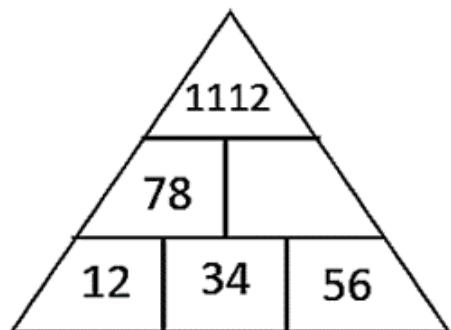


RBE NTPC 2025 Live Mock May 16,2025

Q. 1

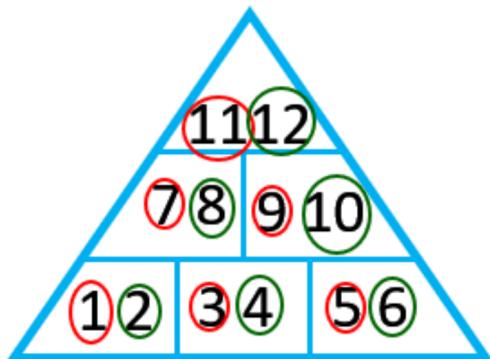
Study the given pattern carefully and select the number from among the given options that can replace the question mark (?).



- a) 910 ✓
- b) 190 ✗
- c) 808 ✗
- d) 901 ✗

The Correct Answer is: a

Explanation:



Logic: Numbers are arranged in a **zig-zag left-to-right upward motion forming a continuous counting pattern:**

12 34 56 78 910, 1112

Q. 2	<p>The NBPW, which can be considered as the most widespread Iron Age pottery, stands for _____.</p> <p>a) Northern Bronze Polished Ware <input checked="" type="checkbox"/></p> <p>b) Northern Brown Polished Ware <input checked="" type="checkbox"/></p> <p>c) Northern Blue Polished Ware <input checked="" type="checkbox"/></p> <p>d) Northern Black Polished Ware <input checked="" type="checkbox"/></p>
Explanation:	<p>The correct answer is: d</p> <p>Explanation:</p> <p>Northern Black Polished Ware (NBPW) is considered the most distinctive and widespread pottery type of the Iron Age in the Indian subcontinent. It was used from around 700 BCE to 200 BCE, primarily during the Mauryan period, and is known for its highly burnished, glossy finish, usually in black or dark grey shades.</p>

Q. 3

If $\frac{5+2\sqrt{3}}{2-\sqrt{3}} = x + y\sqrt{3}$, then $(x, y) = ?$

- a) (9, 16) X
- b) (2, 3) X
- c) 16, 9) ✓
- d) (4, 9) X

The correct answer is: c

L.H.S

$$\frac{5 + 2\sqrt{3}}{2 - \sqrt{3}}$$

Explanation:

$$\frac{(5+2\sqrt{3})(2+\sqrt{3})}{(2-\sqrt{3})(2+\sqrt{3})} = \frac{10+5\sqrt{3}+4\sqrt{3}+6}{4-3}$$

$$\frac{16+9\sqrt{3}}{1} = 16 + 9\sqrt{3}$$

RHS = $x + y\sqrt{3}$

Comparing both LHS and RHS

We get $x = 16$ and $y = 9$

Q. 4

Which view allows you to organise the sequence of slides in your presentation in MS PowerPoint?

- a) Slide Sorter View ✓
- b) Reading View ✗
- c) Normal View ✗
- d) Slide Show ✗

The correct answer is: a

Explanation:

Slide Sorter View in Microsoft PowerPoint allows users to **organize, rearrange, and manage the sequence of slides** efficiently. It displays all slides in a **thumbnail format**, making it easy to drag and drop slides into the desired order.

Explanation of the other options in **Microsoft PowerPoint** related to slide organization and presentation:

- **Reading View** → This mode allows you to view your presentation **as it would appear during a slideshow**, but without switching to full-screen mode. It is useful for reviewing the slides without distractions and maintaining access to PowerPoint controls.
- **Normal View** → This is the **default view** when you open a PowerPoint presentation. It lets you **edit individual slides**, add content, and design the layout. The left panel typically displays a **slide thumbnail list**, making navigation easier, but it is not specifically designed for sequencing multiple slides.
- **Slide Show** → This mode runs the presentation **full-screen**, allowing viewers to experience the slides **exactly as intended** during an actual presentation. It does not permit rearranging slides, as its primary function is to display content in sequence.

Q. 5

Three of the following four letter-clusters are alike in a certain way and one is different. pick the odd one out.

- a) FGILP X
- b) EFGIK ✓
- c) HIKNR X
- d) JKMPT X

+1 +2 +3 +4
F G I L P

+1 +1 +2 +2
E F G I K

+1 +2 +3 +4
H I K N R

+1 +2 +3 +4
J K M P T

Explanation:

Q. 6	If 40% of $(a - b)$ is equal to 20% of $(a + b)$, then b is what percentage of a? a) 25%  b) $100/3\%$  c) 35%  d) 28% 
------	--

Explanation:

The correct answer is: b

$$40\% \text{ of } (a-b) = 20\% \text{ of } (a+b)$$

$$2a - 2b = a + b$$

$$a = 3b$$

$$a/b = 3/1$$

$$\text{Percentage} = 1/3 \times 100 = 100/3\%$$

Q. 7

The numerator of a fraction is less than its denominator by 2. If we subtract 2 from the numerator and add 2 to the denominator, then the new fraction is $1/3$. What is the original fraction?

- a) $5/7$ ✓
- b) $1/3$ ✗
- c) $5/9$ ✗
- d) $3/7$ ✗

The correct answer is: a

Let the numerator be x

Denominator = $x+2$

x

Original fraction = $\frac{x}{x+2}$

$x+2$

ATQ

Explanation:

$$\frac{x-2}{x+4} = \frac{1}{3}$$

$$3x - 6 = x + 4$$

$$2x = 10, x = 5$$

So, Original fraction = $\frac{5}{5+2} = \frac{5}{7}$

Q. 8	Who founded the Kanva dynasty after the death of the last Shunga ruler?
	a) Pushyamitra
	b) Menander
	c) Vasudeva
	d) Demetrius

The correct answer is: c

Explanation:

The **Kanva dynasty** was founded by **Vasudeva** after the decline of the **Shunga dynasty**. The last Shunga ruler, **Devabhuti**, was overthrown in **75 BCE**, marking the end of Shunga rule and the rise of the Kanvas in **Magadha**.

Explanation: **Other options explained:**

- **Pushyamitra** → The founder of the **Shunga dynasty**, not the Kanva dynasty. He ruled after assassinating the last Mauryan emperor, Brihadratha, in **185 BCE**.
- **Menander** → A Greek ruler of the **Indo-Greek Kingdom**, famous for his patronage of Buddhism.
- **Demetrius** → Another Indo-Greek ruler who expanded Greek influence into northwestern India.

Q. 9	If A = 26 and T = 7, then AUTHENTIC = ?
	a) 266719221371823
	b) 266719221371824
	c) 266719221471824
	d) 266719221371825

Opposite value of an alphabet

Explanation: AUTHENTIC = (266719221371824)

Q. 10	<p>Which among the following keyboard shortcuts open the properties for the selected item on a Windows 10 home screen?</p> <p>a) Alt + Enter ✓</p> <p>b) Ctrl + Enter ✗</p> <p>c) Ctrl + Shift + Spacebar ✗</p> <p>d) Alt + Shift + Spacebar ✗</p>
Explanation:	<p>The correct answer is: a</p> <p>Explanation:</p> <p>Pressing Alt + Enter opens the Properties window for the selected file or folder on the Windows 10 home screen (or File Explorer). This shortcut allows users to view detailed attributes like file size, security settings, and version history.</p> <p>Ctrl + Enter → Often used for executing commands or opening links in a browser.</p>

Q. 11

Five salesmen, A, B, C, D and E, of a company are considered for a three member trade delegation to represent the company at an international trade conference. What is the probability that A gets selected?

- a) $1/5$ X
- b) $2/5$ X
- c) $3/5$ ✓
- d) $4/5$ X

The correct answer is: c

Total no. of outcome =

$$5C_3$$

Explanation:

Favourable outcome =

$$4C_2 \times 1C_1$$

Probability that A gets selected =

$$\frac{4C_2 \times 1C_1}{5C_3} = \frac{3}{5}$$

Q. 12

In a certain code language, HUNGER is written as UHATRE. How will SWIMMING be written as in that language?

- a) FCKSSKSM X
- b) UBFCCFCW X
- c) GAPTTPTL X
- d) FJVZZVAT ✓

H U N G E R
↓ ↓ ↓ ↓ ↓ ↓ +13
U H A T R E

Similarly,

S W I M M I N G
↓ ↓ ↓ ↓ ↓ ↓ ↓ +13
F J V Z Z V A T

Explanation:

Q. 13

What is meant by the term 'Bugyals'?

- a) Type of forest in the Himalayas X
- b) Tributary river of the Ganga X
- c) Summer grasslands in the Himalayas ✓
- d) Glaciers of the Himalayas X

The correct answer is: c

Explanation:

Bugyals are **high-altitude alpine meadows** found in the **Himalayan region**, primarily in **Uttarakhand** and parts of Himachal Pradesh. These **lush green grasslands** serve as grazing grounds for livestock and attract trekkers due to their scenic beauty. They typically lie between **3,000 to 4,000 meters** above sea level and remain **snow-covered in winter**, transforming into verdant meadows in summer.

Here are some **prominent Bugyals (alpine meadows)** in Uttarakhand:

1. Bedni Bugyal

- Located at an altitude of **3,354 meters** in the Chamoli district.
- Known for its **lush green meadows and distant views of Trishul and Nanda Ghunti peaks**.
- Serves as a **major stop** for trekkers heading towards **Roopkund Lake**.

2. Ali Bugyal

- Lies close to **Bedni Bugyal**, offering equally mesmerizing landscapes.
- Famous for its **vast rolling grasslands with uninterrupted panoramic views of the Himalayas**.

3. Dayara Bugyal

- Situated at an elevation of **3,048 meters** in the Uttarkashi district.
- Offers **one of the best trekking routes in Uttarakhand**, especially during winters when it turns into a **skiing destination**.

4. Kedarkantha Bugyal

- Located at an altitude of **3,800 meters**, often considered one of **India's best winter treks**.
- Offers **snow-covered landscapes and stunning sunrise views** over peaks like Swargarohini and Bandarpoomch.

5. Panhali Bugyal

- Lesser known but equally stunning, located in **Tehri Garhwal**.
- Offers **dense alpine vegetation and untouched grasslands**, making it a peaceful retreat.

Q. 14

In the number set given below, all are alike in some manner, except one. Select the odd one.

2, 28, 48, 58, 128

a) 48

b) 128

c) 28

d) 2

Explanation:

The reasoning behind the solution follows this logic:

2 is a prime number.

28, 48, 58, and 128 are all composite numbers.

Since option 3 represents the number 2, which is the only prime number in the set, it is the correct answer.

Q. 15

Which of the following was the adult literacy rate for women in rural areas as per Census of India 2011?

a) 50.6

b) 72.9

c) 65.4

d) 58.5

Explanation:

The correct answer is: a

The adult literacy rate for women in rural areas, as reported in the Census of India 2011, refers to the percentage of women aged 15 and above in rural regions who can read and write with understanding in any language. According to the census data, this rate was 50.6%.

- The overall literacy rate in India in 2011 was 74.04%, with a significant gap between males (82.14%) and females (65.46%).
- The **rural literacy rate** (for all ages 7+) was **68.91%**, compared to **84.98%** in urban areas.
- For **rural females** (7+), the literacy rate was **58.75%**, but when narrowed to **adult women (15+)**, it drops to **50.6%** due to the exclusion of younger girls who may have benefited from more recent educational initiatives (e.g., Sarva Shiksha Abhiyan).
- This gap reflects historical educational neglect for older women in rural areas, who were less likely to have attended school in their youth.

Q. 16

An article passing through two hands was sold at a total gain of 38% on the original price. If the first person sold it at a gain of 15%, then what was the gain percentage of the second person?

- a) 18%
- b) 10%
- c) 12%
- d) 20%

The correct answer is: d

Let the cost price be 100 unit

$$\text{Selling price} = 100 \times \frac{138}{100} = 138 \text{ unit}$$

ATQ,

$$100 \times \frac{115}{100} \times \frac{100 + x}{100} = 138$$

$$100 + x = 120$$

$$x = 20\%$$

gain percentage of 2nd person = 20%

Q. 17

- A pillar is divided into three parts. The first part is $\frac{1}{4}$ of the whole, second part is $\frac{4}{8}$ of the first, and the third is 10m. The length of the pillar is:
- a) 22 m
 - b) 18 m
 - c) 16 m
 - d) 20 m

Explanation:

The correct answer is: c

Let the total length of pillar = 24 unit (lcm of 4 and 8)

First part = $24 \times \frac{1}{4} = 6$ unit

Second part = $6 \times \frac{4}{8} = 3$ unit

Third part = $24 - 6 - 3 = 15$ unit

$15 \rightarrow 10$ m

$1 \rightarrow \frac{10}{15}$ m

$24 \rightarrow \frac{10}{15} \times 24 = 16$ m

Total length of pillar = 16 m

Q. 18

Sarojini Naidu was the first Indian woman to become the President of the Indian National Congress in which of the following years?

- a) 1916
- b) 1907
- c) 1931
- d) 1925

Explanation:

The correct answer is: d

Explanation:

Sarojini Naidu became the **first Indian woman** to be elected as the **President of the Indian National Congress (INC)** in **1925** during the Kanpur session. She was a prominent freedom fighter, poet, and advocate for women's rights.

Certainly! Here's an overview of some of the most **important sessions of the Indian National Congress (INC)** and their historical significance:

1. First Session – 1885 (Bombay)

- **President: W.C. Bennerjee**
- Marked the **foundation of the INC**, with **72 delegates** participating.
- Focused on **constitutional reforms and administrative changes** under British rule.

2. Surat Split – 1907 (Surat)

- **President: Rash Behari Ghosh**
- Conflict between **Moderates** (led by Gopal Krishna Gokhale) and **Extremists** (led by Bal Gangadhar Tilak).
- The split weakened INC until reconciliation in 1916.

3. Lucknow Session – 1916

- **President: Ambika Charan Mazumdar**
- The Moderates and Extremists **reunited**.
- The **Lucknow Pact** was signed between INC and the **Muslim League**, agreeing on joint demands for self-rule.

4. Calcutta Session – 1920

- **President: Lala Lajpat Rai**
- Supported **Gandhi's Non-Cooperation Movement**, marking the shift from constitutional reforms to **mass movements**.

5. Lahore Session – 1929

- **President: Jawaharlal Nehru**
- Declared **Purna Swaraj (Complete Independence)** as INC's ultimate goal.
- **January 26, 1930**, was celebrated as **Independence Day**, later influencing India's **Republic Day**.

6. Karachi Session – 1931

- **President: Vallabhbhai Patel**
- Adopted a **Resolution on Fundamental Rights and Economic Policies**.
- Supported **Gandhi-Irwin Pact**, ending the Civil Disobedience Movement temporarily.

7. Tripuri Session – 1939

- **President: Subhash Chandra Bose**
- Bose defeated Pattabhi Sitaramayya in elections but was forced to resign due to differences with Congress leadership.
- Led to the formation of **Forward Bloc** by Bose.

8. Quit India Resolution – 1942 (Bombay)

- **President: Maulana Abul Kalam Azad**
- Launched the **Quit India Movement**, demanding British withdrawal.
- Led to mass arrests, including Gandhi and other INC leaders.

9. Indian Independence Session – 1947 (Delhi)

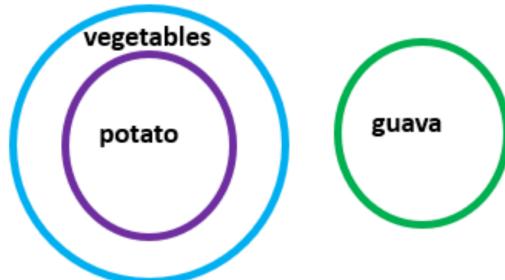
- President: Acharya Kripalani
- Marked the transfer of power from British rule to India's independent government.
- Set the foundation for India's constitutional development.

Q. 19

Select the Venn diagram that best represents the relationship between the following classes.

Guava, Potato, Vegetables

- a) ✗
- b) ✓
- c) ✗
- d) ✗

Explanation:

Potato comes under vegetables. Guava comes under Fruits.

Q. 20

A man and a boy, working together, can finish a task in 24 days. If, for the last 6 days, the man works alone, then the task can be finished in 26 days. In how many days can the boy alone finish the task?

- a) 54
- b) 72
- c) 36
- d) 48

The correct answer is: b

ATQ,

$$(M + B)24 = 6 \times M + 20 \times (M + B)$$

$$24M + 24B = 6M + 20M + 20B$$

$$2M = 4B$$

Explanation:

$$\frac{M}{B} = \frac{2}{1} \text{ [ratio of efficiency]}$$

$$\text{Total work} = (2+1) \times 24 = 72$$

$$\text{Boy alone can finish the work} = \frac{72}{1} = 72 \text{ days}$$

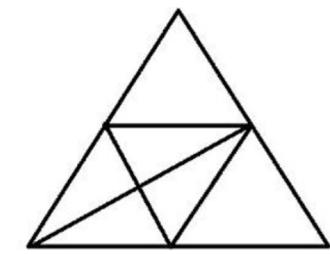
Q. 21	<p>Where do the Arabian Sea and the Bay of Bengal branches of the monsoon merge?</p> <p>a) Ganga plains ✓</p> <p>b) Malabar coast ✗</p> <p>c) Coromandel coast ✗</p> <p>d) Godavari delta ✗</p>
Explanation: <p>The correct answer is: a</p> <p>Explanation:</p> <p>The Indian Summer Monsoon originates due to differential heating between land and ocean. It has two branches, each carrying moisture from different sources:</p> <ol style="list-style-type: none"> 1. The Arabian Sea Branch – Travels across the Western Ghats, causing heavy rainfall over coastal and central India. 2. The Bay of Bengal Branch – Moves northeast, hitting the eastern states before spreading inland. <p>Where They Merge – Ganga Plains</p> <ul style="list-style-type: none"> As these two branches advance inland, they gradually converge over the Ganga Plains, especially in northern and eastern India (Uttar Pradesh, Bihar, and West Bengal). The Bay of Bengal branch moves northwest, bringing rain to the eastern states. The Arabian Sea branch, after crossing the Deccan Plateau and central India, merges with the Bay of Bengal branch, intensifying rainfall in the Ganga Basin. 	

Q. 22	<p>The HCF of two numbers is 15 and the LCM is 6090. If one of the numbers is 435, then the other is:</p> <p>a) 25 ✗</p> <p>b) 210 ✓</p> <p>c) 324 ✗</p> <p>d) 120 ✗</p>
Explanation: <p>The correct answer is: b</p> <p>As we know :</p> $LCM \times HCF = Product\ of\ two\ numbers$ $15 \times 6090 = 435 \times x$ $x = 210$ <p>So, the other no. is 210</p>	

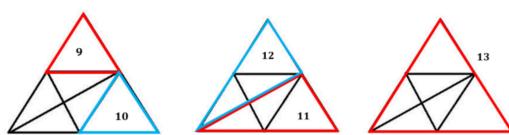
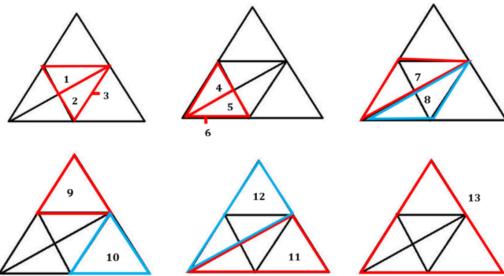
<p>Q. 23</p> <p>Which of the following pollutants is primarily responsible for the formation of tropospheric ozone, a key component of smog?</p> <p>a) Particulate matter (PM2.5) </p> <p>b) Volatile organic compounds (VOCs) </p> <p>c) Sulfur dioxide (SO₂) </p> <p>d) Carbon monoxide (CO) </p>
<p>The correct answer is: b</p> <p>Explanation:</p> <p>Tropospheric ozone, commonly referred to as ground-level ozone, forms when volatile organic compounds (VOCs) and nitrogen oxides (NO_x) react in the presence of sunlight. This secondary pollutant is a major component of smog and contributes to air pollution-related health issues such as respiratory problems and lung damage.</p> <p>Here's an explanation of the different pollutants mentioned and their roles in air pollution:</p> <p>1. Particulate Matter (PM2.5)</p> <ul style="list-style-type: none"> • Fine airborne particles that are 2.5 micrometers or smaller in diameter. • Generated from sources like vehicle emissions, industrial pollution, and wildfires. • Harmful because they can penetrate deep into the lungs, causing respiratory and cardiovascular diseases. • Not directly responsible for tropospheric ozone formation, but contributes to smog and haze. <p>2. Sulfur Dioxide (SO₂)</p> <ul style="list-style-type: none"> • Released from burning coal and oil at power plants and industries. • Major cause of acid rain, which damages ecosystems, soil, and buildings. • Can react with other pollutants to form sulfate aerosols, contributing to fine particulate pollution. • Does not play a role in tropospheric ozone formation. <p>3. Carbon Monoxide (CO)</p> <ul style="list-style-type: none"> • A colorless, odorless gas produced from incomplete combustion of fuels like gasoline and wood. • Reduces oxygen-carrying capacity in the bloodstream when inhaled, leading to health risks. • Contributes to overall air pollution, but does not form ozone directly.

Q. 24

How many triangles does this figure have?



- a) 15
- b) 9
- c) 11
- d) 13

Explanation:

Q. 25	<p>Anisha purchased a TV at $\frac{4}{5}$th of its initial selling price and then sold it at 4% more than its initial selling price. What is Anisha's gain percentage?</p> <p>a) 20% <input checked="" type="checkbox"/> X</p> <p>b) 40% <input checked="" type="checkbox"/> X</p> <p>c) 10% <input checked="" type="checkbox"/> X</p> <p>d) 30% <input checked="" type="checkbox"/> ✓</p>
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The correct answer is: d

Let the initial selling price be 5 unit

Cost price = $5 \times \frac{4}{5} = 4$ unit

Explanation:

New selling price = $5 \times \frac{104}{100} = 5.2$ unit

Gain percentage = $\frac{1.2}{4} \times 100 = 30\%$

Q. 26	<p>Select the option that is related to the third term in the same way as the second term is related to the first term.</p> <p>Navy : Ship :: Army : ?</p> <p>a) War <input checked="" type="checkbox"/> X</p> <p>b) Tank <input checked="" type="checkbox"/> ✓</p> <p>c) Guns <input checked="" type="checkbox"/> X</p> <p>d) Soldier <input checked="" type="checkbox"/> X</p>
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Explanation: Just as the Navy uses a Ship for operations, the Army uses a Tank in warfare.
Both pairs relate a military force to its primary vehicle or mode of combat.

Q. 27**Ghiyasuddin Balban became Sultan of Delhi in which year?**

- a) 1310 
- b) 1290 
- c) 1266 
- d) 1340 

The correct answer is: c

Explanation:

Ghiyasuddin Balban (1266–1287 CE) was a significant ruler of the **Delhi Sultanate** under the **Slave Dynasty**, known for his strong **centralized rule** and **military discipline**. Here are some of his key contributions:

1. Doctrine of Kingship

- Balban introduced the concept of **Divine Kingship**, portraying himself as **God's shadow on Earth (Zill-e-Ilahi)**.
- He upheld **strict royal authority**, suppressing any opposition to his rule.

2. Suppression of the Nobility (Turkan-i-Chahalgani)

- He weakened the power of **Turkan-i-Chahalgani (the Forty)**, an influential group of Turkish nobles.
- Eliminated rebellious nobles and consolidated his **absolute authority** over the administration.

3. Military Strength & Law Enforcement

- Strengthened the **military** to prevent internal revolts.
- Established a **strong spy network** (Barid system) to track court officials and administrators.
- Enforced **harsh punishments** for corruption and disobedience.

Explanation:

4. Defense Against Mongols

- Strengthened **forts along the northwestern frontier**, particularly in Punjab, to guard against **Mongol invasions**.
- Successfully repelled Mongol raids, ensuring the security of the **Delhi Sultanate**.

5. Administrative Reforms

- Centralized administration by appointing loyal officers.
- Revived **Persian customs** at court, promoting strict discipline and royal decorum.

6. Expansion of Royal Authority

- Introduced the **Sijdah (prostration)** and **Paibos (kissing the monarch's feet)** as court rituals to reinforce his supremacy.
- Avoided direct interaction with common people, maintaining an aura of **divine kingship**.

7. Patronage of Persian Culture

- Encouraged **Persian literature** and court traditions.
- His court poet **Amir Khusrau** rose to prominence during his reign.

Despite his **rigid policies**, Balban **stabilized** the Sultanate and maintained **strict law and order**. However, his death in **1287 CE** led to instability, paving the way for the **Khalji dynasty**.

Q. 28

The sum of all odd numbers between 0 and 52 is:

- a) 676 ✓
- b) 625 ✗
- c) 576 ✗
- d) 729 ✗

The correct answer is: a

Odd nos. between 0 and 52 are 1, 3, 5....51

Total no. of terms = $n = \frac{51-1}{2} + 1 = 26$

$$\begin{aligned} \text{Sum of all odd no.} &= \frac{n}{2}(1\text{st term} + \text{last term}) \\ &= \frac{26}{2}(1 + 51) = 13 \times 52 \\ &= 676 \end{aligned}$$

Explanation:

Q. 29

'Centimetre' is related to 'Metre' in the same way as 'Paisa' is related to '_____':

- a) Rupee ✓
- b) Wealth ✗
- c) Coin ✗
- d) Capital ✗

Explanation:

Logic: Smaller unit is a part of a larger unit.

Centimeter is a smaller unit of measurement, and it is a part of a meter.
Paisa is the smaller unit and Rupee is the larger unit

Q. 30

Which country has the longest coastline in the world?

- a) Russia X
- b) Canada ✓
- c) USA X
- d) Australia X

The correct answer is: b

Explanation:

Explanation:

Canada has the **longest coastline in the world**, measuring approximately **202,080 kilometers (125,566 miles)**. This vast coastline touches the **Pacific Ocean, Atlantic Ocean, and Arctic Ocean**, making it unique among all countries.

Q. 31

A certain sum of money at simple interest amounts to ₹1,512 in 3 years and to ₹1,668 in 4.5 years. The rate of interest on this sum of money is:

- a) 28/3% X
- b) 26/3% ✓
- c) 10% X
- d) 24/3% X

The correct answer is: b

Amount after 3 years = Rs. 1512

Amount after 4.5 years = Rs. 1668

Interest for 1.5 years = 1668-1512 = Rs. 156

Interest for 3 years = $156 \times 2 = \text{Rs. } 312$

Principal = 1512-312 = Rs. 1200

Explanation:

$$P \times R \times T$$

SI =



100

$$R = \frac{312 \times 100}{1200 \times 3} = \frac{26}{3}\%$$

Q. 32

Find the value of $\frac{(19 \times 9 + 31 \times 10 + 32 \times 11)}{(233.25 \times 2 - 50)}$.

- a) 8 X
- b) 2 ✓
- c) 6 X
- d) 4 X

The correct answer is: b

$$\frac{(19 \times 9 + 31 \times 10 + 32 \times 11)}{(233.25 \times 2 - 50)}$$

$$\begin{array}{r} 171 + 310 + 352 \\ \hline 466.50 - 50 \\[0.4cm] 833 \\ \hline 416.50 = 2 \end{array}$$

Explanation:

Q. 33

Who among the following founded the Abhinav Bharat Mandir (Young India Society)?

- a) BR Ambedkar and C Rajgopalachari X
- b) Aurobindo Ghosh and Dadabhai Naoroji X
- c) Vinayak Damodar Savarkar and Ganesh Damodar Savarkar ✓
- d) Motilal Nehru and CR Das X

The correct answer is: c

Explanation:

Abhinav Bharat Mandir (Young India Society) was founded by **Vinayak Damodar Savarkar** and his brother **Ganesh Damodar Savarkar** in **1904** as a **revolutionary organization** dedicated to India's independence from British rule.

Explanation:

- Initially formed as **Mitra Mela** in **Nasik**, Maharashtra, the group later evolved into **Abhinav Bharat** in 1906.
- The society **advocated armed resistance** against British rule, promoting nationalism among Indian youth.
- It had a **secret network** for revolutionary activities and was influential in inspiring other freedom fighters.

Q. 34	<p>Select the option that is related to the third term in the same way as the second term is related to the first term.</p> <p>Day : Week :: Month :</p> <p>a) Calendar </p> <p>b) Weeks </p> <p>c) Year </p> <p>d) Annual </p>
Explanation:	<p>Logic: A smaller unit making up a large unit of time</p> <p>Week is made up of 7 days</p> <p>Similarly, a year is made up of 12 months.</p>

Q. 35	<p>Which African lake is the world's longest freshwater lake?</p> <p>a) Lake Victoria </p> <p>b) Lake Tanganyika </p> <p>c) Lake Malawi </p> <p>d) Lake Chad </p>
Explanation: <p>The correct answer is: b</p> <p>Explanation:</p> <p>Lake Tanganyika is the world's longest freshwater lake, stretching approximately 673 km (418 miles) in length. It is also the second-largest freshwater lake by volume and second-deepest in the world, after Lake Baikal.</p> <p>Key Facts About Lake Tanganyika:</p> <ul style="list-style-type: none"> • Located in Central Africa, bordered by Burundi, Democratic Republic of the Congo, Tanzania, and Zambia. • Has a maximum depth of about 1,470 meters (4,820 feet), making it one of the deepest lakes in the world. • Formed as part of the Great Rift Valley, contributing to its elongated shape. • Supports rich biodiversity, including many endemic species of fish, making it vital for local communities. <p>Other Options Explained:</p> <ul style="list-style-type: none"> • Lake Victoria → Africa's largest lake by surface area, but not the longest. • Lake Malawi → Third largest lake in Africa, known for its unique cichlid fish species, but smaller than Lake Tanganyika. • Lake Chad → A shallow lake in Central Africa, which has been shrinking due to climate change and human activities. 	

Q. 36

Read the following statements carefully and decide which of given statement(s) is/are true.

1. A median of a triangle is a line segment joining a vertex to the midpoint of the opposite side.

2. In a triangle, centroid divides the median in 2 : 1 ratio.

a) Both statements are false

b) Only statement 1 is true

c) Only statement 2 is true

d) Both statements are true

Explanation:

The correct answer is: d

1. The median of a triangle is a line segment joining a vertex to the midpoint of the opposite side.

- This is the correct definition of a median in a triangle. A median connects a vertex to the midpoint of the opposite side.

2. In a triangle, the centroid divides the median in a 2:1 ratio.

- The centroid is the point of intersection of the medians of a triangle, and it divides each median into two parts, with the ratio of 2:1 (the longer part being between the vertex and the centroid).

Thus, both statements are true.

Q. 37

Which state hosted the 38th National Games?

- a) Odisha
- b) Uttarakhand
- c) Maharashtra
- d) Gujarat

The correct answer is: b

Explanation:

The **38th National Games of India** were hosted by **Uttarakhand** from **28 January to 14 February 2025**. The event took place across multiple cities, including Dehradun, Haridwar, Shivpuri, New Tehri, Nainital, Haldwani, Rudrapur, and Pithoragarh.

Explanation:

Key Highlights:

- The **opening ceremony** was inaugurated by Prime Minister Narendra Modi, while the **closing ceremony** featured Home Minister Amit Shah.
- Over **10,000 athletes** participated in **35 sports disciplines**, making it one of the largest editions of the National Games.
- The official **mascot** was **Mauli, a Himalayan monal**, and the **Olympic torch** was named **Tejaswini**.

Q. 38

- In a parallelogram, the altitude is twice the corresponding base, and the area of the parallelogram is 288 m^2 . the altitude of the parallelogram is:
- a) 18 m X
 - b) 36 m X
 - c) 24 m ✓
 - d) 12 m X

The correct answer is: c

$$\text{Area of parallelogram} = \text{Base} \times \text{Altitude}$$

$$\text{Base} = x \text{ unit}$$

$$\text{Altitude} = 2x \text{ unit}$$

Now,

$$x \times 2x = 288$$

$$2x^2 = 288$$

$$x^2 = 144, x = 12 \text{ m}$$

Therefore, altitude = $2 \times 12 = 24 \text{ m}$

Explanation:

Q. 39

Consider the given statement and decide which of the given assumptions is/are implicit in the statement.

Statement: "Buy pure and natural honey of company Z" – an advertisement.

Assumptions:

I. Artificial honey can be prepared.

II. People do not mind for paying more prices for pure and natural honey.

a) Only assumption II is implicit.

b) Both Assumption I and II are implicit.

c) Only assumption I is Implicit.

d) Neither assumption I nor II is implicit

The correct answer is: c)

- **Assumption I: Artificial honey can be prepared**

The advertisement emphasizes "pure and natural honey," which suggests that there might be honey that is not pure or natural—possibly artificial or adulterated honey. This assumption is **implicit** because the distinction implies the existence of artificial honey.

- **Assumption II: People do not mind paying more for pure and natural honey**

While the advertisement promotes purity and naturalness, it does not explicitly state anything about price or whether people are willing to pay more for it. The assumption about pricing is **not necessarily implicit**, as the advertisement simply encourages people to buy the product without mentioning cost or consumer willingness to pay a premium.

Thus, the correct answer is: "**Only Assumption I is implicit.**"

Q. 40

Vikas spends 80% of his salary. His salary is increased by 25% and his expenditure increased by 15%. What is the percentage increase in his savings.

- a) 50% X
- b) 55% X
- c) 65% ✓
- d) 60% X

The correct answer is: c

Let the income of Vikas be 100 units

$$\text{Expenditure} = 100 \times \frac{80}{100} \quad \text{80 units}$$

$$\text{Savings} = 100 - 80 = 20 \text{ units}$$

Now,

Explanation:

$$\text{New income} = 100 \times \frac{125}{100} = 125 \text{ units}$$

$$\text{New expenditure} = 80 \times \frac{115}{100} = 92 \text{ units}$$

$$\text{New savings} = 125 - 92 = 33 \text{ units}$$

$$\text{Percentage increase in savings} = \frac{13}{20} \times 100 = 65\%$$

Q. 41	<p>The formal proclamation of Swadeshi Movement was made in which year?</p> <p>a) 1905 ✓</p> <p>b) 1903 ✗</p> <p>c) 1906 ✗</p> <p>d) 1904 ✗</p>
<p>The correct answer is: a</p> <p>Explanation:</p> <p>The Swadeshi Movement was formally proclaimed in 1905 as a reaction to the Partition of Bengal by Lord Curzon. The movement aimed at economic self-sufficiency by promoting Indian-made goods and boycotting British products to challenge colonial exploitation.</p> <p>Key Events:</p> <p>Explanation:</p> <ul style="list-style-type: none">• August 7, 1905 → Official proclamation of Swadeshi at Town Hall, Calcutta, with leaders like Bal Gangadhar Tilak, Lala Lajpat Rai, Bipin Chandra Pal, and Aurobindo Ghosh leading the charge.• Boycott of British goods, including textiles, as a way to weaken colonial trade dominance.• Promotion of indigenous industries, leading to the rise of Indian manufacturing, banking, and educational institutions.• Influence on later movements, including the Non-Cooperation Movement and Civil Disobedience Movement under Mahatma Gandhi.	

Q. 42	<p>Which UN treaty aims to protect the ozone layer by phasing out the production of substances responsible for ozone depletion?</p> <p>a) Kyoto Protocol </p> <p>b) Montreal Protocol </p> <p>c) Paris Agreement </p> <p>d) Stockholm Convention </p>
<p>The correct answer is: b</p> <p>Explanation:</p> <p>The Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in 1987, is a landmark international treaty aimed at phasing out the production and consumption of ozone-depleting substances (ODS) such as chlorofluorocarbons (CFCs), halons, and hydrochlorofluorocarbons (HCFCs). It has played a crucial role in reducing ozone depletion, and scientific studies indicate that the ozone layer is slowly recovering due to its implementation.</p> <p>Other Options Explained:</p> <p>Explanation:</p> <ul style="list-style-type: none">• Kyoto Protocol → Adopted in 1997, this treaty focuses on reducing greenhouse gas emissions to combat climate change. It sets binding emission reduction targets for industrialized nations.• Paris Agreement → Signed in 2015, the Paris Agreement builds on the Kyoto Protocol and seeks to limit global warming to well below 2°C above pre-industrial levels through nationally determined contributions (NDCs) from each country.• Stockholm Convention → Adopted in 2001, it aims to eliminate or restrict the production and use of Persistent Organic Pollutants (POPs), harmful chemicals like DDT and polychlorinated biphenyls (PCBs) that threaten human health and the environment.	

Q. 43

If the hypotenuse of right angles isosceles is 8 cm, then the area of triangle is:

- a) $2\sqrt{32} \text{ cm}^2$ 
- b) 16 cm^2 
- c) $\sqrt{32} \text{ cm}^2$ 
- d) 8 cm^2 

The correct answer is: b
In right right-angled isosceles triangle

Ratio of base: height: hypotenuse =

$$1:1:\sqrt{2}$$

$$\sqrt{2} \rightarrow 8 \text{ cm}$$

$$1 \rightarrow \frac{8}{\sqrt{2}} = 4\sqrt{2}$$

So,

Explanation:

Base = $4\sqrt{2}$ cm and height =

$$4\sqrt{2} \text{ cm}$$

$$\text{Area} = \frac{1}{2} \times \text{base} \times \text{height} = \frac{1}{2} \times 4\sqrt{2} \times 4\sqrt{2} = 16 \text{ cm}^2$$

Q. 44

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

FLPX : GJST :: HMRW : ?

- a) ZKYR X
- b) NSTG X
- c) IKUS ✓
- d) WDHO X

F L P X
↓ ↓ ↓ ↓
+1 -2 +3 -4
G J S T

Explanation:

Similarly,
H M R W
↓ ↓ ↓ ↓
+1 -2 +3 -4
I K U S

Q. 45

When was the Defence of India Act enacted?

- a) 1920
- b) 1915
- c) 1921
- d) 1918

The correct answer is: b

Explanation:

The **Defence of India Act, 1915** was enacted on **March 19, 1915**, by the **Governor-General of India**. It was an **emergency criminal law** introduced during **World War I** to suppress **nationalist and revolutionary activities** in British India.

Key Features of the Act:

Explanation:

- Granted **wide powers** to the British administration, including **preventive detention** and **internment without trial**.
- Restricted **freedom of speech, writing, and movement**, targeting Indian revolutionaries.
- Used extensively against **Ghadar Party revolutionaries** and **Anushilan Samiti members**.
- Later **repealed in 1922**, but its provisions influenced the **Rowlatt Act of 1919**, which led to widespread protests.

Q. 46

Consider the given statements and decide which of the assumptions from the options is NOT implicit in the statements.

All birds are wings.

Some wings are feathers.

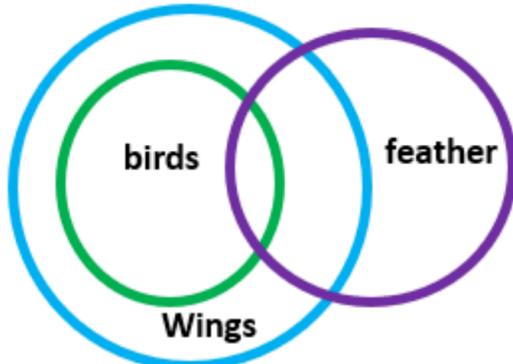
Some feathers are birds.

a) All wings are birds ✓

b) Some birds are wings and feathers. ✗

c) Some birds are feathers. ✗

d) Some feathers are wings. ✗

Explanation:

All wings are birds is not possible.

Q. 47	What is the maximum subsidy provided under the Pradhan Mantri Awas Yojana (Urban) for the Economically Weaker Section (EWS) category? a) ₹1 lakh  b) ₹1.5 lakh  c) ₹2.5 lakh  d) ₹2.67 lakh 
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The correct answer is: d

Explanation:

Under the **Pradhan Mantri Awas Yojana (Urban) - PMAY(U)**, the **maximum subsidy** provided for the **Economically Weaker Section (EWS)** category is **₹2.67 lakh** through the **Credit Linked Subsidy Scheme (CLSS)**.

Explanation: **Key Features of the Subsidy:**

- **Interest subsidy of 6.5%** on home loans up to **₹6 lakh** for EWS beneficiaries.
- The subsidy amount is **credited upfront** to the loan account, reducing the **effective loan burden**.
- Applicable for **new home purchases, construction, or incremental housing improvements**.

Q. 48

Two integers are selected at random from the first 11 natural numbers. If the sum of the integers is even, then the probability that both the numbers are odd is:

a) $3/5$ ✓b) $13/121$ ✗c) $5/11$ ✗d) $4/9$ ✗

The correct answer is: a

The first 11 natural nos. are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

No. of selecting two integers out of 11 =

$$11C_2 = 55$$

Event of selecting two integers such that their sum is even

1. When both the integers is even =

$$5C_2 = 10$$

Explanation:

2. When both the integers is odd =

$$6C_2 = 15$$

Total no. of event = $10+15 = 25$

Event that both the integers are odd = 15

Probability =

$$\frac{15}{25} = \frac{3}{5}$$

Q. 49

In which year was the first Khelo India Winter Games held?

- a) 2019 X
- b) 2022 X
- c) 2020 ✓
- d) 2021 X

The correct answer is: c

Explanation:

The **first Khelo India Winter Games** were held in **2020** at **Gulmarg, Jammu & Kashmir**, from **March 7 to March 11**. The event was organized by the **Jammu & Kashmir Sports Council** in collaboration with the **Union Ministry of Youth Affairs and Sports**.

Key Highlights:

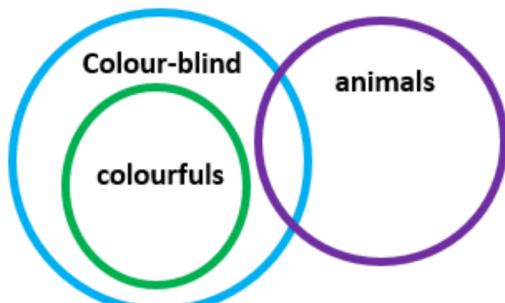
- Featured **900 participants** competing in various **winter sports disciplines**.
- Included events like **skiing, ice hockey, snowboarding, and mountaineering**.
- Aimed at **promoting winter sports** in India and nurturing young talent.

Q. 50

Consider the given statements and decide which of the assumptions from the options is implicit in the statements.

- A. Some animals are colour-blind.
- B. All colourful are colour-blind but not animals.
- a) All colour-blinds are animals. X
- b) Some colour-blinds are animals. ✓
- c) All colour-blinds are colourful. X
- d) Some animals are colourful. X

Explanation:



Q. 51	<p>Find the least positive number, which when divided by 5, 6, 8, 9 and 12, gives 1 as a remainder in each case and is completely divisible by 13.</p> <p>a) 3627 X</p> <p>b) 3640 X</p> <p>c) 3614 X</p> <p>d) 3601 ✓</p>
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The correct answer is: d

$$\text{LCM of } (5, 6, 8, 9, 12) = 360$$

Therefore, no. should be $360k+1$

ATQ,

$$\frac{360k + 1}{13} = 27k + \frac{9k + 1}{13}$$

$$k = 10, \frac{9 \times 10 + 1}{13} \text{ completely divisible by 13}$$

Therefore,

$$\text{No.} = 360 \times 10 + 1 = 3601$$

Explanation:

Q. 52

Which of the following is not true about friction force?

a) Friction is the force which opposes motion relative to two surfaces in contact. X

b) The force of friction that acts when a body is moving (sliding) on a surface is called sliding friction. X

c) Friction in machines wastes energy and also causes wear and tear. X

d) Rolling friction is much more than sliding friction, the use of ball bearings in a machine considerably reduces friction. ✓

Explanation:

The correct answer is: d

Explanation:

The incorrect statement is that rolling friction is more than sliding friction. In reality:

- Rolling friction is much smaller than sliding friction.
- The use of ball bearings in machines reduces friction by converting sliding motion into rolling motion, thus decreasing wear and energy loss.
- Sliding friction occurs when two solid surfaces slide over each other, generating more resistance compared to rolling friction.

Q. 53

If $a = b^2/(b - a)$, then the value of $a^3 + b^3$ is:

- a) 6 X
- b) 2 X
- c) 0 ✓
- d) 1 X

The correct answer is: c

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

$$ab - a^2 = b^2$$

$$a^2 + b^2 - ab = 0$$

Now,

$$a^3 + b^3 = (a + b)(a^2 + b^2 - ab)$$

$$= (a + b) \times 0 = 0$$

Q. 54

Which treaty established the European Union?

- a) Maastricht Treaty ✓
- b) Paris Agreement ✗
- c) Treaty of Westphalia ✗
- d) Treaty of Rome ✗

The correct answer is: a

Explanation:

The **Maastricht Treaty**, signed on **7 February 1992**, officially established the **European Union (EU)**. It came into effect on **1 November 1993**, transforming the **European Economic Community (EEC)** into a **political and economic union** with deeper integration across member states.

Key Features of the Maastricht Treaty:

Explanation:

- Introduced the concept of **European citizenship**, allowing citizens of member states to move and reside freely within the EU.
- Laid the foundation for the **Euro currency**, which was later adopted by many EU nations.
- Strengthened cooperation in areas such as **foreign policy, security, and justice**.
- Established the **three-pillar structure** of the EU:
 1. **European Communities** (economic policies)
 2. **Common Foreign and Security Policy (CFSP)**
 3. **Justice and Home Affairs**

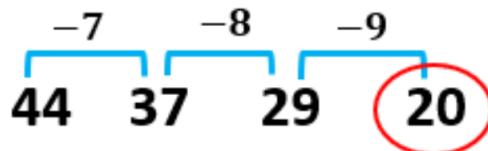
Q. 55

Select the number from among the following options that will come next in the following series.

44, 37, 29, _____.

- a) 55 ✗
- b) 11 ✗
- c) 16 ✗
- d) 20 ✓

Explanation:



Q. 56

Two numbers are in the ratio of 9 : 11. If 4 is subtracted from each of the numbers, then their ratio becomes 7 : 9. The sum of these two numbers is:

- a) 35
- b) 30
- c) 45
- d) 40

The correct answer is: d

The nos. are $9x$ and $11x$

ATQ,

$$\frac{9x - 4}{11x - 4} = \frac{7}{9}$$

$$81x - 36 = 77x - 28$$

Explanation:

$$4x = 8$$

$$x = 2$$

Sum of the two numbers = $20x = 20 \times 2 = 40$

Q. 57	<p>Which regional organization established the South Asian Free Trade Area (SAFTA) agreement?</p> <p>a) BIMSTEC </p> <p>b) SAARC </p> <p>c) ASEAN </p> <p>d) SCO </p>
	<p>The correct answer is: b</p> <p>Explanation:</p> <p>The South Asian Free Trade Area (SAFTA) agreement was established by the South Asian Association for Regional Cooperation (SAARC) in 2004 to promote trade liberalization among its member countries. SAFTA aims to gradually reduce tariffs, boost regional economic cooperation, and enhance trade among SAARC nations.</p> <p>Explanation: Key Features of SAFTA:</p> <ul style="list-style-type: none">• Enforced from 1 January 2006, focusing on reducing import duties among members.• Involves Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.• Encourages economic integration by eliminating trade barriers.• Supports Least Developed Countries (LDCs) with preferential trade benefits.

Q. 58	Recently, ISRO and which institute have jointly developed 'Indigenous RISC-V Controller (IRIS) Chip'?
	a) IISc Bangalore
	b) IIT Madras
	c) IIT Bombay
	d) IIT Kharagpur

The correct answer is: b

Explanation:

The Indian Institute of Technology Madras (IIT Madras) and the Indian Space Research Organisation (ISRO) have jointly developed the Indigenous RISC-V Controller (IRIS) Chip. This aerospace-grade semiconductor chip is designed for space applications, enhancing India's self-reliance in semiconductor technology.

Key Features of the IRIS Chip:

- Based on the SHAKTI processor, utilizing the open-source RISC-V Instruction Set Architecture (ISA).
- Developed by ISRO's Inertial Systems Unit (IISU) in Thiruvananthapuram, with implementation by IIT Madras.
- Manufactured by Semiconductor Laboratory (SCL) in Chandigarh and packaged by Tata Advanced Systems.
- Designed for Internet of Things (IoT) systems, computing functions, and critical space applications.

Q. 59

A question is given followed by two arguments. Decide which of the arguments is/are strong with respect to the question.

Question:

Should electronic gadgets be allowed in an examination hall?

Arguments:

I. No, it is easy to cheat with their help in an examination.

II. Yes, electronic gadgets are costly and it is not safe to leave them outside the examination hall.

a) Neither argument I nor II nor strong.

b) Only argument I is strong.

c) Only argument II is strong.

d) Both argument I and II are strong.

The correct answer is:

Only argument I is strong.

Explanation:

- **Argument I: No, it is easy to cheat with their help in an examination.**

This is a strong argument because the primary purpose of an examination is to assess a student's knowledge and skills fairly. Allowing electronic gadgets could facilitate cheating, which undermines the integrity of the examination process. Hence, this argument is **strong**.

- **Argument II: Yes, electronic gadgets are costly and it is not safe to leave them outside the examination hall.**

While safety concerns for expensive gadgets are valid, they do not justify allowing them inside the examination hall. Alternative solutions, such as secure storage areas, can address this issue without compromising exam integrity. Hence, this argument is **not strong**.

Thus, the correct answer is: "**Only argument I is strong.**"

Q. 60

Who has been appointed as the Chairman of Tata Communications in March 2025?

- a) N Chandrasekaran
- b) Rajesh Gopinathan
- c) Uday Kotak
- d) N. Ganapathy Subramaniam

The correct answer is: d

Explanation:

N. Ganapathy Subramaniam was appointed as the Chairman of Tata Communications on March 14, 2025.

Explanation:

- He previously served as the Chief Operating Officer (COO) and Executive Director of Tata Consultancy Services (TCS) until May 2024.
- His appointment was based on the recommendation of the Nomination and Remuneration Committee.
- He has extensive experience in technology, operations, product development, and business transformation

Q. 61

Study the given table and answer the question that follows.

The number of cycles produced in a factory during five consecutive weeks is given in the table.

Week	First	Second	Third	Fourth	Fifth
Number of cycles produced	800	1360	1000	900	1400

If the factory had produced the same number of cycles in all 5 weeks as they produced in the week with the maximum production, how many additional cycles would the factory have produced?

- a) 1540
- b) 1350
- c) 5640
- d) 7000

Explanation:

$$\text{No. of cycles produced} = (800 + 1360 + 1000 + 900 + 1400) = 5460$$

$$\text{If they produced cycle in the week with the maximum production} = (1400) \times 5 = 7000$$

$$\text{Additional cycles} = 7000 - 5460 = 1540$$

Q. 62

If $a + b = a - b + \frac{1}{\sqrt{ab}} + \sqrt{\left(\frac{a}{b}\right)}$, then $0.9 + 0.1 = ?$

- a) $30/212$ X
- b) $214/30$ ✓
- c) $212/30$ X
- d) $30/214$ X

The correct answer is: 2

$$a + b = a - b + \frac{1}{\sqrt{ab}} + \sqrt{\frac{a}{b}}$$

$$\begin{aligned} 0.9 + 0.1 &= 0.9 - 0.1 + \frac{1}{\sqrt{0.9 \times 0.1}} \\ &\quad + \sqrt{\frac{0.9}{0.1}} \end{aligned}$$

$$= 0.8 + \frac{1}{0.3} + 3$$

$$= \frac{4}{5} + \frac{10}{3} + 3$$

$$= \frac{12+50+45}{15} = \frac{107}{15}$$

$$\frac{107}{15} \times \frac{2}{2} = \frac{214}{30}$$

Explanation:

Q. 63

How is the chromosome numbers maintained from one generation to another in sexually reproducing organisms?

- a) Doubling of chromosomes during gamete formation X
- b) Doubling of chromosomes during zygote formation X
- c) Halving of chromosomes during gamete formation ✓
- d) Halving of chromosomes during zygote formation X

The correct answer is: c

Explanation:

In **sexually reproducing organisms**, chromosome numbers are maintained across generations through **meiosis**, a specialized type of cell division.

Explanation:

- During **gamete formation (sperm and egg cells)**, chromosomes undergo **reduction division**, where the number of chromosomes **halves** (from diploid → haploid).
- This ensures that when a sperm fertilizes an egg, the chromosome number is **restored to the original diploid count** in the **zygote**, preventing chromosome doubling in each generation.

Q. 64

Study the given table and answer the question that follows.

Institution	Girls	Boys	Teachers
School	3000	2500	690
College	9000	11000	1500
University	15000	16000	2000

What is the ratio of the college teachers to school girls?

- a) 2 : 1 X
- b) 3 : 15 X
- c) 1 : 2 ✓
- d) 1.5 : 30 X

Explanation:

$$\text{Ratio} = 1500 : 3000 \\ 1 : 2$$

Q. 65

One _____ is produced from base events in protein synthesis.

- a) DNA copy 
- b) RNA copy 
- c) mRNA copy 
- d) DNA and RNA copies 

The correct answer is: c

Explanation:

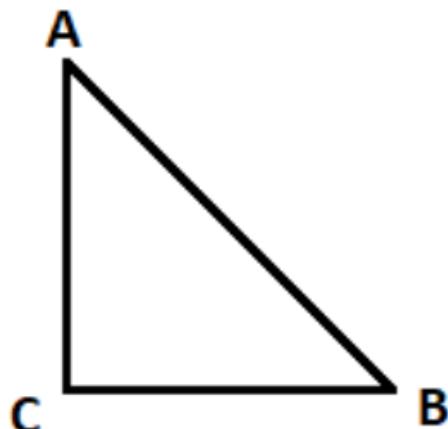
In **protein synthesis**, the base sequence of **DNA** is transcribed into **messenger RNA (mRNA)**, which carries genetic instructions to the **ribosome** for translation into proteins.

- This process, called **transcription**, occurs in the **nucleus** of eukaryotic cells.
- The **mRNA** then moves to the **cytoplasm**, where it serves as a template for assembling amino acids into a protein.

Q. 66

- In a triangle ABC that is right angled at C, $\angle A = \angle B$. The value of $\sin A \sin B + \cos A \cos B$ is:
- a) 0 X
 - b) 1 ✓
 - c) $1/\sqrt{2}$ X
 - d) $1/2$ X

The correct answer is: 2



Explanation:

$$\angle A = \angle B$$

$$\therefore \sin A = \sin B, \text{ and } \cos A = \cos B$$

Now,

$$\begin{aligned} \sin A \sin B + \cos A \cos B \\ = \sin^2 A + \cos^2 A = 1 \end{aligned}$$

Q. 67

Which region of India is known for the Pattachitra painting style?

- a) Rajasthan X
- b) Odisha ✓
- c) Madhya Pradesh X
- d) Himachal Pradesh X

The correct answer is: b

Explanation:

Pattachitra painting is a traditional scroll painting style that originated in Odisha, known for its intricate detailing, mythological themes, and vibrant colors.

Explanation:

- The name **Pattachitra** comes from "Patta" (cloth) and "Chitra" (picture), referring to paintings done on cloth or dried palm leaves.
- These paintings typically depict **stories from Hindu mythology**, especially **Lord Jagannath, Krishna, and Ramayana** themes.
- The art form is practiced primarily in **Raghurajpur village**, a famous heritage crafts village in Odisha.

Q. 68

Study the given table and answer the question that follows.

The information related to the sale (in rupees) of different items of a baker's shop in one day is given in the table.

Items	Ordinary bread	Fruit bread	Cakes and pastries	Biscuits	Others
Sales (in rupees)	400	320	210	120	100
Customers	40	16	14	12	4

What would be the maximum amount of increase in sales for the baker, if all customers who bought any type of bread would ALSO have bought either Cakes and Pastries OR Biscuits?

- a) 840 ✓
- b) 700 X
- c) 560 X
- d) 600 X

Explanation:

Cakes and pastries= 210

Biscuits = 120

Maximum amount of increase in sales for the baker= $210 \times 4 = 840$

Q. 69	<p>What is the largest number that 2270, 3739 and 6677 must be divided by to obtain the same remainder in each case?</p> <p>a) 1459 </p> <p>b) 1479 </p> <p>c) 1469 </p> <p>d) 1489 </p>
-------	--

Explanation:	<p>The correct answer is: c $3739 - 2270 = 1469$ $6677 - 3739 = 2938$ $6677 - 2270 = 4407$ The HCF of 1469, 2938, 4407 is 1469 Largest number is 1469</p>
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Q. 70	<p>Which of the following elements of group 14 is a metalloid?</p> <p>a) Ge </p> <p>b) Sn </p> <p>c) Pb </p> <p>d) C </p>
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Explanation:	<p>The correct answer is: a</p> <p>Explanation:</p> <p>In Group 14 of the periodic table, Germanium (Ge) is classified as a metalloid, meaning it has properties of both metals and nonmetals.</p> <ul style="list-style-type: none">• It is semiconducting and widely used in electronics and fiber-optic systems.• It exhibits moderate conductivity, which can be enhanced by doping (adding small amounts of other elements).
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Q. 71

Study the given table and answer the question that follows.

Institution	Girls	Boys	Teachers
School	3000	2500	690
College	9000	11000	1500
University	15000	16000	2000

What is ratio of total students to college and university teachers?

- a) 11 : 5 X
- b) 7 : 113 X
- c) 113 : 7 ✓
- d) 5 : 11 X

Explanation:

$$\begin{aligned}\text{Ratio} &= (3000+9000+15000+2500+11000+16000) : (1500+2000) \\ &= (56500) : (3500) \\ &= 113 : 7\end{aligned}$$

Q. 72

If $a+b+c = 17$, $abc = 168$, and $ab + bc + ca = 94$, then $a^3 + b^3 + c^3$?

a) 623 ✓

b) 621 ✗

c) 620 ✗

d) 622 ✗

The correct answer is: a

$$a + b + c = 17$$

$$ab + bc + ca = 94$$

$$abc = 168$$

Explanation:

$$\begin{aligned} a^3 + b^3 + c^3 - 3abc \\ = (a + b + c)[(a + b \\ + c)^2 \\ - 3(ab + bc + ca)] \end{aligned}$$

$$\begin{aligned} a^3 + b^3 + c^3 - 3 \times 168 \\ = (17)(17^2 - 3 \times 94) \end{aligned}$$

$$\begin{aligned} a^3 + b^3 + c^3 - 504 \\ = 17(289 - 282) \end{aligned}$$

$$a^3 + b^3 + c^3 - 504 = 17 \times 7$$

$$a^3 + b^3 + c^3 = 119 + 504 = 623$$

Q. 73

Which chemical element with atomic number 35 has a dark reddish-brown liquid with a burning pungent odour?

- a) Bromine ✓
- b) Astatine ✗
- c) Chlorine ✗
- d) Tennessine ✗

The correct answer is: a

Explanation:

Bromine (Br) is the **chemical element with atomic number 35**, and it exists as a **dark reddish-brown liquid** at room temperature.

Explanation:

- It is one of the **few elements** that are **liquid in their natural state**, along with **mercury**.
- It has a **burning pungent odour** and is highly **reactive and corrosive**, especially with organic compounds.
- Found in **seawater and mineral deposits**, it is widely used in **flame retardants, pesticides, and pharmaceuticals**.

Q. 74

Angles A, B and C of a triangle are in arithmetic progression. M is a point on BC such that AM is perpendicular to BC. What is BM/AB?

- a) $1/2$ ✓
- b) $3/4$ ✗
- c) $1/3$ ✗
- d) $1/4$ ✗

The correct answer is: a

$$A+B+C=180^\circ \dots (1)$$

If A, B and C are in AP then $B-A = C-B$

$$2B = A + C \dots (2)$$

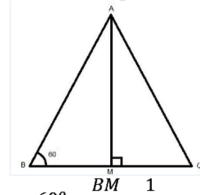
Solving eq (1) and eq (2), we get

$$B = 60^\circ$$

AM is perpendicular to BC hence $\triangle ABM$ is a right angled triangle and

$$\angle AMB = 90^\circ$$

The remaining $\angle BAM = 30^\circ$



$$\cos 60^\circ = \frac{BM}{AB} = \frac{1}{2}$$

Explanation:

Q. 75 _____ can help detect spelling and grammatical errors in Microsoft Word 365.

- a) Pressing 'F7' ✓
- b) Pressing 'F8' ✗
- c) Pressing 'Alt+ F7' ✗
- d) Pressing 'Alt+ F8' ✗

The correct answer is: a

Explanation:

Pressing 'F7' in Microsoft Word 365 opens the **Spelling and Grammar Check** feature. This tool helps identify and correct spelling mistakes, grammar errors, and formatting inconsistencies within a document.

Explanation:

Other Options Explained:

- 'F8' → Used for **extending text selection** in Word.
- 'Alt + F8' → Opens the **Macros dialog box**, allowing users to manage automated commands.

Q. 76 Study the given pattern carefully and select the number that can replace the question mark (?) in it.

3	?	4
7	121	8
6	9	5

- a) 8 ✗
- b) 9 ✓
- c) 114 ✗
- d) 12 ✗

Logic:

First Step: Multiply the 1st and 3rd column number

Second step: then sum the digit of the given result

Third step: after sum, square the given result

Apply: $6 \times 5 = 30$ (1st step)

$30 = 3 + 0 = 3$ (2nd Step)

$3^2 = 9$ (3rd Step)

So,

$3 \times 4 = 12$ (1st step)

$12 = 1 + 2 = 3$ (2nd Step)

$3^2 = 9$ (3rd Step)

So the correct answer is: 9

Q. 77

Out of the four sports listed, three are alike in some manner and one is different.

Select the odd one.

- a) Hammer throw
- b) Golf
- c) Shot-put
- d) Discus throw

The odd one out is **Golf**.

Explanation:

- Hammer throw, Shot-put, and Discus throw are all **track and field events** that involve throwing an object for distance. They are part of athletics competitions.
- **Golf**, on the other hand, is a **precision sport** where players use clubs to hit a ball into a series of holes on a course. It does not involve throwing for distance like the other three.

Thus, **Golf** is the sport that is different from the rest.

Q. 78

A train starts at a speed of 40 km/h. Its speed increases every 1 h by 20 km/h. How much time does it take to cover a distance of 470 km?

- a) 4 h 30 min
- b) 5 h 30 min
- c) 6 h
- d) 6 h 30 min

The correct answer is: b

Speed of train = 40 km/h

In 1 hour train covers 40 km

Explanation:

Now speed increases every hour by 20km/h, so train covers 20 km extra every hr.

Distance covered = $40+60+80+100+120 = 400$ km in 5 hrs

Remaining 70 km will be covered with the speed of 140km/h in 1/2 hr = 30 min

Total time taken = 5 hr 30 min

Q. 79	<p>Which Five-Year Plan marked the shift towards economic liberalization and reforms in India?</p> <p>a) Seventh Five-Year Plan </p> <p>b) Eighth Five-Year Plan </p> <p>c) Ninth Five-Year Plan </p> <p>d) Tenth Five-Year Plan </p>
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Explanation:	<p>The correct answer is: b</p> <p>Explanation:</p> <p>The Eighth Five-Year Plan (1992–1997) marked the shift towards economic liberalization and reforms in India. Although it was scheduled to begin in 1990, political instability delayed its implementation, and the New Economic Policy (NEP) of 1991 was introduced instead.</p> <p>Key Highlights of the Eighth Plan:</p> <ul style="list-style-type: none">• Liberalization, Privatization, and Globalization (LPG) reforms initiated by Prime Minister P.V. Narasimha Rao and Finance Minister Dr. Manmohan Singh.• Industrial deregulation, reducing government control over businesses.• Foreign Direct Investment (FDI) promotion, opening India's economy to global markets.• Shift from public sector-driven development to private sector-led growth.• Focus on employment generation and human development along with economic growth.
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Q. 80

A father can complete a task in 8 days, while the son can do it in 7 days. If they work on alternate days, with the father starting, then in how many days will the task be completed?

- a) 7 X
- b) 6 X
- c) 7 (1/2) ✓
- d) 6 (1/2) X

The correct answer is: c

Explanation:

$$\begin{array}{l}
 \text{F} \longrightarrow 8 \text{ days} \xrightarrow{\text{Efficiency}} 56 \text{ (Total work)} \\
 \text{S} \longrightarrow 7 \text{ days} \xrightarrow{\text{Efficiency}} 56 \\
 \begin{array}{rcl}
 \text{1st day} & \longrightarrow & 7 \text{ units} \\
 \text{2nd day} & \longrightarrow & 8 \text{ units} \\
 \text{3rd day} & \longrightarrow & 7 \text{ units} \\
 \text{4th day} & \longrightarrow & 8 \text{ units} \\
 \text{5th day} & \longrightarrow & 7 \text{ units} \\
 \text{6th day} & \longrightarrow & 8 \text{ units} \\
 \text{7th day} & \longrightarrow & 7 \text{ units} \\
 \end{array} \\
 \begin{array}{rcl}
 7 \text{ days} & \longrightarrow & 15 \text{ units} \\
 & \downarrow \times 3 & \downarrow \times 3 \\
 21 \text{ days} & \longrightarrow & 45 \text{ units} \\
 + 7 & & + 7 \\
 \hline
 28 \text{ days} & \longrightarrow & 52 \text{ units}
 \end{array} \\
 \text{Remaining } 4 \text{ units will be done in } \frac{4}{8} = \frac{1}{2} \text{ days.} \\
 \therefore \text{Total time} = 7 \frac{1}{2} \text{ days.}
 \end{array}$$

Q. 81	<p>Which of the following best defines transfer payments?</p> <p>a) Payments made by individuals to the government in the form of taxes. X</p> <p>b) Payments made by the government to individuals without any corresponding production of goods or services. ✓</p> <p>c) Payments made by businesses to their shareholders as a share of profits. X</p> <p>d) Payments made to individuals in exchange for their labour or services. X</p>
Explanation:	<p>The correct answer is: b</p> <p>Explanation:</p> <p>Transfer payments refer to non-compensatory financial transactions where the government provides monetary benefits to individuals without requiring the recipients to produce goods or services in return. These payments aim to support social welfare, economic stability, and income redistribution.</p> <p>Examples of Transfer Payments:</p> <ul style="list-style-type: none"> • Social Security benefits • Unemployment assistance • Pension payments • Subsidies and welfare schemes

Q. 82	<p>Identify the day from the options that belongs to the following class.</p> <p>15-08, 02-10, 26-01</p> <p>a) Wednesday X</p> <p>b) Tuesday X</p> <p>c) Sunday ✓</p> <p>d) Monday X</p>
Explanation:	<p>15-08 (15th August- Independence Day) 02-10 (2nd October- Gandhi Jayanti) 26-01 (26th January- Republic Day)</p> <p>These are all national holidays in India.</p> <p>So, Sunday is also a public holiday observed weekly across the country,</p>

Q. 83

- After adding 7 to a number, the sum is multiplied by 5, and the product so obtained is divided by 9. From the quotient so obtained, 3 is subtracted to get 12. The number is:
- a) 30 X
 - b) 60 X
 - c) 20 ✓
 - d) 40 X

The correct answer is: c

$$\text{Quotient} - 3 = 12$$

$$\text{Quotient} = 15$$

Let the no. be x

ATQ,

$$\frac{(x + 7)5}{9} = 15$$

Explanation:

$$5x + 35 = 135$$

$$5x = 100$$

$$x = 20$$

Q. 84

Which of the following statements is correct about Article 129 of the Constitution of India?

- a) It provides for the Supreme Court to give advisory opinion to the President. X
- b) It provides for the Supreme Court to be a court of original jurisdiction X
- c) It provides for the Supreme Court to be the highest court of appeal. X
- d) It provides for the Supreme Court to be a court of record. ✓

Explanation:

The correct answer is: d

Explanation:

Article 129 of the Constitution of India designates the **Supreme Court of India** as a **court of record**. This means:

- Its decisions, judgments, and proceedings are **official records** that cannot be questioned in any lower court.
- The Supreme Court has the **power to punish for contempt of court**, ensuring respect for judicial authority.

Articles 124 to 147: Supreme Court of India

These articles in the **Indian Constitution** define the **structure, jurisdiction, powers, and functioning** of the **Supreme Court of India**. They are part of **Chapter IV of Part V**, which deals with the **Union Judiciary**.

Key Articles Explained:

- **Article 124** → Establishes the **Supreme Court of India**, its composition, and appointment of judges.
- **Article 125** → Defines the **salaries and allowances** of Supreme Court judges.
- **Article 126** → Provides for the **appointment of an acting Chief Justice** when needed.
- **Article 127** → Allows the **appointment of ad hoc judges** in case of a shortage of judges.
- **Article 128** → Enables **retired judges** to attend Supreme Court sittings if required.
- **Article 129** → Declares the Supreme Court as a **court of record**, meaning its decisions are binding and it has the power to punish for contempt.
- **Article 130** → Specifies the **seat of the Supreme Court**, which is in **New Delhi**, but allows flexibility for hearings elsewhere.
- **Article 131** → Grants the Supreme Court **original jurisdiction** in disputes between the **Union and States** or between different States.
- **Article 132** → Provides for **appellate jurisdiction** in cases involving constitutional matters.
- **Article 133** → Grants **appellate jurisdiction** in **civil cases** from High Courts.
- **Article 134** → Grants **appellate jurisdiction** in **criminal cases** from High Courts.
- **Article 134A** → Allows High Courts to issue **certificates for appeal** to the Supreme Court.
- **Article 135** → Enables the Supreme Court to exercise **jurisdiction of the Federal Court** under pre-existing laws.
- **Article 136** → Grants the Supreme Court **special leave to appeal**, allowing it to hear cases beyond normal jurisdiction.
- **Article 137** → Provides for **review of judgments** by the Supreme Court.
- **Article 138** → Allows **Parliament to expand the Supreme Court's jurisdiction**.
- **Article 139** → Grants the Supreme Court the power to **issue writs** for enforcement of fundamental rights.
- **Article 139A** → Allows the **transfer of cases** from High Courts to the Supreme Court.
- **Article 140** → Grants **ancillary powers** to the Supreme Court for effective functioning.
- **Article 141** → Declares that **Supreme Court rulings are binding** on all courts in India.
- **Article 142** → Empowers the Supreme Court to **pass orders for complete justice**, ensuring enforcement of its decrees.
- **Article 143** → Allows the **President to seek advisory opinions** from the Supreme Court.

- Article 144 → Requires **civil and judicial authorities** to assist the Supreme Court in enforcing its decisions.
- Article 145 → Grants the Supreme Court the power to **frame rules** for its procedures.
- Article 146 → Deals with the **appointment of officers and staff** of the Supreme Court.
- Article 147 → Defines the **interpretation of constitutional provisions** related to the Supreme Court.

These articles collectively establish the **Supreme Court's authority, independence, and role** as the **guardian of the Constitution**.

Q. 85 Select the combination of letters that when sequentially placed in the blanks will create a Repetitive pattern.

c_bba_cab_ac_ab_ac

a) abcabc

b) acbcb

c) bcacb

d) babcc

Explanation:

The correct answer is: b

cabbac/cabbac/cabbac

Q. 86

Find the value of $\cot 19^\circ (\cot 71^\circ \cos^2 21^\circ + 1/\tan 71^\circ \sec^2 69^\circ)$.

- a) 1 ✓
- b) -1 ✗
- c) 0 ✗
- d) 1/2 ✗

The correct answer is: a

$$\cot(90 - \theta) = \tan \theta$$

$$\cos(90 - \theta) = \sin \theta$$

Now,

$$\cot 19^\circ \left(\cot 71^\circ \cos^2 21^\circ + \frac{1}{\tan 71^\circ \sec^2 69^\circ} \right)$$

$$\cot 19^\circ (\cot 71^\circ \cos^2 21^\circ + \cot 71^\circ \cos^2 69^\circ)$$

$$\cot 19^\circ \cot 71^\circ (\cos^2 21^\circ + \sin^2 21^\circ)$$

$$\cot 19^\circ \tan 19^\circ = 1$$

Explanation:

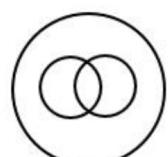
Q. 87	<p>Which country will host the BRICS summit 2025?</p> <p>a) Russia </p> <p>b) India </p> <p>c) Brazil </p> <p>d) China </p>
Explanation:	<p>The correct answer is: c</p> <p>Explanation:</p> <p>The 2025 BRICS Summit will be hosted by Brazil, with the main event scheduled to take place in Rio de Janeiro on July 6-7, 2025.</p> <ul style="list-style-type: none">• Brazil holds the BRICS presidency for 2025, focusing on governance reform and cooperation among Global South countries.• The summit will bring together leaders from Brazil, Russia, India, China, South Africa, and newly joined members like Egypt, Ethiopia, Iran, UAE, and Indonesia.

Q. 88

Select the Venn diagram that best represents the relationship between the following classes.

Lawyers, Human Beings, Married People

a)



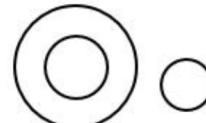
b)



c)

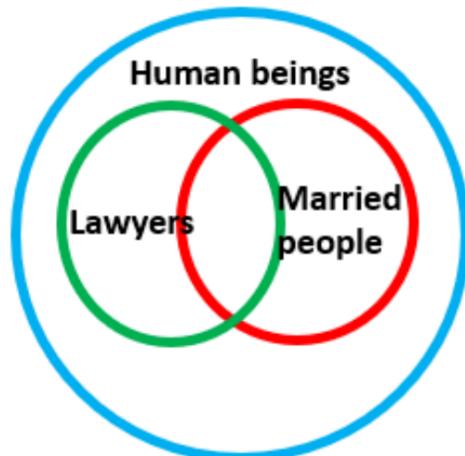


d)



Lawyers and married people are human beings. Some lawyers can be married and some married people can be lawyers.

Explanation:



Q. 89	<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>
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Explanation:	<p>The correct answer is: b</p> <p>Explanation:</p> <p>Beriberi is a nutritional disorder caused by a deficiency of vitamin B1 (Thiamine). It affects the nervous system and cardiovascular health, leading to muscle wasting, nerve damage, and severe complications if left untreated.</p> <p>Types of Beriberi:</p> <ul style="list-style-type: none"> • Wet Beriberi → Affects the cardiovascular system, causing heart failure, fluid retention, and shortness of breath. • Dry Beriberi → Affects the nervous system, leading to muscle weakness, numbness, and peripheral nerve damage. • Infantile Beriberi → Occurs in infants of mothers deficient in B1, leading to severe neurological issues. <p>Other Options Explained:</p> <ul style="list-style-type: none"> • Xerophthalmia → Caused by vitamin A deficiency, leading to dry eyes and blindness. • Rickets → Caused by vitamin D deficiency, affecting bone development and strength. • Pernicious Anaemia → Caused by vitamin B12 deficiency, leading to red blood cell production problems.
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Q. 90	<p>Select the option that is related to the third term in the same way as the second term is related to the first term.</p> <p>Radio : Sound :: Television : ?</p> <p>a) Serials </p> <p>b) Channels </p> <p>c) Colour </p> <p>d) Images </p>
Explanation:	<p>Radio relates to sound in the same way that television relates to images/video or audio-visual elements. Television broadcasts not only audio but also visual content like moving images, while radio primarily focuses on transmitting sound alone.</p>

Q. 91	A 70 kg man pushes a 50 kg man with the force of 50N. How much force has a 50 kg man pushed the other person? a) 50N ✓ b) 30N ✗ c) 100N ✗ d) 60N ✗
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Explanation:	The correct answer is: a Explanation: According to Newton's Third Law of Motion, "For every action, there is an equal and opposite reaction." <ul style="list-style-type: none"> • When the 70 kg man exerts a force of 50N on the 50 kg man, the 50 kg man also exerts an equal force of 50N in the opposite direction. • This means the force exchanged between them is equal in magnitude but opposite in direction.
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Q. 92	Select the number from the given options that can come next in the following series. 1, 12, 124, 1248, 12496, _____. a) 124962 ✗ b) 124978 ✗ c) 124992 ✓ d) 124982 ✗
Explanation:	$\begin{array}{cccccc} \times 10 + 2 & \times 10 + 4 & \times 10 + 8 & \times 10 + 16 & \times 10 + 32 \\ \textcolor{blue}{1} & \textcolor{blue}{12} & \textcolor{blue}{124} & \textcolor{blue}{1248} & \textcolor{blue}{12496} & \textcolor{red}{124992} \end{array}$

Q. 93

- Which of the following is NOT a directive principle of state policy?
- Separation of the judiciary from executive
 - Reside in any part of India
 - Protection of monuments
 - Uniform civil code

The correct answer is: b

Explanation:

The right to **reside in any part of India** is a **Fundamental Right**, not a **Directive Principle of State Policy (DPSP)**. It is enshrined under **Article 19(1)(e)** of the **Constitution of India**, which guarantees citizens the freedom to move and settle anywhere in the country.

Other Options Explained:

- Separation of the judiciary from the executive → Directive Principle under Article 50, aiming to ensure independent functioning of the judiciary.
- Protection of monuments → Directive Principle under Article 49, directing the State to safeguard national monuments, places of historic importance, and art treasures.
- Uniform Civil Code (UCC) → Directive Principle under Article 44, encouraging the adoption of a common set of personal laws across religions for uniformity in civil matters.

Q. 94

Where the first Jallikattu event of 2025 has started?

- Tamil Nadu
- Kerala
- Andhra Pradesh
- Karnataka

The correct answer is: a

Explanation:

The first Jallikattu event of 2025 was held in Thatchankurichi village, Gandarvakottai taluk, Pudukkottai district, Tamil Nadu, on January 4, 2025.

Explanation:

- The event featured **600 bulls** from various districts, including Trichy, Dindigul, Manapparai, Pudukkottai, and Sivagangai.
- 350 bull tamers** participated, all medically examined and issued identity cards.
- The **oath-taking ceremony** was conducted in the presence of the **District Collector M. Aruna**.
- Jallikattu is a **traditional bull-taming sport** associated with **Pongal celebrations**, symbolizing **Tamil heritage, bravery, and agricultural pride**.

Q. 95

A man invests money in three different schemes for 6 years, 10 years and 12 years, at 10%, 12% and 15% simple interest, respectively. If at the completion of each scheme, he gets the same interest then the ratio of the respective investments is:

- a) 6 : 3 : 2 ✓
- b) 7 : 4 : 3 ✗
- c) 4 : 3 : 2 ✗
- d) 5 : 4 : 3 ✗

The correct answer is: a

$$P \times R \times T$$

SI =

100

Principal for three different scheme is P1, P2, and P3

$$P_1:P_2:P_3 = \frac{1}{6 \times 10} : \frac{1}{10 \times 12} : \frac{1}{12 \times 15} = 6:3:2$$

Q. 96

Consider the given statements and decide which of the assumptions from the options is NOT implicit in the statements.

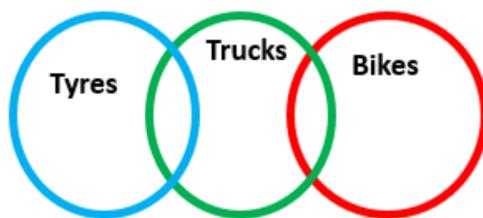
Some trucks are bikes

Some tyres are not bikes but trucks.

- a) Some bikes are trucks. ✗
- b) Some bikes are tyres. ✓
- c) Some tyres are not trucks. ✗
- d) Some trucks are tyres. ✗

There is no relation between tyres and bikes.

Explanation:



Q. 97

Which of the following statement is correct?

- I. The family welfare programme has sought to promote responsible and planned parenthood on a compulsory basis.
- II. The National Population Policy 2000 provides a policy framework for imparting free and compulsory education upto 14 years of age.

a) Neither I nor II

b) Only I

c) Both I and II

d) Only II

Explanation:

The correct answer is: d

Explanation:

- Statement I is incorrect → The Family Welfare Programme in India promotes responsible and planned parenthood, but it is voluntary, not compulsory. It emphasizes awareness, contraception options, and maternal health, ensuring informed choices rather than mandatory enforcement.
- Statement II is correct → The National Population Policy (NPP) 2000 provides a policy framework that includes free and compulsory education for children up to 14 years of age. This aligns with Article 21A of the Constitution, which was later reinforced by the Right to Education Act, 2009.

Q. 98

Select the number from among the given options that will come next in the following series.

17, 36, 76, 158, ____.

a) 350

b) 324

c) 344

d) 316

Explanation:

$$\begin{array}{cccccc} & \times 2 + 2 & \times 2 + 4 & \times 2 + 6 & \times 2 + 8 \\ \overbrace{17} & \quad \overbrace{36} & \quad \overbrace{76} & \quad \overbrace{158} & \quad \overbrace{324} \end{array}$$

Q. 99**Who has written the recently published book 'Guardian of Heritage'?****a) Amish Tripathi****b) Ramachandra Guha****c) Dr. Biswaroop Roy Chowdhury****d) Shashi Tharoor****The correct answer is: c****Explanation:**

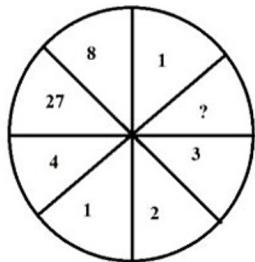
The book "**Guardian of Heritage**" was written by **Dr. Biswaroop Roy Chowdhury** and published by **Diamond Books** on **February 8, 2025**.

Explanation:

- The book highlights the **life and contributions of Professor Chu Bao Que**, who is recognized for his efforts in **preserving Vietnam's folklore and cultural heritage**.
- It explores **historical connections between Vietnam and India**, dating back to the **Cham civilization** in the 7th century.

Q. 100

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



- a) 32 X
- b) 48 X
- c) 64 ✓
- d) 22 X

Explanation:

