contributions to religious institutions.
- **Article 28:** Restricts religious instruction in state-funded institutions.

**6. Cultural and Educational Rights (Articles 29-30)**

- **Article 29:** Protects cultural rights of minorities.
- **Article 30:** Guarantees minorities the right to establish and administer educational institutions.

**7. Right to Constitutional Remedies (Articles 32-35)**





- **Article 32:** Grants the right to approach courts for enforcing Fundamental Rights (includes writs like Habeas Corpus, Mandamus, etc.).
- **Article 33:** Restricts Fundamental Rights for armed forces.

- **Article 34:** Allows limitations on rights during emergencies.
- **Article 35:** Empowers Parliament to legislate on Fundamental Rights enforcement.

This framework ensures justice, equality, liberty, and dignity for all citizens.

Q. 19

The mean of 20 observations is 22.5. One observation was wrongly noted as -25 instead of 25. The correct mean is:

- a) 25 
- b) 21.75 
- c) 20 
- d) 23.75 

**Explanation:**

The correct answer is: a

Mean of 20 observations = 22.5

Total =  $20 \times 22.5 = 450$

ATQ,

New total =  $450 - (-25) + 25 = 500$

Correct mean =  $\frac{500}{20} = 25$





Q. 20

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

G4H, J8K, M12N, ?, S20T, V24W

a) P16O 

b) N20O 









c) N16Q 









d) P16Q 

The correct answer is: d









Explanation:









G	4	H	
↓+3	↓+4	↓+3	
J	8	K	
↓+3	↓+4	↓+3	
M	12	N	
↓+3	↓+4	↓+3	
<b>P</b>	<b>16</b>	<b>Q</b>	(Ans)
↓+3	↓+4	↓+3	
S	20	T	
↓+3	↓+4	↓+3	
V	24	W	





Q. 21	<p>The Karbi-Anglong plateau located in Assam state is a part of which physical division of India?</p> <p>a) The coastal plains </p> <p>b) Himalaya mountains </p> <p>c) The northern plain </p> <p>d) The peninsular plateau </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>The <b>Karbi-Anglong Plateau</b>, located in <b>Assam</b>, is an <b>extension of the Indian Peninsular Plateau</b> in the northeastern region. It is geologically connected to the <b>Meghalaya Plateau</b>, which itself is a fragmented part of the larger <b>Deccan Plateau</b>. This plateau is primarily composed of <b>Precambrian rocks</b>, rich in minerals and diverse in topography.</p>
Q. 22	<p>Which two numbers (not digits) should be interchanged to make the given equation correct?</p> $126 - 104 \div 4 + 27 \times 2 - 40 = 142$ <p>a) 27 and 104 </p> <p>b) 2 and 4 </p> <p>c) 27 and 40 </p> <p>d) 126 and 104 </p>
Explanation:	<p>The correct answer is: b</p> $126 - 104 \div 4 + 27 \times 2 - 40 = 142$ <p>2 and 4 are interchanged to make the given equation correct,</p> <p>LHS,</p> $\Rightarrow 126 - 104 \div 2 + 27 \times 4 - 40$ $\Rightarrow 126 - 52 + 108 - 40$ $\Rightarrow 74 + 68 \Rightarrow 142$

Q. 23	<p>Which of the following is NOT a tributary of river Kaveri?</p> <p>a) Musi </p> <p>b) Bhavani </p> <p>c) Hemavati </p> <p>d) Kabini </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p>The <b>Musi River</b> is <b>not</b> a tributary of the <b>Kaveri River</b>. Instead, it is a <b>tributary of the Krishna River</b>, flowing through <b>Telangana</b> and passing through <b>Hyderabad</b>.</p> <p><b>Major Tributaries of the Kaveri River</b></p> <p><b>Left-Bank Tributaries (flow from the left side)</b></p> <ol style="list-style-type: none"> <li>1. <b>Harangi</b> – Originates in Kodagu, Karnataka.</li> <li>2. <b>Hemavati</b> – A significant tributary, originating from Karnataka's Western Ghats.</li> <li>3. <b>Shimsha</b> – Flows through Karnataka before joining the Kaveri.</li> <li>4. <b>Arkavathi</b> – Originates near Bangalore, Karnataka.</li> <li>5. <b>Kabbini (Kabini)</b> – A major tributary from Kerala and Karnataka.</li> <li>6. <b>Bhavani</b> – Originates in Tamil Nadu, flowing into Kaveri near Erode.</li> <li>7. <b>Noyyal</b> – Joins Kaveri near Karur, Tamil Nadu.</li> <li>8. <b>Amaravati</b> – Another Tamil Nadu tributary, merging near Karur.</li> </ol> <p><b>Right-Bank Tributaries (flow from the right side)</b></p> <ol style="list-style-type: none"> <li>1. <b>Lakshmana Tirtha</b> – Originates in Karnataka.</li> <li>2. <b>Suvarnavathi</b> – Flows through Karnataka and joins the Kaveri.</li> <li>3. <b>Mayura</b> – A minor tributary in Karnataka.</li> </ol>
Q. 24	<p>If a map of a city was drawn on a scale of 0.05 centimetre to kilometre, what area would represent a country if it has an area of 8000 square kilometres?</p> <p>a) 5 cm<sup>2</sup> </p> <p>b) 10 cm<sup>2</sup> </p> <p>c) 20 cm<sup>2</sup> </p> <p>d) 25 cm<sup>2</sup> </p>
Explanation:	<p>The correct answer is: c</p> <p>The scale of the map is 0.05 cm to 1 km, which means that for every 0.05 cm on the map, there is 1 km in reality.</p> <p>The area of the country represent will be</p> $8000 \times (0.05 \times 1)^2$ $8000 \times 0.0025 = 20 \text{ cm}^2$

Q. 25	<p>Read the given statement and courses of action carefully and decide which of the courses of action logically follows from the statement.</p> <p><b>Statement:</b></p> <p>The weather bureau has recently forecast next week's weather of Kashmir in which it said that there is going to be a heavy snowfall for the whole week.</p> <p><b>Courses of Action:</b></p> <p>(i) The weather bureau should propagate the information throughout Kashmir through various platforms</p> <p>(ii) The civic bodies must make arrangements to remove snow from roads.</p> <p>(iii) The news must be stopped from spreading outside the state.</p> <p>a) All the actions (i), (ii) and (iii) follows. ❌</p> <p>b) Only action (iii) follows. ❌</p> <p>c) Only action (ii) and (iii) follow. ❌</p> <p>d) Only action (i) and (ii) follow. ✅</p>
<b>Explanation:</b>	<p>The correct answer is <b>Only action (i) and (ii) follow.</b></p> <p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• <b>Action (i):</b> Propagating the information throughout Kashmir is a logical step as it ensures that residents and authorities in the region are aware of the forecast. This allows them to prepare adequately for heavy snowfall.</li> <li>• <b>Action (ii):</b> Civic bodies must make arrangements to remove snow from roads to ensure smooth mobility and safety during and after the snowfall. This is a direct and logical consequence of the forecast.</li> <li>• <b>Action (iii):</b> The suggestion to stop the news from spreading outside the state is illogical and baseless. Weather information is important for everyone, including travellers and neighbouring areas, as it helps them plan accordingly. There's no valid reason to suppress such news.</li> </ul> <p>Hence, actions (i) and (ii) logically follow the statement, while action (iii) does not.</p>

Q. 26	<p>Who amongst the following Sultans introduced the Market Reforms to regulate the prices of general commodities?</p> <p>a) Alauddin Khilji </p> <p>b) Iltutmish </p> <p>c) Razia Sultana </p> <p>d) Muhammad Tughlaq </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p><b>Alauddin Khilji</b>, the <b>second ruler of the Khilji dynasty</b>, introduced <b>market reforms</b> in the <b>Delhi Sultanate</b> to regulate the prices of general commodities, including food grains, cloth, horses, and other essential goods. His aim was to prevent inflation, control exploitation by traders, and ensure affordable supplies for his army and citizens.</p> <p>Key Features of Alauddin Khilji's <b>Market Control System</b>:</p> <ul style="list-style-type: none"> <li>• <b>Standardized pricing</b> for essential commodities, fixed by the state.</li> <li>• <b>Strict supervision</b> by government officers to prevent hoarding and overpricing.</li> <li>• <b>Warehouse system</b> to maintain stock availability and avoid scarcity.</li> <li>• <b>State-appointed merchants</b> to ensure fair trade practices.</li> </ul>
Q. 27	<p>Which island nation, located in the Indian Ocean and composed of 26 atolls, has the lowest average elevation of any country, making it highly vulnerable to sea-level rise?</p> <p>a) Seychelles </p> <p>b) Mauritius </p> <p>c) Maldives </p> <p>d) Comoros </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p>The <b>Maldives</b> is an island nation in the <b>Indian Ocean</b>, composed of <b>26 atolls</b> and over <b>1,000 coral islands</b>. It has the <b>lowest average elevation</b> of any country, with most of its land sitting just <b>1-1.5 meters above sea level</b>. This extreme low elevation makes the Maldives <b>highly vulnerable to sea-level rise</b>, coastal erosion, and climate change-related impacts.</p>

<p>Q. 28</p>	<p>How many meaningful English words can be formed by using first, third, sixth and eighth letters of the word 'LAMINATE' using each only once?</p> <p>a) 1 </p> <p>b) 2 </p> <p>c) 3 </p> <p>d) 4 </p>
<p>Explanation:</p>	<p>The correct answer is: d</p> <p>There are four meaningful English words that can be formed from the letters L, M, A, E (first, third, sixth, and eighth letters of "LAMINATE"):</p> <p><b>LAME</b> – (adj.) unable to walk normally; unsatisfactory.</p> <p><b>MALE</b> – (adj./noun) relating to the sex that typically produces sperm.</p> <p><b>MEAL</b> – (noun) an occasion when food is eaten, or the food itself.</p> <p><b>NOTE:</b> In some rare dialects or archaic use (such as old English or regional usage), "LEAM" might mean a gleam or light, but it is <b>extremely rare and outdated</b>, and not accepted in <b>standard modern English vocabulary</b>, especially not in exams or logical reasoning contexts.</p> <p><b>Therefore, "LEAM" is not considered a meaningful English word in this context.</b></p>
<p>Q. 29</p>	<p>If the HCF of 85 and 153 is expressible in the form of <math>85x - 153</math>, then the value of x is:</p> <p>a) 2 </p> <p>b) 5 </p> <p>c) 3 </p> <p>d) 1 </p>
<p>Explanation:</p>	<p>The correct answer is: a</p> <p><math>85 = 17 \times 5</math></p> <p><math>153 = 17 \times 9</math></p> <p>HCF of 85 and 153 = 17</p> <p>ATQ,</p> <p><math>85x - 153 = 17</math></p> <p><math>85x = 170</math></p> <p><math>x = 2</math></p>





Q. 30	<p>Henry Louis Vivian Derozio was the founder of the _____.</p> <p>a) Vedanta College </p> <p>b) Young Bengal Movement </p> <p>c) Aligarh Anglo College </p> <p>d) Swadeshi Movement </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p><b>Henry Louis Vivian Derozio</b> was a social reformer, poet, and educator who founded the <b>Young Bengal Movement</b> in the early <b>19th century</b>. He was a professor at <b>Hindu College (now Presidency University, Kolkata)</b> and inspired his students to embrace <b>rationalism, free thought, and progressive ideas</b>. The movement aimed at <b>challenging orthodox traditions, promoting women's rights, and encouraging intellectual debates</b> among the youth of Bengal.</p> <p><b>Other Options explained:</b></p> <ul style="list-style-type: none"><li>• <b>Vedanta College:</b> Founded by <b>Raja Ram Mohan Roy</b> to promote Western and Indian education.</li><li>• <b>Aligarh Anglo College:</b> Established by <b>Sir Syed Ahmad Khan</b>, which later became <b>Aligarh Muslim University (AMU)</b>.</li><li>• <b>Swadeshi Movement:</b> A nationalist movement advocating <b>economic self-sufficiency</b>, emerging during the partition of Bengal (1905).</li></ul>

Q. 31

The table below shows incomes (in rupees) earned by five employees of a company during the month of March 2019 and income sources.

Source/Name of Employee	Reeta	Seeta	Geeta	Neeta	Aneeta
Overtime	2,500	2,800	2,300	2,200	2,600
Arrears	4,500	4,800	4,900	5,300	5,600
Bonus	2,300	2,100	2,500	2,700	2,800
Salary	24,000	30,000	29,000	32,000	34,000

The total amount of arrears paid by the company during the given period is what percentage of the total amount of bonus paid during the given period?

- a) 302.42% 
- b) 402.42% 
- c) 102.42% 
- d) 202.42% 

Explanation:




The correct answer is: d

$$\text{Required percentage} = \frac{4500+4800+4900+5300+5600}{2300+2100+2500+2700+2800} \times 100$$

$$\Rightarrow \frac{25100}{12400} \times 100 \Rightarrow 202.42\%$$

Q. 32

Where is the headquarters of Food corporation of India located?

- a) Kolkata 
- b) New Delhi 
- c) Hyderabad 
- d) Bhubaneswar 

Explanation:

The correct answer is: b



**Explanation:**

The **Food Corporation of India (FCI)**, established in **1965** under the **Food Corporation Act, 1964**, has its **headquarters in New Delhi**. It operates under the **Ministry of Consumer Affairs, Food and Public Distribution**, ensuring **food security** across India.



Q. 33

The population of a town increases by 5% annually and its present population is 640000. What will its population be in 2 years' time?

a) 744880 b) 705600 c) 745880 d) 704600 **Explanation:**

The correct answer is: b



$$5\% = \frac{1}{20}$$

$$\text{Population after 2 years} = 640000 \times \frac{21}{20} \times \frac{21}{20} = 705600$$

Q. 34

What is the value of D, if  $A : C = B : D$  in the given table?





A	B	C	D
25	40	30	?





a) 45 b) 42 c) 56 d) 48 **Explanation:**





The correct answer is: d





Given,  $A : C = B : D$

$$\frac{25}{30} = \frac{40}{?} \Rightarrow ? = 48 \text{ (Ans)}$$

Q. 35	<p>Who recently inaugurated the indigenously developed automated battlefield surveillance system 'Sanjay'?</p> <p>a) Ajit Doval </p> <p>b) General Manoj Pande </p> <p>c) Rajnath Singh </p> <p>d) Amit Shah </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p><b>Defence Minister Rajnath Singh</b> inaugurated the <b>indigenously developed automated battlefield surveillance system 'Sanjay'</b> in <b>New Delhi</b> on <b>January 24, 2025</b>. This advanced system integrates inputs from <b>ground and aerial battlefield sensors</b>, processes them for accuracy, and provides a <b>Common Surveillance Picture</b> over the <b>Army Data Network &amp; Satellite Communication Network</b>.</p> <p><b>Key Features of 'Sanjay' Battlefield Surveillance System:</b></p> <ul style="list-style-type: none"><li>• Enhances <b>battlefield transparency</b> and supports <b>real-time decision-making</b>.</li><li>• Equipped with <b>state-of-the-art sensors</b> and <b>cutting-edge analytics</b>.</li><li>• Helps monitor <b>land borders</b>, prevent <b>intrusions</b>, and improve <b>situational awareness</b>.</li><li>• Developed <b>indigenously</b> by the <b>Indian Army and Bharat Electronics Limited (BEL)</b>.</li><li>• Will be inducted into <b>operational Brigades, Divisions, and Corps</b> in <b>three phases</b> from <b>March to October 2025</b>.</li></ul>





Q. 36	<p><b>Question:</b> Four magicians, U, V, W and X, will perform at a theatre on four consecutive days, each on a different day but not in the same order. On which day will W perform?</p> <p><b>Statements:</b></p> <p>1. Show starts on the 1st of Feb and X performs on the next day.</p> <p>2. U doesn't perform on the 3rd of Feb; one of them performs between U and V.</p> <p>a) 1 alone is sufficient while 2 alone is not sufficient to answer the question. </p> <p>b) Both 1 and 2 together are sufficient to answer the question. </p> <p>c) Either 1 or 2 is sufficient to answer the question. </p> <p>d) 2 alone is sufficient while 1 alone is not sufficient to answer the question. </p>
Explanation:	<p>The correct answer is: <b>Both 1 and 2 together are sufficient to answer the question.</b></p> <p><b>Explanation:</b></p> <ol style="list-style-type: none"> <li>From <b>Statement 1</b>, we know X performs on <b>2nd Feb</b>, but this alone is insufficient to determine when W performs.</li> <li>From <b>Statement 2</b>, we know U doesn't perform on <b>3rd Feb</b>, and there is one day between U and V. This by itself is also insufficient to determine when W performs.</li> <li><b>Combining Statements 1 and 2</b>, we can deduce: <ul style="list-style-type: none"> <li>X performs on <b>2nd Feb</b>.</li> <li>U must perform on <b>1st Feb</b> (since U cannot perform on 3rd Feb, and there is a day between U and V).</li> <li>V performs on <b>3rd Feb</b>.</li> <li>The only remaining day for W is <b>4th Feb</b>.</li> </ul> </li> </ol> <p>Thus, both statements together are needed to answer the question.</p>

Q. 37	<p>In 1857, Maulvi Ahmadullah Shah fought in the famous ____ in which the British forces under Henry Lawrence were defeated.</p> <p>a) Battle of Chinhat </p> <p>b) Battle of Kanpur </p> <p>c) Battle of Sikandar Bagh </p> <p>d) Battle of Aarah </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p>The <b>Battle of Chinhat</b>, fought on <b>30 June 1857</b>, was a significant event in the <b>Revolt of 1857</b>. <b>Maulvi Ahmadullah Shah</b>, one of the most influential leaders of the rebellion, led the Indian forces against the British troops commanded by <b>Henry Lawrence</b> near <b>Lucknow</b>.</p> <ul style="list-style-type: none"><li>• The <b>Indian rebels</b>, using superior tactics and local knowledge, decisively defeated the <b>British forces</b>.</li><li>• Henry Lawrence was forced to retreat to the <b>British Residency in Lucknow</b>, where he later succumbed to injuries sustained during the siege.</li><li>• This victory further encouraged the local resistance against British rule, making Maulvi Ahmadullah Shah a key figure in the revolt.</li></ul>

Q. 38	<p>In a 600 m race, A gave B a head start of 5 seconds and still won the race by 20 seconds. If the ratio of the speed of A to the speed of B is 2 : 1, then the speed of B is:</p> <p>a) 21 m/sec </p> <p>b) 12 m/sec </p> <p>c) 10 m/sec </p> <p>d) 18 m/sec </p>									
Explanation:	<p>Length of race = 600 m</p> <table><tr><td></td><td>A</td><td>B</td></tr><tr><td>Speed</td><td>2</td><td>1</td></tr><tr><td>Time</td><td>1</td><td>2</td></tr></table> <p>Difference in time = 2 - 1 = 1 1 Unit = (5 + 10) = 25 seconds Time taken by B = 2 × 25 = 50 seconds</p> <p>Speed of B = <math>\frac{600}{50} = 12 \text{ m/s}</math></p>		A	B	Speed	2	1	Time	1	2
	A	B								
Speed	2	1								
Time	1	2								

Q. 39

A, B, C, D, E and F live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it, number 2 and so on till the topmost floor is numbered 6. D lives on a floor which is a prime number. The product of floors on which D and A live is 8. E lives immediately above B. The sum of floors on which A and C lives is 7. How many people live between D and E?





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





The correct answer is: c

Explanation:

6 → (E)  
5 → (B)  
4 → (A)  
3 → (C)  
2 → (D)  
1 → (F)





Three people live  
between D and E.

Q. 40	<p>South Asian leaders signed the SAARC Charter at the first summit in _____ in the year 1985.</p> <p>a) Colombo </p> <p>b) Dhaka </p> <p>c) Delhi </p> <p>d) Thimphu </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>The <b>South Asian Association for Regional Cooperation (SAARC)</b> was formally established with the signing of the <b>SAARC Charter</b> at its <b>first summit in Dhaka, Bangladesh on December 8, 1985</b>. The founding members included <b>India, Bangladesh, Pakistan, Sri Lanka, Nepal, Bhutan, and the Maldives</b> (Afghanistan joined later in 2007).</p> <p>Over the years, SAARC has facilitated agreements like the <b>SAFTA (South Asian Free Trade Agreement)</b> and <b>regional disaster response mechanisms</b>. However, challenges such as <b>political tensions between member nations</b> and <b>limited implementation of policies</b> have hindered its progress.</p>

Q. 41	<p>A statement followed by two arguments I and II are given. Study the statements and arguments carefully, and choose the appropriate answer from the given alternatives.</p> <p><b>Statement:</b></p> <p>Apartment complexes have decided to impose heavy fines on residents who do not segregate dry waste and wet waste.</p> <p><b>Argument:</b></p> <p>I. The government has made it mandatory for all house owners to segregate wet waste and dry waste.</p> <p>II. To facilitate waste segregation, separate dustbins for dry waste and wet waste have been provided in all apartments.</p> <p>a) Argument I does not support the statement, while argument II supports the statement. </p> <p>b) Both the arguments I and II do not support the statement. </p> <p>c) Both the arguments I and II support the statement. </p> <p>d) Argument II does not support the statement, while the argument. supports the statement. </p>
Explanation:	<p>The correct answer is: c</p> <p>The correct answer is: <b>Both the arguments I and II support the statement.</b></p> <p><b>Explanation:</b></p> <ol style="list-style-type: none"> <li><b>Argument I:</b> The government mandating waste segregation provides a valid reason for apartment complexes to impose heavy fines. By aligning their actions with government regulations, apartment complexes ensure compliance. Hence, <b>Argument I supports the statement.</b></li> <li><b>Argument II:</b> Providing separate dustbins facilitates waste segregation, making it easier for residents to comply. Imposing fines acts as a deterrent for those who do not follow the rules. Therefore, <b>Argument II also supports the statement.</b></li> </ol>

Q. 42	<p>The roots of the equation <math>y^2 - \sqrt{5}y - y + \sqrt{5} = 0</math> are:</p> <p>a) <math>-\sqrt{5}; -1</math> ✗</p> <p>b) <math>\sqrt{5}; 1</math> ✓</p> <p>c) <math>\sqrt{5}; -1</math> ✗</p> <p>d) <math>-\sqrt{5}; 1</math> ✗</p>
Explanation:	<p>The correct answer is: b</p> $y^2 - \sqrt{5}y - y + \sqrt{5} = 0$ $y(y - \sqrt{5}) - 1(y - \sqrt{5}) = 0$ $(y - 1)(y - \sqrt{5}) = 0$ $\therefore y = 1, y = \sqrt{5}$
Q. 43	<p>Which of the following Pacts was signed on 5 March 1931?</p> <p>a) Poona Pact ✗</p> <p>b) Gandhi-Irwin Pact ✓</p> <p>c) Rajah-Moonje Pact ✗</p> <p>d) Lucknow Pact ✗</p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>The <b>Gandhi-Irwin Pact</b> was signed on <b>5 March 1931</b> between <b>Mahatma Gandhi</b> and <b>Lord Irwin, the then Viceroy of India</b>. It was a political agreement aimed at ending the <b>Civil Disobedience Movement</b> and paving the way for Indian leaders to participate in the <b>Second Round Table Conference</b> in London.</p> <p><b>Key Terms of the Pact:</b></p> <ul style="list-style-type: none"> <li>• The <b>British government</b> agreed to release <b>political prisoners</b> arrested during the Civil Disobedience Movement.</li> <li>• The <b>confiscated properties of the freedom fighters</b> were to be restored.</li> <li>• The British <b>allowed peaceful protests</b> and <b>permitted the use of salt by Indians</b>, though the Salt Tax remained in place.</li> <li>• In return, Gandhi agreed to <b>withdraw the Civil Disobedience Movement</b> and participate in the <b>Second Round Table Conference</b>.</li> </ul>



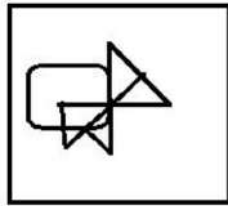
<b>Q. 44</b>	<p><b>Find the missing number at?</b></p> <p>57, 62, 49 = 24</p> <p>29, 43, 19 = 13</p> <p>42, 55, 36 = ?</p> <p>a) 17 </p> <p>b) 15 </p> <p>c) 19 </p> <p>d) 27 </p>
<b>Explanation:</b>	<p>The correct answer is: c</p> <ul style="list-style-type: none"><li>• <math>\frac{57 + 62 + 49}{7} = 24</math></li><li>• <math>\frac{29 + 43 + 19}{7} = 13</math></li><li>• <math>\frac{42 + 55 + 36}{7} = 19</math></li></ul>

Q. 45

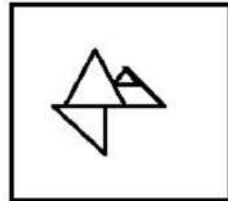
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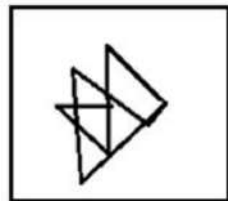
a)



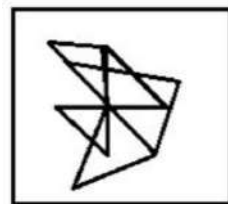
b)



c)

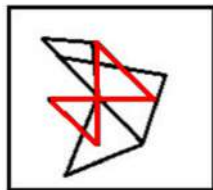
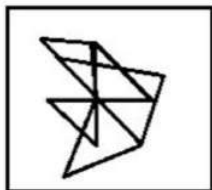






d)



Explanation:

The correct answer is: d



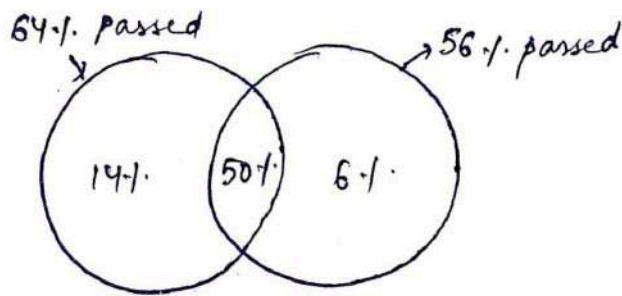
Q. 46	<p>Which of the following factors can lead to an increase in the money supply in India?</p> <p>a) Decrease in government spending </p> <p>b) Increase in bank lending </p> <p>c) Increase in interest rates </p> <p>d) Increase in bank reserve requirements </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>An increase in money supply refers to the expansion of currency circulation and available credit in the economy. Several factors influence this, including bank lending and central bank policies.</p> <p>An <b>increase in bank lending</b> leads to <b>higher credit creation</b>, putting more money into circulation in the economy. When banks provide loans to businesses and individuals, the <b>money supply expands</b>, as those funds are used for investments, spending, and economic growth.</p> <p>How Bank Lending Increases Money Supply:</p> <ul style="list-style-type: none"><li>• When banks lend money to businesses or individuals, the funds enter circulation, allowing for higher spending and investment.</li><li>• This expands the credit creation cycle, where money deposited in banks is re-lent to borrowers.</li><li>• As borrowing rises, more money is created through fractional reserve banking.</li></ul>

Q. 47

In an examination, 36% students failed in one subject and 44% failed in the other subject, among these 30% failed in both the subjects. If total number of students is 4500 then how many students passed only in one subject?

- a) 2250 ✗  
 b) 900 ✓  
 c) 1750 ✗  
 d) 1050 ✗

Explanation:



Total passed student

$$\Rightarrow 100\% - 30\% = 70\%$$

$$\begin{aligned} \text{Students passed in both} \\ \text{the subjects} &= (64 + 56) - 70\% \\ &= 50\% \end{aligned}$$

$$\begin{aligned} \text{No. of students passed only} \\ \text{in one subject} &= 14\% + 6\% \\ &= 20\% \end{aligned}$$

$$\Rightarrow 4500 \times 20\% = 900 \text{ (Ans)}$$

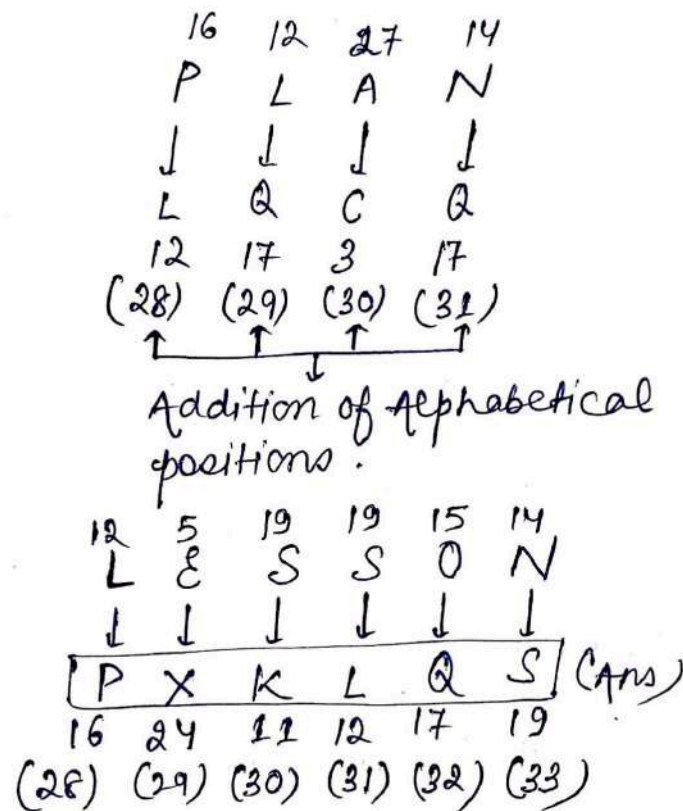
Q. 48









In a certain code language, PLAN is written as LQCQ. How will LESSON be written in the same language?





- a) PXKLSQ ✗  
 b) PXKLON ✗  
 c) PXKLQS ✓  
 d) PXACZQ ✗

The correct answer is: c

Explanation:



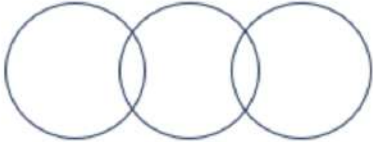

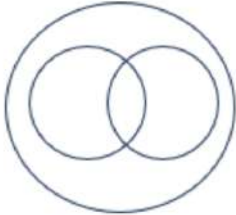

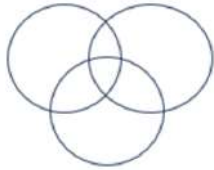

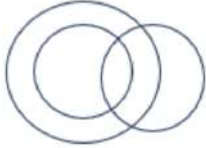

Q. 49	<p>Which portal has been recently launched by the Central Government for e-auction of properties?</p> <p>a) BAANKNET </p> <p>b) eSellNet </p> <p>c) DigiAuction </p> <p>d) eBidsIndia </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• BAANKNET, which stands for Bank Asset Auction Network, is a revamped e-auction portal launched to streamline the listing and auctioning of banks' assets.</li> <li>• This portal was launched to enhance transparency and efficiency in disposing of Public Sector Banks' non-performing assets.</li> <li>• It is designed to be a one-stop destination for buyers and investors looking to discover and bid on a wide range of properties.</li> <li>• BAANKNET incorporates automated KYC tools and secure payment gateways to facilitate a transparent and effective auction process.</li> </ul>
Q. 50	<p>The diameters of the bases of two cones are equal. If their slant heights are in the ratio of 3: 4, then what will the ratio of their curved surface areas be?</p> <p>a) 4 : 3 </p> <p>b) 3 : 4 </p> <p>c) 16 : 9 </p> <p>d) 9 : 16 </p>
Explanation:	<p>The correct answer is: b</p> <p>Diameters are equal so the radius will also be equal</p> <p>Ratio of curved surface area = <math>\pi r l_1 : \pi r l_2 = 3 : 4</math></p>

Q. 51	<p>People who wear bifocal lenses have ____.</p> <p>a) Myopia </p> <p>b) Cataract </p> <p>c) Presbyopia </p> <p>d) Hypermetropia </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p><b>Presbyopia</b> is an age-related condition where the <b>eye's lens loses flexibility</b>, making it difficult to focus on <b>near objects</b>. People with <b>presbyopia</b> typically require <b>bifocal lenses</b>, which combine two different lens powers—one for <b>near vision</b> (reading) and another for <b>distance vision</b>.</p> <p><b>Other options explained:</b></p> <ul style="list-style-type: none"><li>• <b>Myopia (Nearsightedness):</b> Causes difficulty in seeing <b>distant objects</b>, but it is corrected with <b>concave lenses</b>.</li><li>• <b>Cataract:</b> A clouding of the eye's lens, leading to <b>blurred vision</b>, which is treated with <b>surgery</b>.</li><li>• <b>Hypermetropia (Farsightedness):</b> Causes difficulty in seeing <b>near objects</b>, but is corrected with <b>convex lenses</b>.</li></ul>

Q. 52

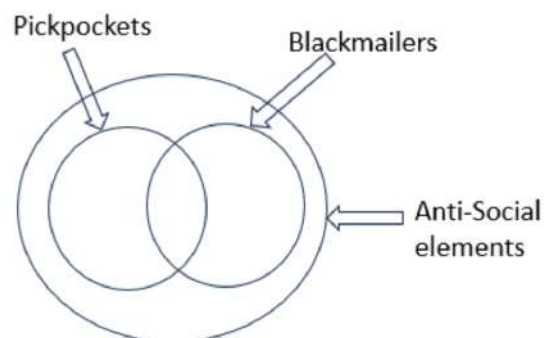
The question given below contains three groups of things. You are to choose from the following four options, the one that depicts the correct relationship among the groups of things in each question.

Anti-social elements, Pickpockets, Blackmailers

- a)  
- b)  
- c)  
- d)  





The correct answer is: b





Explanation:



The **overlap** between the two inner circles implies that **some Pickpockets are also Blackmailers**, and vice versa.



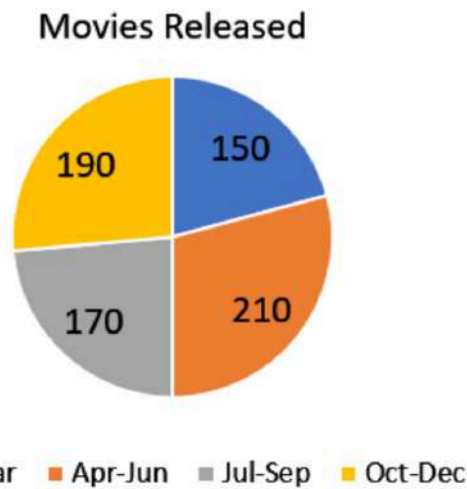
Q. 53	<p>Death valley is a desert valley in the _____ that is the hottest and driest place with a world record highest air temperature of 134° F.</p> <p>a) Mojave desert of California </p> <p>b) Atacama Desert of Chile </p> <p>c) Lut Desert of Iran </p> <p>d) Sahara Desert of Africa </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p><b>Death Valley</b>, located in the <b>Mojave Desert of California, USA</b>, is the <b>hottest and driest place on Earth</b>. It holds the <b>world record</b> for the highest air temperature ever recorded—<b>134°F (56.7°C)</b> on <b>July 10, 1913</b>, at <b>Furnace Creek</b>.</p> <p><b>Explanation of Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>Atacama Desert of Chile:</b> <ul style="list-style-type: none"> <li>◦ Located in <b>South America</b>, stretching across northern <b>Chile</b>.</li> <li>◦ One of the <b>driest places on Earth</b>, with some areas receiving <b>no recorded rainfall</b> for centuries.</li> <li>◦ Known for its <b>Mars-like terrain</b>, often used for <b>astrobiological research</b>.</li> </ul> </li> <li>• <b>Lut Desert of Iran:</b> <ul style="list-style-type: none"> <li>◦ Located in <b>southeastern Iran</b> and is famous for extreme <b>ground temperatures</b>.</li> <li>◦ Holds the <b>record for the highest surface temperature</b> ever recorded—<b>159.3°F (70.7°C)</b> by satellite measurements.</li> <li>◦ Unlike <b>Death Valley</b>, this measurement is <b>ground temperature</b>, not <b>air temperature</b>.</li> </ul> </li> <li>• <b>Sahara Desert of Africa:</b> <ul style="list-style-type: none"> <li>◦ The <b>largest hot desert</b> in the world, covering <b>North Africa</b>.</li> <li>◦ Known for its <b>shifting dunes, rocky plateaus, and extreme climate</b>.</li> <li>◦ While it reaches <b>high temperatures</b>, <b>Death Valley</b> still surpasses it in recorded <b>air temperature extremes</b>.</li> </ul> </li> </ul>

Q. 54	<p>A and B working alone can finish a task in 12 and 16 days respectively. In how many days can the task be finished if they work for one day each alternatively, and A begins the work?</p> <p>a) <math>13\frac{1}{3}</math> days </p> <p>b) <math>13\frac{2}{3}</math> days </p> <p>c) <math>12\frac{2}{3}</math> days </p> <p>d) <math>12\frac{1}{3}</math> days </p>
Explanation:	<p>The correct answer is: b</p> <p><math>A \rightarrow 12</math> days</p> <p><math>B \rightarrow 16</math> days</p> <p>Total work <math>\rightarrow 48</math> unit (LCM of 12 and 16)</p> <p>Efficiency of A <math>\rightarrow 4</math></p> <p>Efficiency of B <math>\rightarrow 3</math></p> <p>2 days work A+B <math>\rightarrow 7</math> unit</p> <p>12 days work A+B <math>\rightarrow 42</math> unit</p> <p>13 days work by A <math>\rightarrow 46</math> unit</p> <p>Remaining 2 unit work will be done by B in    days</p> <p>Total time taken by A+B = <math>13\frac{2}{3}</math> days</p>

Q. 55

The following pie chart represents the data of movies released in a city throughout a year.

The combined angle made by Jan-Mar and Jul-Sep is \_\_\_\_\_ than the combined angle made by Apr-Jun and Oct-Dec.



a) 40° less ✓

b) 80° more ✗

c) 80° less ✗

d) 40° mores ✗

**Explanation:**

The correct answer is: a





The combined angle made by Jan-Mar and Jul-Sep is

$$\Rightarrow \frac{360}{720} \times (150 + 170) = 160^\circ$$

The combined angle made by Apr-Jun and Oct-Dec is

$$\Rightarrow \frac{360}{720} \times (190 + 210) = 200^\circ$$

Therefore, the combined angle made by Jan-Mar and Jul-Sep is **40° less** than the combined angle made by Apr-Jun and Oct-Dec.

Q. 56	<p>The Reserve Bank of India has allowed settlement of trade transactions with Maldives in local currencies, what is the currency of Maldives?</p> <p>a) Baht </p> <p>b) Rufiyaa </p> <p>c) Dinar </p> <p>d) Ringgit </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>The official currency of <b>Maldives</b> is the <b>Maldivian Rufiyaa (MVR)</b>. It is subdivided into <b>100 laari</b> and is issued by the <b>Maldives Monetary Authority (MMA)</b>. The name "Rufiyaa" is derived from the <b>Hindi word "Rupiyaa,"</b> reflecting historical trade influences.</p> <p><b>Other options explained:</b></p> <ul style="list-style-type: none"><li>• <b>Baht:</b> The currency of <b>Thailand</b>.</li><li>• <b>Dinar:</b> Used in several Middle Eastern and North African countries.</li><li>• <b>Ringgit:</b> The currency of <b>Malaysia</b>.</li></ul>

Q. 57

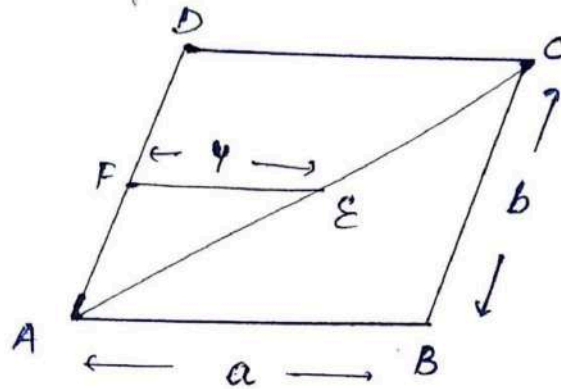
In a parallelogram ABCD, the length of the line joining the midpoints of AD and AC is 4 units. If the perimeter of the parallelogram is 32 units, then find the length of AD.

a) 8 units ✓

b) 7 units ✗

c) 9 units ✗

d) 6 units ✗



$$2(a+b) = 32 \text{ units}$$

$$a+b = 16 \text{ units}$$

Explanation:

In  $\triangle ADC$ ,

$$\Rightarrow CD = 2 \times EF \text{ (Mid-point theorem)}$$

$$\Rightarrow CD = 2 \times 4 = 8$$

$$\therefore a+b = 16$$

$$\Rightarrow 8+b = 16$$

$$\Rightarrow b = 8 \text{ units}$$

$\therefore$  length of AD is 8 units.

Q. 58

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

Statements:

All villages are cities.

All cities are countries.

No country is state.

Conclusions:

(I) No city is state.

(II) All villages are countries.

a) Both conclusion I and conclusion II follow. ✓

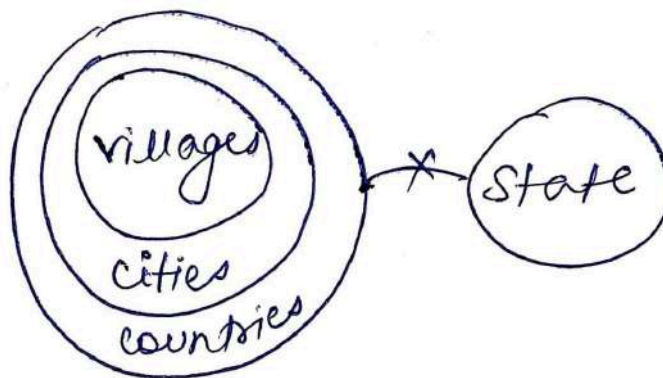
b) Only conclusion I follows. ✗

c) Neither conclusion I nor II follows. ✗









d) Only conclusion II follows. ✗





Explanation:

The correct answer is: a



Both conclusion I and conclusion II follows.

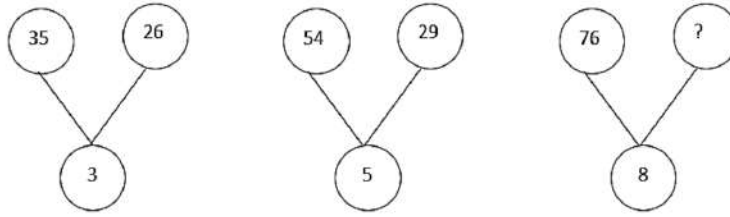


Q. 59	<p>According to IQ Air's annual World Air Quality Report 2024, what is the rank of India in air pollution?</p> <p>a) 5<sup>th</sup> </p> <p>b) 3<sup>rd</sup> </p> <p>c) 1<sup>st</sup> </p> <p>d) 7<sup>th</sup> </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p>According to the <b>IQAir World Air Quality Report 2024</b>, India ranked <b>5th</b> among the most polluted countries globally, with an average <b>PM2.5 concentration of 50.6 <math>\mu\text{g}/\text{m}^3</math></b>. This level is <b>more than 10 times higher</b> than the <b>WHO guideline of 5 <math>\mu\text{g}/\text{m}^3</math></b>.</p>
Q. 60	<p>A statement is followed by two conclusions, numbered I and II. Identify which of the conclusions is/are true based on the given statements.</p> <p><b>Statement:</b>  <math>G \leq R &gt; O = W \geq N</math></p> <p><b>Conclusions:</b>          I. <math>R &gt; N</math>          II. <math>R = W</math></p> <p>a) Both I and II are true </p> <p>b) Neither I nor II is true </p> <p>c) Only II is true </p> <p>d) Only I is true </p>
Explanation:	<p>The correct answer is: <b>Only I is true.</b></p> <p><b>Explanation:</b></p> <p>From the statement <math>G \leq R &gt; O = W \geq N</math>, we analyse the given relationships step by step:</p> <ol style="list-style-type: none"> <li><b>Conclusion I: <math>R &gt; N</math></b> From the statement, <math>R &gt; O</math>, and <math>O = W</math>, so <math>R &gt; W</math>. Also, <math>W \geq N</math>. Therefore, <math>R &gt; N</math> is logically true.</li> <li><b>Conclusion II: <math>R = W</math></b> From the statement, <math>R &gt; O</math>, and <math>O = W</math>. This implies <math>R &gt; W</math>, not <math>R = W</math>. Hence, this conclusion is false.</li> </ol>

Q. 61	<p>Which state government has recently launched the Mukhyamantri Balika Samriddhi Yojana and Mukhyamantri Kanya Atmanirbhar Yojana?</p> <p>a) Assam </p> <p>b) Manipur </p> <p>c) Tripura </p> <p>d) Jharkhand </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p>The <b>Tripura state government</b> recently launched the <b>Mukhyamantri Balika Samriddhi Yojana</b> and <b>Mukhyamantri Kanya Atmanirbhar Yojana</b> to empower girls in the state.</p> <p><b>Mukhyamantri Balika Samriddhi Yojana:</b></p> <ul style="list-style-type: none"><li>• Provides <b>financial assistance</b> to newborn girl children from <b>economically weaker families</b>.</li><li>• The government deposits <b>₹50,000</b> in the form of a bond, which grows to <b>₹10 lakh</b> when the girl turns <b>18 years old</b>.</li><li>• The funds can be used for <b>education and other essential needs</b>.</li></ul> <p><b>Mukhyamantri Kanya Atmanirbhar Yojana:</b></p> <ul style="list-style-type: none"><li>• Aims to support <b>female students</b> by providing <b>scooters</b> to <b>140 meritorious girl students</b> appearing for <b>Tripura board, CBSE, and ICSE exams</b>.</li><li>• Encourages <b>self-reliance and mobility</b> among young women.</li></ul>



Q. 62

A set of figures carrying certain numbers is given. The numbers in each set follow a similar pattern. Based on that pattern, find the missing number.

a) 32 b) 12 c) 59 d) 48 **Explanation:**

The correct answer is: b

- $35 - 26 = (3)^2 \Rightarrow 9$
- $54 - 29 = (5)^2 \Rightarrow 25$
- $76 - 12 = (8)^2 \Rightarrow 64$

Q. 63

For two events A and B,  $P(A) = 1/5$ ,  $P(B) = 1/4$  and  $P(A \cup B) = 1/3$ .  $P(A/B) = ?$ 

a)  $\frac{8}{17}$  ✗

b)  $\frac{9}{16}$  ✗

c)  $\frac{5}{13}$  ✗

d)  $\frac{7}{15}$  ✓

Explanation:

$$P(A \cap B) = P(A) + P(B) - P(A \cup B)$$

$$P(A \cap B) = \frac{1}{5} + \frac{1}{4} - \frac{1}{3}$$

$$P(A \cap B) = \frac{7}{60}$$

$$\therefore P(A/B) = \frac{P(A \cap B)}{P(B)}$$

$$= \frac{\frac{7}{60}}{\frac{1}{4}} = \frac{7}{15}$$

Q. 64

Six letters K, L, M, N, O and P are written on different faces of a dice. Three positions of this dice are shown in the figure. Find the letter on the face opposite to M.



- a) K ☒
- b) L ☒
- c) P ☒
- d) N ☒

Explanation:

The correct answer is: d

The opposites of the given dice are O – L, M – N, and P – K.

Q. 65

The cell wall of bacteria is made up of:

- a) Peptidoglycan ☒
- b) Cellulose ☒
- c) Glycogen ☒
- d) Peptone ☒

The correct answer is: A





**Explanation:**

The **cell wall of bacteria** is primarily composed of **peptidoglycan**, which provides **structural support** and **shape** to bacterial cells. It acts as a protective layer, preventing the cell from bursting due to **osmotic pressure**. Peptidoglycan is made up of **sugar derivatives (N-acetylglucosamine and N-acetylmuramic acid)** and **short peptide chains**, which form a **rigid mesh-like structure**.





**Explanation of Other Options:**

Explanation:

- **Cellulose:**
  - A structural polysaccharide found in **plant cell walls**.
  - Provides **rigidity and support** to plant cells.
- **Glycogen:**
  - A **storage carbohydrate** found in **animals, fungi, and some bacteria**.
  - Acts as an **energy reserve** rather than a structural component.
- **Peptone:**
  - A protein **digest** used in **microbial culture media** to provide nitrogen for growth.
  - Helps support **bacterial metabolism in lab conditions**.

Q. 66	<p>Sohan and Mohan start from the school with a speed of 3.5 km/hr and 4 km/hr. What time will they take to be 1.5 km apart if they start in the same direction?</p> <p>a) 1 hour </p> <p>b) 90 min </p> <p>c) 12 min </p> <p>d) 3 hours </p>
Explanation:	<p>The correct answer is: d</p> <p>Speed of Sohan = 3.5 km/h</p> <p>Speed of Mohan = 4 km/h</p> <p>Relative speed when they move in the same direction = <math>4 - 3.5 = 0.5</math> km/h</p> <p>Now,</p> <p>Time = <math>\frac{1.5}{0.5} = 3 \text{ hr}</math></p>




Q. 67	<p>If 15th August 2011 falls on a Monday, then what day of the week will 18th September 2011 be?</p> <p>a) Wednesday </p> <p>b) Friday </p> <p>c) Saturday </p> <p>d) Sunday </p>
Explanation:	<p>The correct answer is: d</p> <p>=&gt; No. of days between 15<sup>th</sup> August 2011 and 18<sup>th</sup> September 2011 are 34.</p> <p>=&gt; No. of odd days = <math>\frac{34}{7} = 6</math></p> <p>∴ Monday + 6 = Sunday</p> <p>Therefore, 18<sup>th</sup> September 2011 will be Sunday.</p>

Q. 68	<p>Which of the following groups represents essential amino acid?</p> <p>a) Alanine, isoleucine, leucine, lysine ✗</p> <p>b) Glycine, proline, serine, and tyrosine ✗</p> <p>c) Alanine, arginine, asparagine, aspartic acid ✗</p> <p>d) Histidine, isoleucine, leucine, lysine ✓</p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>Essential amino acids are those that <b>cannot be synthesized</b> by the human body and must be <b>obtained from food</b>. The group <b>histidine, isoleucine, leucine, and lysine</b> contain <b>essential amino acids</b>, meaning they are <b>crucial for protein synthesis, muscle repair, and metabolic functions</b>.</p>

Q. 69	<p>When did India win the first World Cup title in Hockey?</p> <p>a) 1975 ✓</p> <p>b) 1978 ✗</p> <p>c) 1971 ✗</p> <p>d) 1982 ✗</p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p>India won its <b>first and only Hockey World Cup title</b> in <b>1975</b>, defeating <b>Pakistan 2-1</b> in the final held in <b>Kuala Lumpur, Malaysia</b>. This victory was a historic moment for Indian hockey, marking the country's return to international dominance after a long gap.</p>

Q. 70

The cost price (including making charges) of a necklace is ₹3,60,000, and Amit wants to make 24% profit by selling it. At the time of the sale, he declares a discount of 10% on the making charges of the necklace. If making charges are ₹25,000, what is the marked price of the necklace?

- a) ₹4,42,600 
- b) ₹4,48,900 
- c) ₹4,36,800 
- d) ₹4,54,300 

Explanation:





$$\text{SP of Necklace} = \frac{3,60,000 \times 124}{100}$$

$$\Rightarrow 446,400$$

$$\begin{aligned} \text{Discount on the Making} \\ \text{Charges} &= 25,000 \times 10\% \\ &= \textcircled{2500} - \end{aligned}$$

$$\therefore \text{Marked Price of the necklace} = 446,400 + 2500$$

$$\text{₹}4,48,900 \text{ (Ans)}$$

Q. 71	<p>Technetium, the first artificially produced element used in many medical diagnostic imaging scans, is found in which group of the periodic table?</p> <p>a) Group 7 </p> <p>b) Group 19 </p> <p>c) Group 12 </p> <p>d) Group 14 </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p><b>Technetium (Tc)</b> is an element in <b>Group 7</b> of the <b>periodic table</b>, along with manganese (Mn), rhenium (Re), and bohrium (Bh). It was the <b>first artificially produced element</b>, discovered in <b>1937</b>. It is widely used in <b>medical imaging</b>, particularly in <b>radioactive tracers</b> for diagnostic scans such as <b>technetium-99m</b> for <b>SPECT imaging</b>.</p> <p>Technetium has atomic number <b>43</b> and atomic mass of <b>99</b> atomic mass unit (amu).</p>

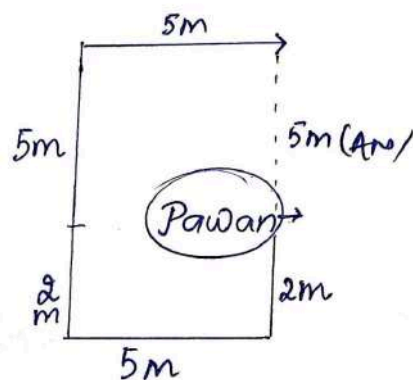
Q. 72

Pawan is standing facing the east. He takes a right turn and walks for 2m. Again, takes a right turn and walks for 5m. Then takes a right turn again to walk for 7m. Finally, he takes a right turn and walks for 5m. How far is he from the starting point?

- a) 7 m ☒
- b) 9 m ☒
- c) 2 m ☒
- d) 5 m ☒

Explanation:

The correct answer is: d



Pawan is standing  
'5 km' from the  
starting point.

Q. 73

An irrational number between 3 and 5 is:

- a)  $\sqrt{27}$  ☒
- b)  $\sqrt{17}$  ☒
- c)  $\sqrt{5}$  ☒
- d)  $\sqrt{3}$  ☒









Explanation:





The correct answer is: b





An irrational number between 3 and 5 is:  $\sqrt{17}$

$\sqrt{17}$  cannot be expressed as a fraction — it has a non-repeating, non-terminating decimal expansion.







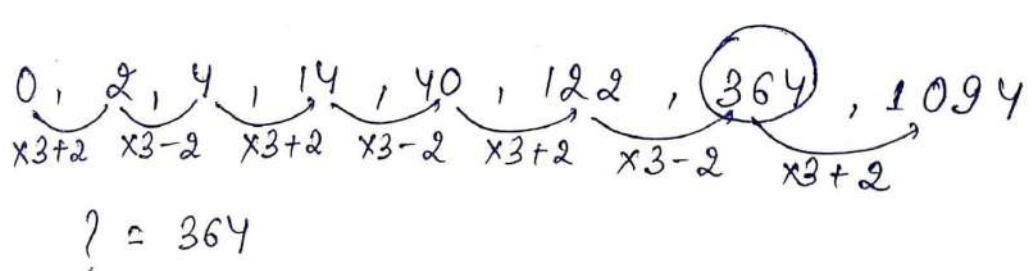
Q. 74	<p>A _____ is an image that fills the screen whenever the computer is left idle for some time.</p> <p>a) system tray </p> <p>b) shortcut menu </p> <p>c) Wallpaper </p> <p>d) screen saver </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>A <b>screen saver</b> is an image or animation that appears on the screen when a computer is <b>left idle</b> for a certain period. Originally designed to <b>prevent screen burn-in</b> on older CRT monitors, modern screen savers are used for <b>security (locking the screen)</b>, aesthetics, or entertainment.</p>
Q. 75	<p>If <math>5x = \sec\theta</math> and <math>5/x = \tan\theta</math>, then <math>x^2 + \frac{1}{x^2}</math> is equal to:</p> <p>a) <math>\frac{1}{25}</math> </p> <p>b) <math>\frac{\sqrt{2501}}{25}</math> </p> <p>c) <math>\frac{\sqrt{2501}}{625}</math> </p> <p>d) 25 </p>
Explanation:	$25x^2 - \frac{25}{x^2} = \sec^2\theta - \tan^2\theta$ $25\left(x^2 - \frac{1}{x^2}\right) = 1$ $x^2 - \frac{1}{x^2} = \frac{1}{25}$ $x^2 + \frac{1}{x^2} = \sqrt{\left(\frac{1}{25}\right)^2 + 4}$ $= \frac{\sqrt{2501}}{25}$





Q. 76	<p>Choose the correct pair from the following options.</p> <p>a) Sixth Five-Year Plan – Rajiv Gandhi </p> <p>b) Fifth Five-Year Plan – Indira Gandhi </p> <p>c) Fourth Five-Year Plan – Jawaharlal Nehru </p> <p>d) Seventh Five-Year Plan – PV Narasimha Rao </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>The <b>Fifth Five-Year Plan (1974-1978)</b> was launched during the tenure of <b>Prime Minister Indira Gandhi</b>. This plan focused on <b>poverty alleviation (Garibi Hatao), economic growth, and self-reliance</b>. It emphasized policies for <b>employment generation, agricultural growth, and heavy industrial expansion</b>.</p> <p><b>Other options explained:</b></p> <ul style="list-style-type: none"> <li>• <b>Sixth Five-Year Plan – (1980-1985)</b> was introduced under <b>Indira Gandhi's leadership</b>, and Rajiv Gandhi became Prime Minister in 1984, during the last year of this plan.</li> <li>• <b>Fourth Five-Year Plan – (1969-1974)</b> was implemented under <b>Indira Gandhi</b>, not Nehru (who passed away in 1964).</li> <li>• <b>Seventh Five-Year Plan – (1985-1990)</b> was launched under <b>Rajiv Gandhi</b>, and PV Narasimha Rao became Prime Minister only in <b>1991</b>.</li> </ul>

Q. 77	<p>Some words are given which are related in a certain way. Establish the similar relationship among the words given in the alternatives and choose the correct option:</p> <p>Table : Furniture : Chair</p> <p>a) Stationery : Pen : Pencil </p> <p>b) Cup : Crockery : Frying-pan </p> <p>c) Curtain : Garment : Shirt </p> <p>d) Man : Mammal : Whale </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>The analogy in the given example <b>Table : Furniture : Chair</b> establishes the following relationship:</p> <ul style="list-style-type: none"> <li>• <b>Furniture</b> is the category.</li> <li>• <b>Table</b> and <b>Chair</b> are items that belong to this category.</li> </ul> <p>Now, analysing the option <b>Man : Mammal : Whale</b></p> <ul style="list-style-type: none"> <li>• <b>Mammal</b> is the category.</li> <li>• <b>Man</b> and <b>Whale</b> are specific members of this category, just as <b>Table</b> and <b>Chair</b> are specific members of the <b>Furniture</b> category.</li> </ul>

Q. 78	<p>What is the third proportion to 12 and 30?</p> <p>a) 75 </p> <p>b) 750 </p> <p>c) 360 </p> <p>d) 150 </p>
Explanation:	<p>The correct answer is: a</p> <p>Third proportion = <math>\frac{12}{30} = \frac{30}{c}, c = 75</math></p>

<p><b>Q. 79</b></p>	<p><b>Find the missing term in the following series:</b></p> <p>0, 2, 4, 14, 40, 122, _____, 1094</p> <p>a) 364    ✓</p> <p>b) 202    ✗</p> <p>c) 268    ✗</p> <p>d) 368    ✗</p>
<p><b>Explanation:</b></p>	<p>The correct answer is: a</p>  <p>0, 2, 4, 14, 40, 122, 364, 1094</p> <p><math>\times 3+2</math> <math>\times 3-2</math> <math>\times 3+2</math> <math>\times 3-2</math> <math>\times 3+2</math> <math>\times 3-2</math> <math>\times 3+2</math></p> <p>? = 364</p>
<p><b>Q. 80</b></p>	<p><b>If the arithmetic mean of 16, 18, 15, 17, p and 14 is 17, then the value of p is:</b></p> <p>a) 22    ✓</p> <p>b) 23    ✗</p> <p>c) 21    ✗</p> <p>d) 24    ✗</p>
<p><b>Explanation:</b></p>	<p>The correct answer is: a</p> <p>Arithmetic mean = <math>\frac{16+18+15+17+p+14}{6} = 17</math></p> <p>= <math>80 + p = 102,</math></p> <p><math>p = 22</math></p>

Q. 81	<p>When was the National Investment and Infrastructure Fund established?</p> <p>a) 2017 </p> <p>b) 2014 </p> <p>c) 2015 </p> <p>d) 2016 </p>
Explanation:	<p>The correct answer is: c</p> <p><b>Explanation:</b></p> <p>The <b>National Investment and Infrastructure Fund (NIIF)</b> was established in <b>February 2015</b> as India's <b>first sovereign wealth fund</b>. It was announced in the <b>Union Budget 2015-16</b> by the then <b>Finance Minister Arun Jaitley</b> to <b>boost infrastructure financing</b> and attract investments into commercially viable projects.</p>

Q. 82

'A + B' means 'A is the brother of B'

'A × B' means 'A is the mother of B'

'A – B' means 'A is the wife of B'

'A ÷ B' means 'A is the father of B'

If  $P \div Q \times R + S - T$ ; then how is 'Q' is related to 'T'?

a) Grand-mother ✗

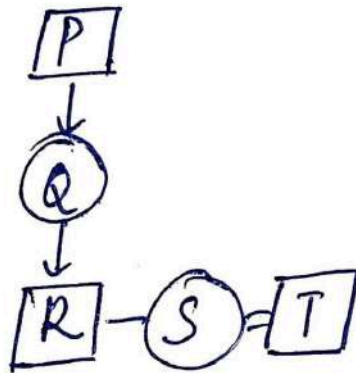
b) Mother-in-law ✓

c) Sister ✗





d) Sister-in-law ✗









The correct answer is: b

Explanation:



'Q' is Mother-in-law  
of 'T'.  
(O → female, □ → male)

Q. 83	<p><b>Under which Amendment Act to the Constitution was the reservation for Economically Weaker Sections in educational institutions added?</b></p> <p>a) 102nd Amendment </p> <p>b) 101st Amendment </p> <p>c) 105th Amendment </p> <p>d) 103rd Amendment </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>The <b>103rd Constitutional Amendment Act, 2019</b> introduced <b>reservation for Economically Weaker Sections (EWS) in educational institutions and government jobs</b>. This amendment added <b>Article 15(6) and Article 16(6)</b> to the Constitution, allowing <b>10% reservation</b> for EWS candidates who do not fall under existing <b>SC, ST, or OBC</b> quotas<sup>2</sup>.</p> <p><b>Key Features of the 103rd Amendment:</b></p> <ul style="list-style-type: none"> <li>• <b>Article 15(6):</b> Provides <b>reservation in educational institutions</b>, including <b>private institutions</b>, except minority-run institutions.</li> <li>• <b>Article 16(6):</b> Allows <b>reservation in government jobs</b> for EWS candidates.</li> <li>• <b>Eligibility Criteria:</b> Based on <b>family income and asset ownership</b>, ensuring benefits reach economically disadvantaged individuals.</li> </ul> <p><b>Other options explained:</b></p> <ul style="list-style-type: none"> <li>• <b>102nd Amendment (2018):</b> Defined the powers of the <b>National Commission for Backward Classes (NCBC)</b>.</li> <li>• <b>101st Amendment (2016):</b> Introduced the <b>Goods and Services Tax (GST)</b>.</li> <li>• <b>105th Amendment (2021):</b> Restored <b>state governments' power</b> to identify <b>OBC</b> categories.</li> </ul>

Q. 84	<p>Reena and Jaya can complete a piece of work in 6 days and Jaya alone can complete it in 8 days. In how many days can Reena alone complete it?</p> <p>a) 12 days </p> <p>b) 2 days </p> <p>c) 48 days </p> <p>d) 24 days </p>
Explanation:	<p>The correct answer is: d</p> <p><math>R+J \rightarrow 6 \text{ days}</math></p> <p><math>J \rightarrow 8 \text{ days}</math></p> <p>Total work = 24 units (LCM of 6 and 8)</p> <p>Efficiency of <math>R+J \rightarrow 4</math></p> <p>Efficiency of <math>J \rightarrow 3</math></p> <p>So, the Efficiency of <math>R \rightarrow 1</math></p> <p>Reena alone completes the work = <math>\frac{24}{1} = 24 \text{ days}</math></p>
Q. 85	<p>Union Minister Piyush Goyal inaugurated the 'National Turmeric Board' in Nizamabad, Telangana, who has been appointed as its first chairman?</p> <p>a) Ramesh Chand </p> <p>b) Palle Ganga Reddy </p> <p>c) Rajeev Kumar </p> <p>d) Ashok Dalwai </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>Union Minister <b>Piyush Goyal</b> inaugurated the <b>National Turmeric Board (NTB)</b> on <b>January 14, 2025</b>, with its headquarters in <b>Nizamabad, Telangana</b>. <b>Palle Ganga Reddy</b> was appointed as the <b>first chairman</b> of the board.</p>







Q. 86

Study the given table and answer the question that follows.

The table shows the production of five different types of cars by a company from 1989 to 1994.

Year → Type ↓	1989	1990	1991	1992	1993	1994	Total
P	8	20	16	17	21	6	88
Q	16	10	14	12	12	14	78
R	21	17	16	15	13	8	90
S	4	6	10	16	20	31	87
T	25	18	19	30	14	27	133
Total	74	71	75	90	80	86	476

In which year was the production of cars of all types taken together approximately equal to the average of the total production during the period?

- a) 1992 
- b) 1991 
- c) 1990 
- d) 1993 

**Explanation:**

The correct answer is: d

Average of the total production during the period =  $\frac{476}{6} \Rightarrow 79.3$

In the year, 1993 the production of cars is 80 which is approximately equal to the average of the total production during the period.

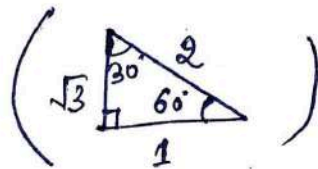
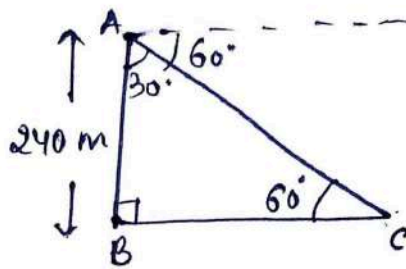
Q. 87	<p>Which nutritional disorder is caused by a deficiency of vitamin B1 in which problems with peripheral nerves and wasting occur?</p> <p>a) Xerophthalmia ❌</p> <p>b) Beriberi ✅</p> <p>c) Rickets ❌</p> <p>d) Pernicious anaemia ❌</p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p><b>Beriberi</b> is a nutritional disorder caused by a <b>deficiency of vitamin B1 (thiamine)</b>. It leads to <b>neurological and muscular problems</b>, including <b>wasting, weakness, and peripheral nerve damage</b>. There are two types of beriberi:</p> <ul style="list-style-type: none"><li>• <b>Dry Beriberi:</b> Affects the <b>nervous system</b>, leading to <b>numbness, muscle weakness, and paralysis</b>.</li><li>• <b>Wet Beriberi:</b> Impacts the <b>cardiovascular system</b>, causing <b>heart failure and swelling (edema)</b>.</li></ul> <p>Vitamin B1 is essential for <b>energy metabolism</b>, and deficiency is common in populations with <b>poor nutrition, chronic alcoholism, or prolonged illness</b>.</p> <p><b>Other options explained:</b></p> <ul style="list-style-type: none"><li>• <b>Xerophthalmia:</b> Caused by <b>vitamin A deficiency</b>, leading to <b>dry eyes and night blindness</b>.</li><li>• <b>Rickets:</b> Results from <b>vitamin D deficiency</b>, affecting <b>bone development</b> in children.</li><li>• <b>Pernicious Anaemia:</b> Caused by <b>vitamin B12 deficiency</b>, leading to <b>red blood cell abnormalities and neurological issues</b>.</li></ul>

Q. 88

A guard observes an enemy boat, from an observation tower at a height of 240 meters above the sea level, to be at an angle of depression of  $60^\circ$ . What is the distance of the boat from the foot of the tower?

a)  $80/\sqrt{3}$  m ✗b)  $80\sqrt{3}$  m ✓c)  $40\sqrt{3}$  m ✗d)  $40/\sqrt{3}$  m ✗









Explanation:







$$\therefore \sqrt{3} \rightarrow 240 \text{ m}$$

$$1 \rightarrow \frac{240}{\sqrt{3}}$$

$$\Rightarrow 80\sqrt{3} \text{ m}$$

Q. 89	<p>Which of the following statements is true with respect to a car running at constant acceleration on a straight road with a flat plane?</p> <p>a) The acceleration of the car is zero. </p> <p>b) The velocity of the car is zero. </p> <p>c) The acceleration of the car is constantly changing. </p> <p>d) The velocity of the car is constantly changing. </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>When a car is running at <b>constant acceleration</b> on a <b>straight road</b>, its <b>velocity must change continuously</b> over time. Acceleration is defined as the <b>rate of change of velocity</b>, so if acceleration is constant, the velocity of the car will keep increasing or decreasing at a uniform rate.</p>
Q. 90	<p>Which of the following has terminal decimal representation?</p> <p>a) <math>\frac{2}{7}</math> </p> <p>b) <math>\frac{2}{3}</math> </p> <p>c) <math>\frac{2}{5}</math> </p> <p>d) <math>\frac{2}{9}</math> </p>
Explanation:	<p>The correct answer is: c</p> <p>A <b>terminating decimal</b> (also called a <b>terminal decimal</b>) is a decimal number that has a finite number of digits after the decimal point. Unlike repeating or irrational decimals, it stops after a certain number of decimal places</p> <p><math>\frac{2}{7} = 0.285714285714...</math></p> <p><math>\frac{2}{3} = 0.66666666...</math></p> <p><math>\frac{2}{9} = 0.222222..</math></p> <p><math>\frac{2}{5} = 0.4</math> (<i>terminating decimal</i>)</p>

Q. 91	<p><b>Which Article of the Indian Constitution prohibits providing of any religious instruction in the educational institutions maintained by the State?</b></p> <p>a) Article 29 </p> <p>b) Article 28 </p> <p>c) Article 30 </p> <p>d) Article 31 </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>Article 28 of the Indian Constitution explicitly deals with the prohibition of religious instruction in educational institutions wholly maintained by the State. Specifically, <b>Article 28(1)</b> states that no religious instruction shall be provided in any educational institution that is wholly maintained out of State funds. This provision ensures the secular character of State-run institutions by preventing the imposition of religious teachings in such schools or colleges.</p> <ul style="list-style-type: none"> <li>• <b>Article 28(2)</b> clarifies that this prohibition does not apply to institutions established under an endowment or trust that mandates religious instruction, even if they receive State aid.</li> <li>• <b>Article 28(3)</b> further ensures that no person attending a State-recognized or State-aided institution can be compelled to participate in religious instruction or worship without their consent (or their guardian's consent, if a minor).</li> </ul> <p><b>Why the other options are incorrect:</b></p> <ul style="list-style-type: none"> <li>• <b>Article 29:</b> This article protects the cultural and educational rights of minorities, ensuring their right to conserve their language, script, or culture and prohibiting discrimination in State-run institutions based on religion, race, caste, or language.</li> <li>• <b>Article 30:</b> This article grants minorities the right to establish and administer educational institutions of their choice, including those with a religious character.</li> <li>• <b>Article 31:</b> This article is no longer in effect. It originally dealt with the compulsory acquisition of property but was repealed by the 44th Amendment Act of 1978.</li> </ul>

Q. 92

If SA and SB are tangents to a circle from an outside point S, such that  $SA = 12$  cm and  $\angle ASB = 60^\circ$ . What will the length of chord AB be?

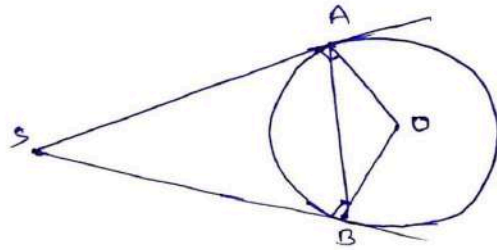
a) 12 cm ✓

b) 3 cm ✗

c) 24 cm ✗

d) 6 cm ✗

The correct answer is: a



Explanation:

$$SA = SB = 12 \text{ cm.}$$

$$\angle ASB = 60^\circ$$

$$\angle SAO = \angle SBO = 90^\circ$$

$$\therefore \angle AOB = 120^\circ.$$

In  $\triangle AOB$

$$\angle OAB = \angle OBA = 30^\circ.$$









$$\therefore \angle SAB = \angle SBA = 60^\circ.$$









In  $\triangle SAB$

$$\angle ASB = 60^\circ, \angle SAB = 60^\circ, \angle SBA = 60^\circ$$









$$\therefore SA = SB = AB$$









$$\therefore AB = 12 \text{ cm}$$

Q. 93	<p>Thaipusam Festival is celebrated in which of the following Indian states?</p> <p>a) Tamil Nadu </p> <p>b) Kerala </p> <p>c) Andhra Pradesh </p> <p>d) Karnataka </p>
Explanation:	<p>The correct answer is: a</p> <p><b>Explanation:</b></p> <p><b>Thaipusam</b> is a Hindu festival primarily celebrated by the <b>Tamil community</b> in <b>Tamil Nadu</b> and the <b>Union Territory of Puducherry</b>. It is dedicated to <b>Lord Murugan</b>, the Hindu god of war and victory, and is observed on the <b>full moon day</b> of the Tamil month <b>Thai (January/February)</b>.</p> <p><b>Key Features of Thaipusam:</b></p> <ul style="list-style-type: none"> <li>• Devotees perform <b>Kavadi Aattam</b>, a ritual where they carry decorated structures as an act of devotion.</li> <li>• Many devotees undertake <b>fasting and prayers</b> before the festival.</li> <li>• The festival is also celebrated in <b>Malaysia, Sri Lanka, Singapore, and Mauritius</b>, where Tamil communities have a strong presence.</li> </ul>
Q. 94	<p>One-sixth of a number exceeds its one-ninth by 100, the number is:</p> <p>a) 180 </p> <p>b) 1800 </p> <p>c) 3600 </p> <p>d) 360 </p>
Explanation:	<p>The correct answer is: b</p> <p>Let the no. be x</p> <p>ATQ,</p> $\frac{1}{6}x = \frac{1}{9}x + 100$ $\left(\frac{1}{6} - \frac{1}{9}\right)x = 100$ $\frac{1}{18}x = 100$ $x = 1800$

Q. 95	<p>The Atal Innovation Mission was launched in year ____.</p> <p>a) 2021 </p> <p>b) 2016 </p> <p>c) 2014 </p> <p>d) 2004 </p>
Explanation:	<p>The correct answer is: b</p> <p><b>Explanation:</b></p> <p>The <b>Atal Innovation Mission (AIM)</b> was launched in <b>2016</b> by the <b>Government of India</b> under <b>NITI Aayog</b> to promote <b>innovation and entrepreneurship</b> across the country. AIM focuses on fostering a <b>culture of problem-solving and startup development</b> through various initiatives like <b>Atal Tinkering Labs (ATLs)</b>, <b>Atal Incubation Centres (AICs)</b>, and <b>Atal New India Challenges (ANICs)</b>.</p>
Q. 96	<p>Four options are given below, of which three are similar in a certain manner while one is different from the rest. Find the odd one.</p> <p>a) <math>\sqrt{3}</math> </p> <p>b) <math>\sqrt{5}</math> </p> <p>c) <math>\sqrt{9}</math> </p> <p>d) <math>\sqrt{7}</math> </p>
Explanation:	<p>The correct answer is: c</p> <p><math>\sqrt{3}, \sqrt{7}, \sqrt{5}</math> all are irrational numbers</p> <p><math>\sqrt{9}</math> gives value 3 which is not an irrational no.</p>



Q. 97	<p>The novel 'The Palace of Illusions' is written by_____.</p> <p>a) Kiran Desai </p> <p>b) Amish Tripathi </p> <p>c) Indu Sundareshan </p> <p>d) Chitra Banerjee Divakaruni </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p><b>The Palace of Illusions</b> is a <b>historical fiction novel</b> written by <b>Chitra Banerjee Divakaruni</b>. Published in <b>2008</b>, the book presents a <b>retelling of the Mahabharata</b> from the perspective of <b>Draupadi (Panchali)</b>, the wife of the Pandavas. It offers a <b>fresh and feminist interpretation</b> of the epic, exploring her <b>thoughts, struggles, and emotions</b> in a unique way.</p>
Q. 98	<p>Sita earns 25% more than Rahim. By how much % does Rahim earn less than Sita?</p> <p>a) 5% </p> <p>b) 10% </p> <p>c) 20% </p> <p>d) 25% </p>
Explanation:	<p>The correct answer is: c</p> <p>25% =</p> <p>Ratio of earnings of Sita to Rahim = 5:4</p> <p>Rahim earns 1 unit less than Sita</p> <p>Percentage = <math>\frac{1}{5} \times 100 = 20\%</math></p>

Q. 99	<p>Which of the following decomposition reactions is NOT a redox reaction?</p> <p>a) Decomposition of dihydrogen monoxide </p> <p>b) Decomposition of sodium hydride </p> <p>c) Decomposition of potassium chlorate </p> <p>d) Decomposition of calcium carbonate </p>
Explanation:	<p>The correct answer is: d</p> <p><b>Explanation:</b></p> <p>A redox reaction involves both reduction (gain of electrons or decrease in oxidation state) and oxidation (loss of electrons or increase in oxidation state) occurring simultaneously.</p> <p>The decomposition of calcium carbonate (<math>\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2</math>) involves no change in the oxidation states of calcium, carbon, or oxygen. Therefore, it is not a redox reaction, unlike the other options, which all involve simultaneous oxidation and reduction.</p>
Q. 100	<p>The weights (in kg) of 7 men are 64, 63, 62, 65, 67, 66 and 61. The median weight is:</p> <p>a) 63 kg </p> <p>b) 64 kg </p> <p>c) 66 kg </p> <p>d) 65 kg </p>
Explanation:	<p>The correct answer is: b</p> <p>Arrange the weights in ascending order = 61, 62, 63, 64, 65, 66, 67</p> <p><math>n = 7</math> (odd)</p> <p>Median = <math>\left(\frac{n+1}{2}\right)\text{th term} = \frac{8}{2} = 4\text{th term}</math></p> <p>Median = 64</p>