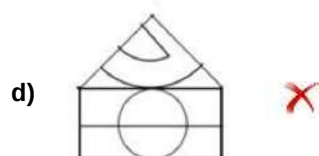
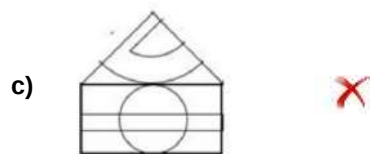
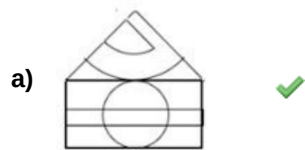
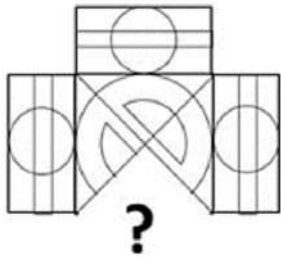


## RBE SSC CGL 2025 Live Mock Feb 09,2025

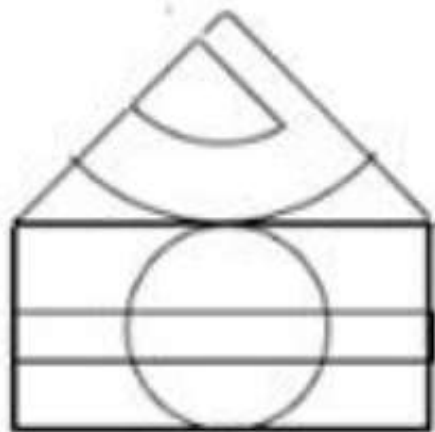
Q. 1

Select the option figure that will replace the question mark (?) in the given figure to complete the pattern.



The correct answer is: a

Explanation:



Q. 2

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

Statements:

All bats are trees.

All trees are cats.

Some cats are green.

Conclusions:

I. Some cats are bats.

II, All trees are green.

III. All green are cats.

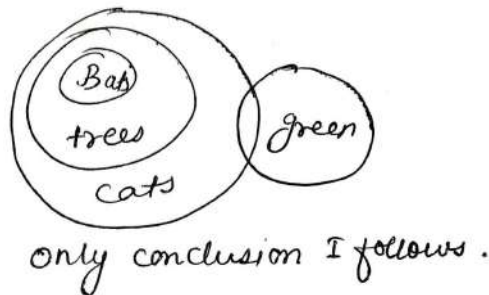
a) Only conclusion III follows. ✗

b) Only conclusion II follows. ✗

c) All conclusions follow. ✗

d) Only conclusion I follows. ✓

Explanation:



Q. 3

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

59 : 3483 :: 63 : ? :: 78 : 6086

a) 3971 ✓

b) 3969 ✗

c) 3953 ✗

d) 3973 ✗





Explanation:

The correct answer is: a





$$\Rightarrow 59 = (59)^2 + 2 = 3481 + 2 = 3483$$

$$\Rightarrow 78 = (78)^2 + 2 = 6084 + 2 = 6086$$

$$\Rightarrow 63 = (63)^2 + 2 = 3969 + 2 = 3971$$

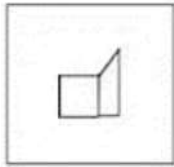
<p><b>Q. 4</b></p>	<p>Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.</p> <p>L _ _ OP _ MN _ PLM _ O _ LM _ _ P</p> <p>a) PQSTSTOQ </p> <p>b) MNQONPNR </p> <p>c) MNLONPNO </p> <p>d) OPLONONO </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: c</p> <p>L MN OP/ L MNOP/LMNOP /LMNOP</p>

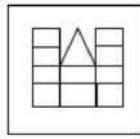
<p><b>Q. 5</b></p>	<p>Select the option that is related to the third word in the same way as the second word is related to the first word.</p> <p>(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)</p> <p>Pen : Ink :: Bulb : ?</p> <p>a) Electricity </p> <p>b) Switch </p> <p>c) Socket </p> <p>d) Plug </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: a</p> <ul style="list-style-type: none"> <li>• A pen uses ink to perform its function (writing).</li> <li>• A bulb uses electricity to perform its function (lighting).</li> </ul> <p>So, the relationship between "Pen" and "Ink" is the same as the relationship between "Bulb" and "Electricity".</p> <p>Therefore, the correct option is <b>Electricity</b>.</p>

Q. 6

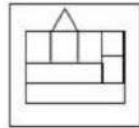
Select the option in which the given figure is embedded (rotation is NOT allowed).



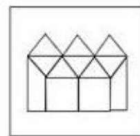
a)



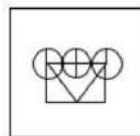
b)



c)

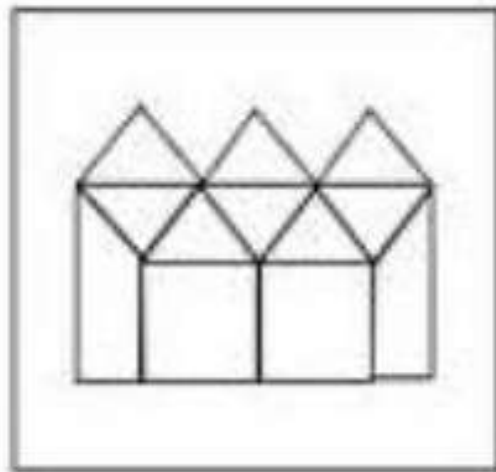


d)



The correct answer is: c

Explanation:



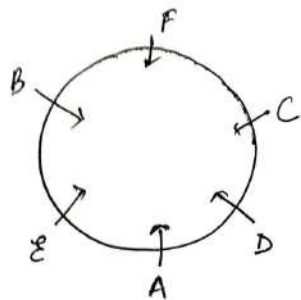
Q. 7

Six friends (A, B, C, D, E and F) are sitting around a circular table, facing the centre. A is sitting to the immediate left of D. F is sitting to the immediate left of B. E is an immediate neighbour of A. F is not an immediate neighbour of D. Who is sitting to the immediate right of D?

- a) A ☒
- b) C ☒
- c) E ☒
- d) B ☒

The correct answer is: c

Explanation:



The immediate right of D is C.

Q. 8

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

'A - B' means 'A is mother of B'

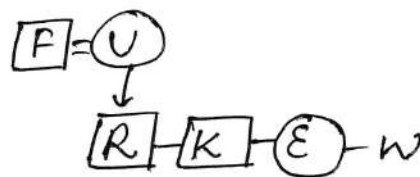
'A × B' means 'A is husband of B'

'A ÷ B' means 'A is sister of B'





If  $F \times U - R + K + E \div W$ , then which of the following statements is NOT correct?

- a) E is the daughter of U. ☒
- b) R is the brother of W. ☒
- c) F is the brother of the father of W. ☒
- d) K is the son of F. ☒

Explanation:






The father of W is F.  
 $\therefore$  Option (c) is incorrect.

<b>Q. 9</b>	<p>In a certain code language, 'SELL' is coded as 84 and 'MAIL' is coded as 53. How will 'PROFIT' be coded in that language?</p> <p>a) 48 </p> <p>b) 36 </p> <p>c) 54 </p> <p>d) 63 </p>
<b>Explanation:</b>	<p>The correct answer is: a</p> <p><math>SELL = 19+5+12+12 = 48</math> (sum of the place value of alphabets)</p> <p>Now, reverse the digits 48    84.</p> <p><math>MAIL = 13+1+9+12 = 35</math></p> <p>Reversing the digits = 53</p> <p><math>PROFIT = 16+18+15+6+9+20 = 84</math></p> <p>Reversing the digit = 48(Ans.)</p>

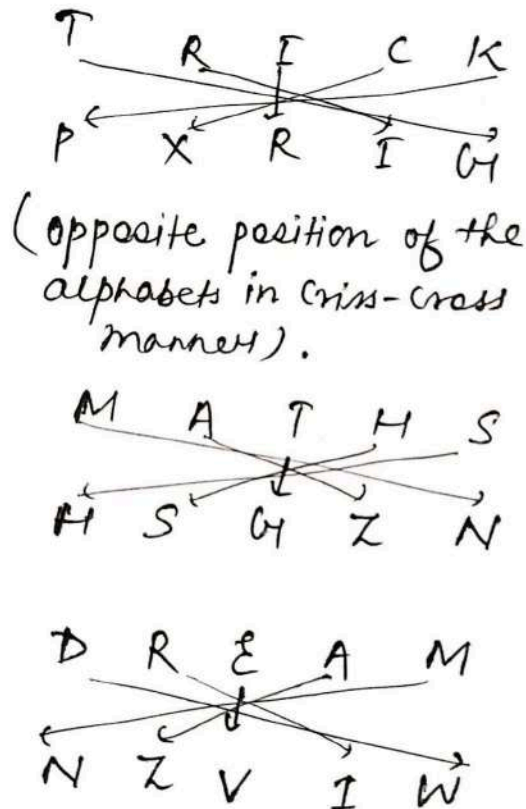
Q. 10

In a certain code language, 'TRICK' is written as 'PXRIG' and 'MATHS' is written as 'HSGZN'. How will 'DREAM' be written in that language?

- a) NZWJW 
- b) NZVIW 
- c) NZVJW 
- d) NZWIV 

The correct answer is: b

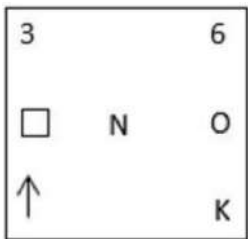

Explanation:

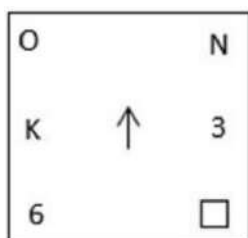



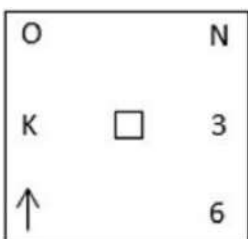

Q. 11

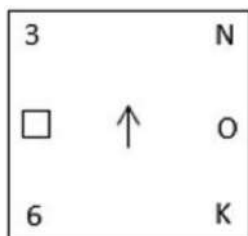

Select the figure from the options that can replace the question mark (?) and complete the given pattern.

3		□	N	O	6	K	□	↑		
K	↑	O	6	3	□	N	O	↑	3	6
6		N	K	↑	3	□	N		O	?

a)  

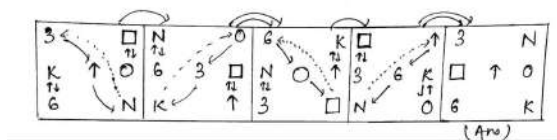
b)  

c)  

d)  

The correct answer is: d

Explanation:





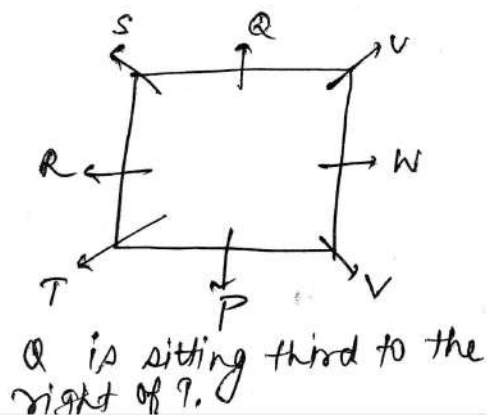
Q. 12

P, Q, R, S, T, U, V and W are sitting around a square table not facing the centre. Some of them are sitting at the corners while some are sitting at the exact centre of the sides. Q is sitting to the immediate left of U. U is sitting to the immediate left of W. S is sitting between Q and R. T is sitting between P and R. V is sitting to the immediate left of P. W is sitting to the immediate right of U. Who is sitting third to the right of T?

- a) U ☒
- b) Q ☒
- c) R ☒
- d) S ☒

The correct answer is: b


Explanation:





Q. 13


Which two signs and two numbers should be interchanged in the following equation to make it correct?

$$17 \div 2499 + 853 = 1000$$

a) 17 and 853, + and = 

b) 1000 and 853, + and  $\div$  

c) 17 and 2499, + and  $\div$  

d) 17 and 853, + and  $\div$  

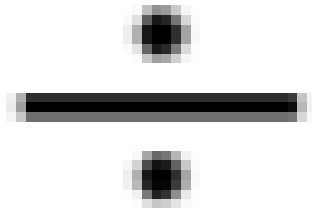
Explanation:

The correct answer is: d

$$17 \div 2499 + 853 = 1000$$

By interchanging, 17 and 853, + and  $\div$ , the given equation will be correct.

$$853 + 2499$$



$$17 = 1000$$

$$\Rightarrow 853 + 147$$

$$\Rightarrow 1000$$

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

Q. 14

Looking at a picture, a lady named Gita said, "He is my daughter-in-law's husband's father".  
How is Gita related to the person in the picture?

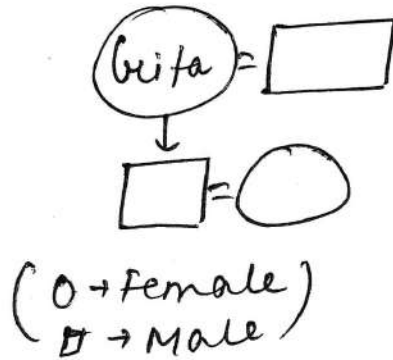
- a) Mother-in-law ☒
- b) Sister ☒
- c) Wife ☒
- d) Mother ☒

The correct answer is: c

- Gita says, "He is my daughter-in-law's husband's father."
- Gita's daughter-in-law's husband is her son.
- Gita's daughter-in-law's husband father is her husband.
- Therefore, Gita is the wife of the person in the picture.

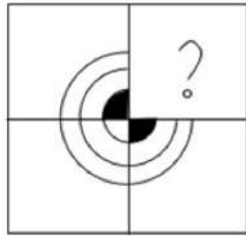
So, Gita is the **Wife** of the person in the picture.









Explanation:



Q. 15

Select the option that will replace the question mark (?) in the given figure to complete the pattern.











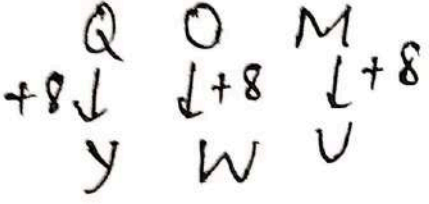
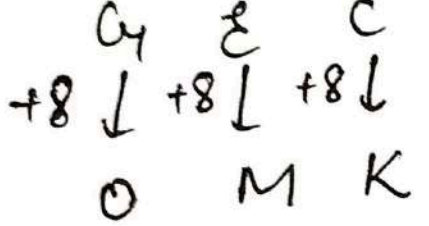
- a)  
- b)  
- c)  
- d)  









The correct answer is: b

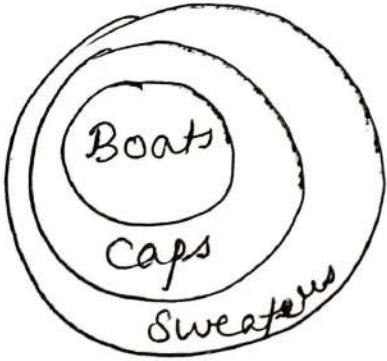
Explanation:







<p><b>Q. 16</b></p>	<p>Select the combination of letters, which when sequentially placed in the blanks of the given series, will complete the series.</p> <p>AAA _ BC _ DDEE _ GGG _ _ I</p> <p>a) ADFHH </p> <p>b) BDFFH </p> <p>c) BDFHH </p> <p>d) BCEGH </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: c</p> <p>AAA/BBC/DDD/EEF/GGG/HHI</p>

<p><b>Q. 17</b></p>	<p>Select the letter-cluster pair that best represents a similar relationship to the one expressed in the pair of letter-clusters given below.</p> <p>QOM : YWU</p> <p>a) GEC : KMO </p> <p>b) GFE : KLM </p> <p>c) GEC : OMK </p> <p>d) DFG : KMN </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: c</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>

<p><b>Q. 18</b></p>	<p>Which of the following numbers will replace the question mark (?) in the given series? 109, 80, 57, 40, 29, ?</p> <p>a) 20 </p> <p>b) 26 </p> <p>c) 22 </p> <p>d) 24 </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: d</p> $  \begin{array}{cccccc}  109 & , & 80 & , & 57 & , & 40 & , & 29 & , & ? \\  \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} \\  -29 & & -23 & & -17 & & -11 & & -5 & & \\  \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & \underbrace{\hspace{1.5cm}} & & & & \\  -6 & & -6 & & -6 & & -6 & & & &   \end{array}  $ <p>? = 29 - 5 = 24 <u>Ans</u></p>
<p><b>Q. 19</b></p>	<p>Which option represents the correct order of the given words as they would appear in an English dictionary?</p> <ol style="list-style-type: none"> <li>1. Tension</li> <li>2. Telecom</li> <li>3. Tonight</li> <li>4. Touched</li> <li>5. Thereby</li> </ol> <p>a) 5, 2, 4, 1, 3 </p> <p>b) 1, 2, 5, 3, 4 </p> <p>c) 2, 5, 1, 4, 3 </p> <p>d) 2, 1, 5, 3, 4 </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: d (2, 1, 5, 3, 4.)</p> <p>Here's the correct order:</p> <ol style="list-style-type: none"> <li>2. Telecom</li> <li>1. Tension</li> <li>5. Thereby</li> <li>3. Tonight</li> <li>4. Touched</li> </ol>

<b>Q. 20</b>	<p>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.</p> <p><b>Statements:</b></p> <p>1) All boats are caps. 2) All caps are sweaters.</p> <p><b>Conclusions:</b></p> <p>I. All boats are sweaters. II. All sweaters are caps.</p> <p>a) Only conclusion II follows ✗</p> <p>b) Neither conclusion I nor II follows ✗</p> <p>c) Both conclusions I and II follow ✗</p> <p>d) Only conclusion I follows ✓</p>
<b>Explanation:</b>	<p>The correct answer is: d</p>  <p>only conclusion I follows.</p>


<b>Q. 21</b>	<p>There are seven students A, B, C, D, E, F and G. Each scored different marks in a test. B got higher marks than C but scored less marks than F. D scored higher marks than G, who scored the least marks among all. A scored higher than F but less than E. C scored higher than D but less than B. Who scored the second highest marks among all?</p> <p>a) F </p> <p>b) E </p> <p>c) B </p> <p>d) A </p>
<b>Explanation:</b>	<p>The correct answer is: d</p> <p>The correct order of the given question is:</p> <p><math>E &gt; A &gt; F &gt; B &gt; C &gt; D &gt; G</math></p> <p>Therefore, A scored the second highest marks among all.</p>





Q. 22


Which two signs and two numbers should be interchanged in the following equation to make it correct?

$$456 - 121 \div 234 - 345 + 11 = 334$$

a) 345 and 121, + and  $\div$  

b) 234 and 121, - and  $\div$  

c) 456 and 121, + and - 

d) 11 and 121, + and - 

The correct answer is: a

$$456 - 121 \div 234 - 345 + 11 = 334$$

By interchanging, 345 and 121, + and  $\div$ , the given equation will be correct.

$$\Rightarrow 456 - 345 + 234 - 121$$

$$\frac{456 - 345}{234 - 121}$$

$$11 = 334$$

**Explanation:**

$$\text{LHS} \Rightarrow 456 - 345 + 234 - 121$$

$$\frac{456 - 345}{234 - 121}$$

$$11$$

$$\Rightarrow 111 + 234 - 11$$

$$\Rightarrow 334$$

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

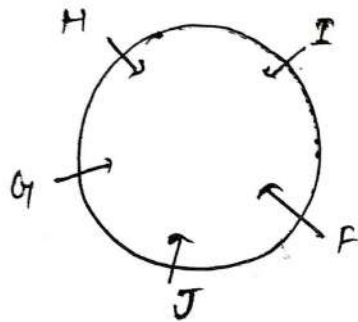
Q. 23

Five friends F, G, H, I and J are sitting around a circular table facing the centre. H is sitting third to the left of F. G is sitting to the immediate left of J and to the immediate right of H. Who is sitting to the immediate right of I?

- a) J ☒
- b) F ☒
- c) G ☒
- d) H ☒

The correct answer is: d

Explanation:



H is sitting to the immediate right of I.

Q. 24

Three of the following four letter-clusters are alike in a certain way and one is different. Select the one that is different.

a) EVHU ✗

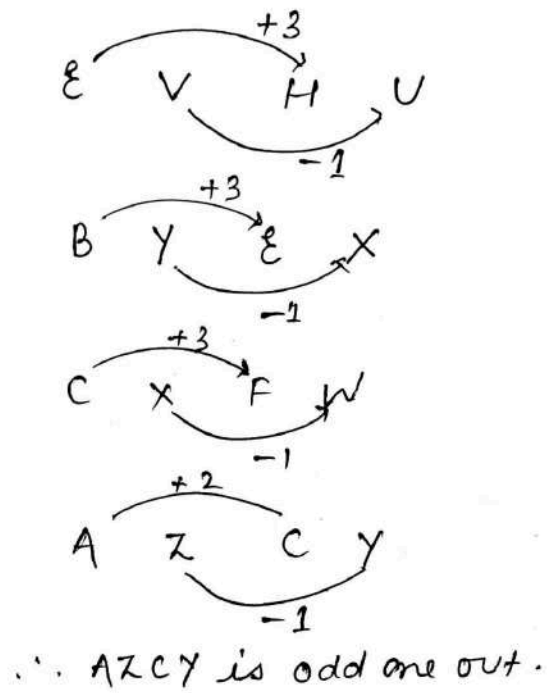
b) BYEX ✗





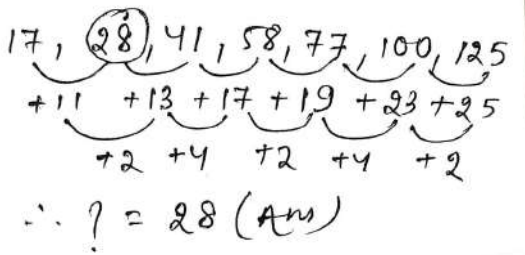




c) CXFW ✗





d) AZCY ✓

The correct answer is: d

Explanation:



<p><b>Q. 25</b></p>	<p><b>Which of the following numbers will replace the question mark (?) in the given series?</b>  <b>17, ?, 41, 58, 77, 100, 125</b></p> <p>a) 38 </p> <p>b) 26 </p> <p>c) 28 </p> <p>d) 32 </p>
<p><b>Explanation:</b></p>	<p>The correct answer is: c</p>  <p> <math>17, 28, 41, 58, 77, 100, 125</math>  <math>+11 \quad +13 \quad +17 \quad +19 \quad +23 \quad +25</math>  <math>+2 \quad +4 \quad +2 \quad +4 \quad +2</math>  <math>\therefore ? = 28 \text{ (Ans)}</math> </p>
<p><b>Q. 26</b></p>	<p><b>In which year did Robert Hooke introduce the term 'cell'?</b></p> <p>a) 1875 </p> <p>b) 1665 </p> <p>c) 1765 </p> <p>d) 1675 </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>1665</b>.</p> <ul style="list-style-type: none"> <li>• <b>Robert Hooke</b> is credited with introducing the term "cell" in <b>1665</b>.</li> <li>• He observed thin slices of cork under a microscope and noticed tiny box-shaped structures that reminded him of the small rooms monks lived in, which were called "cells".</li> <li>• He published his findings in his book, "<b>Micrographia</b>".</li> <li>• Cells of living organisms could be observed only after the discovery of improved microscopes.</li> <li>• While Hooke observed these structures, he was actually looking at the cell walls of dead plant cells.</li> </ul> <p><b>What is Cell?</b></p> <p>Cells are the basic building blocks of all living things. The human body is composed of trillions of cells. They provide structure for the body, take in nutrients from food, convert those nutrients into energy, and carry out specialized functions. Cells also contain the body's hereditary material and can make copies of themselves.</p> <p>Cells have many parts, each with a different function. Some of these parts, called organelles, are specialized structures that perform certain tasks within the cell.</p>

<p><b>Q. 27</b></p>	<p><b>In which year were the Arms Act and Vernacular press Act passed?</b></p> <p>a) 1877 </p> <p>b) 1878 </p> <p>c) 1876 </p> <p>d) 1879 </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>1878</b>.</p> <p><b>Explanation:</b></p> <p>Both the <b>Arms Act</b> and the <b>Vernacular Press Act</b> were passed in <b>1878</b> during the tenure of <b>Lord Lytton</b>, who was the Viceroy of India at that time.</p> <p><b>Important Details:</b></p> <ul style="list-style-type: none"> <li>• <b>Arms Act, 1878:</b> This act was aimed at restricting the possession of arms by Indians. It required Indians to obtain licenses to carry weapons, while the British and Anglo-Indians were exempt from this requirement. The act was part of the British strategy to curb potential uprisings and maintain control over the Indian population.</li> <li>• <b>Vernacular Press Act, 1878:</b> Also known as the "Gagging Act," this law was enacted to curb the freedom of the Indian-language press. It allowed the British government to censor reports and editorials in the vernacular press that were critical of British policies. The act was particularly aimed at controlling seditious writing and preventing the spread of nationalist sentiments.</li> </ul> <p><b>Impact:</b></p> <ul style="list-style-type: none"> <li>• <b>Arms Act:</b> The act led to widespread discontent among Indians as it was seen as a direct attempt to disarm the population and prevent any form of resistance against British rule.</li> <li>• <b>Vernacular Press Act:</b> The act faced strong opposition from Indian nationalists and was eventually repealed in 1882 by Lord Ripon, Lytton's successor. The act had a significant impact on the freedom of the press and the expression of dissent in India.</li> </ul>



Q. 28

The most famous of all Jain festivals, **Mahamastakabhisheka** is performed every 12 years at the **Digambara** sacred complex at \_\_\_\_\_ in **Karnataka**.

- a) Puliarmala ✗
- b) Jinanathapura ✗
- c) Shravanabelagola ✓
- d) Keelakuikudi ✗

The correct answer is **Shravanabelagola**.

**Explanation:**

The **Mahamastakabhisheka** is a grand Jain festival held every 12 years at the sacred complex in **Shravanabelagola**, Karnataka. This festival involves the anointment of the **Bahubali Gommateshwara statue**, which stands at an impressive height of 57 feet. The statue is bathed and anointed with various substances such as milk, saffron, sandalwood paste, and flowers.

**About Jainism:**

**Jainism** is an ancient Indian religion that emphasizes non-violence, truth, and asceticism. It was founded by **Mahavira**, also known as **Vardhamana**, who is considered the 24th Tirthankara (spiritual teacher) in Jain tradition. Jains follow the teachings of the Tirthankaras and practice principles such as **ahimsa** (non-violence), **satya** (truth), **asteya** (non-stealing), **brahmacharya** (chastity), and **aparigraha** (non-attachment).





**Mahamastakabhisheka Festival:**





- **Frequency:** Held every 12 years.
- **Significance:** The festival marks the anointment of the Bahubali statue, symbolizing the spiritual journey and enlightenment of Bahubali.
- **Rituals:** The statue is bathed with purified water, sandalwood paste, and other sacred substances. Devotees from around the world participate in the ceremony, offering prayers and performing rituals.





**Explanation:**

















Q. 29	<p>Which of the following best describes the process of calorimetry?</p> <p>a) Measuring the amount of compressive strength </p> <p>b) Measuring the amount of electricity </p> <p>c) Measuring the amount of force </p> <p>d) Measuring the amount of heat energy transferred </p>
Explanation:	<p>The correct answer is <b>Measuring the amount of heat energy transferred</b>.</p> <p><b>Explanation:</b></p> <p><b>Calorimetry:</b></p> <ul style="list-style-type: none"> <li>• <b>Process:</b> Calorimetry is the process of measuring the amount of heat energy transferred in a chemical reaction, physical change, or heat capacity of substances. This is done using a device called a calorimeter.</li> <li>• <b>Application:</b> It is used in various fields such as chemistry, biology, and physics to determine the energy changes in reactions, the specific heat of substances, and the caloric content of foods.</li> </ul> <p><b>Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>Measuring the amount of compressive strength:</b> <ul style="list-style-type: none"> <li>◦ This is typically performed using mechanical testing methods like compressive strength tests, which measure the capacity of a material to withstand compressive loads. It is commonly used in materials science and civil engineering to evaluate the strength of construction materials.</li> </ul> </li> <li>• <b>Measuring the amount of electricity:</b> <ul style="list-style-type: none"> <li>◦ This involves electrical measurements such as voltage, current, and resistance, typically done using devices like voltmeters, ammeters, and multimeters. It is used in electrical engineering and physics to analyze and troubleshoot electrical circuits and systems.</li> </ul> </li> <li>• <b>Measuring the amount of force:</b> <ul style="list-style-type: none"> <li>◦ This is performed using instruments like force gauges, load cells, and dynamometers. Measuring force is crucial in fields like mechanical engineering, biomechanics, and physics to analyze the interaction between objects and the forces acting upon them.</li> </ul> </li> </ul>





<p><b>Q. 30</b></p>	<p><b>Shovana Narayan, a Padma Shri recipient, is an exponent of _____.</b></p> <p>a) Kuchipudi </p> <p>b) Sattriya </p> <p>c) Bharatanatyam </p> <p>d) Kathak </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Kathak</b>.</p> <p><b>Explanation:</b></p> <p><b>Shovana Narayan</b> is a renowned Indian classical dancer and a recipient of the <b>Padma Shri</b> award. She is an exponent of <b>Kathak</b>, a classical dance form originating from the northern parts of India. Shovana Narayan has been performing and teaching Kathak for over five decades. She trained under the legendary Guru <b>Pandit Birju Maharaj</b> and has contributed significantly to the promotion and preservation of Kathak.</p> <p><b>Other Exponents:</b> Sitara Devi (<b>Known as the Kathak Queen of India</b>), Shambhu maharaj, Lacchu maharaj, Preprana Shrimali, Rani Karnaa, Kamalini &amp; Nalini Asthana etc.</p> <p><b>Other Options:</b></p> <p><b>Kuchipudi:</b> It is a classical dance form from Andhra Pradesh, South India.</p> <ul style="list-style-type: none"> <li>• <b>Famous Exponents:</b> Yamini Krishnamurthy, Raja and Radha Reddy, Mallika Sarabhai, Vedantam Satyanarayana Sarma, Swapna Sundari &amp; Aparna Satheesan.</li> </ul> <p><b>Sattriya:</b> It is a classical dance form from Assam, East India.</p> <ul style="list-style-type: none"> <li>• Latest Classical Dance Form of India.</li> <li>• <b>Famous Exponents:</b> Srimanta Sankardev (<b>Father of Sattriya Dance</b>), Guru Jatin Goswami &amp; Bhupen Hazarika.</li> </ul> <p><b>Bharatnatyam:</b> It is a classical dance form from Tamil Nadu, South India.</p> <ul style="list-style-type: none"> <li>• <b>Famous Exponents:</b> Rukmini Devi Arundale (<b>first woman in Indian history to be nominated as a member of the Rajya Sabha</b>), Padma Subrahmanyam, Alarmel Valli, Yamini Krishnamurthy, Mallika &amp; Mrinalini Sarabhai &amp; T. Balasarawati.</li> </ul>

<p><b>Q. 31</b></p>	<p>The Swarna Jayanti Shahari Rojgar Yojana (SJSRY) was launched in the year _____ by Government of India.</p> <p>a) 2010 </p> <p>b) 1990 </p> <p>c) 1997 </p> <p>d) 2004 </p>
<p><b>Explanation:</b></p>	<p>The Swarna Jayanti Shahari Rojgar Yojana (SJSRY) was launched in the year <b>1997</b> by the Government of India.</p> <p><b>Important Details about SJSRY:</b></p> <ul style="list-style-type: none"> <li>• <b>Launch Date:</b> The scheme came into effect on <b>December 1, 1997</b>.</li> <li>• <b>Objective:</b> The primary goal of SJSRY was to provide gainful employment and livelihood to the urban unemployed and underemployed poor. This was achieved through encouraging the setting up of self-employment ventures or providing wage employment.</li> <li>• <b>Components:</b> The scheme had five major components:             <ol style="list-style-type: none"> <li>1. <b>Urban Self-Employment Programme (USEP):</b> Assisted individuals in setting up self-employment ventures.</li> <li>2. <b>Urban Women Self-help Programme (UWSP):</b> Focused on empowering urban women through self-help groups.</li> <li>3. <b>Skill Training for Employment Promotion amongst Urban Poor (STEP-UP):</b> Provided skill development and training programs.</li> <li>4. <b>Urban Wage Employment Programme (UWEP):</b> Offered wage employment opportunities.</li> <li>5. <b>Urban Community Development Network (UCDN):</b> Supported community development initiatives.</li> </ol> </li> <li>• <b>Implementation:</b> The scheme was implemented on a cost-sharing basis between the Centre and the States in the ratio of 75:25.</li> <li>• <b>Replacement:</b> In 2013, SJSRY was replaced by the <b>National Urban Livelihood Mission (NULM)</b>, which is now known as the <b>Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM)</b>.</li> </ul>

Q. 32	<p>Which river is known as 'Langchen Khambab' in Tibet?</p> <p>a) Tista </p> <p>b) Indus </p> <p>c) Sutlej </p> <p>d) Kosi </p>
Explanation:	<p>The river known as 'Langchen Khambab' in Tibet is the <b>Sutlej</b>.</p> <p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• <b>Sutlej River:</b> The Sutlej River originates near Lake Rakshatal &amp; Lake Manasarovar in Tibet, where it is called Langchen Khambab. It flows through the Himalayas and enters India through the Shipki La pass. The river continues its journey through Himachal Pradesh and Punjab before joining the Indus River in Pakistan.</li> </ul> <p><b>Sutlej River:</b></p> <ul style="list-style-type: none"> <li>• <b>Known as:</b> Langchen Khambab in Tibet.</li> <li>• <b>Origin:</b> Near Lake Rakshatal in Tibet.</li> <li>• <b>Course:</b> Flows through Himachal Pradesh and Punjab in India, then into Pakistan to join the Indus River.</li> <li>• <b>Significance:</b> <ul style="list-style-type: none"> <li>◦ <b>Agriculture:</b> Provides irrigation for crops.</li> <li>◦ <b>Hydroelectric Power:</b> Home to major projects like the Bhakra-Nangal Dam.</li> <li>◦ <b>Historical Importance:</b> Mentioned in the Rigveda and central to regional civilizations.</li> </ul> </li> </ul>
Q. 33	<p>Who is the author of the discussed book "Conspiracy to Oust me from the Presidency" in 2024?</p> <p>a) Sheikh Haseena </p> <p>b) Gotabaya Rajapaksa </p> <p>c) Amit Shah </p> <p>d) Indira Gandhi </p>
Explanation:	<p>The correct answer is <b>Gotabaya Rajapaksa</b>.</p> <p><b>Gotabaya Rajapaksa</b>, the former President of Sri Lanka, authored the book titled "<b>Conspiracy to Oust me from the Presidency</b>" in 2024. In this book, he discusses the political and conspiratorial forces that he believes led to his removal from office. Rajapaksa attributes his ouster to a combination of foreign and local parties conspiring against him.</p>







<p><b>Q. 34</b></p>	<p><b>Who among the following made Ganesh Chaturthi popular as a public celebration in Maharashtra?</b></p> <p>a) Lokmanya Bal Gangadhar Tilak </p> <p>b) Khudiram Bose </p> <p>c) Lala Lajpat Rai </p> <p>d) Vinayak Damodar Savarkar </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Lokmanya Bal Gangadhar Tilak</b>.</p> <p><b>Lokmanya Bal Gangadhar Tilak</b> is credited with transforming Ganesh Chaturthi into a grand public celebration in Maharashtra in the late 19th century. He popularized the festival as a means to unite people and foster a sense of nationalism against British colonial rule. Tilak's efforts turned Ganesh Chaturthi into a major public event, involving large-scale processions and public installations of Ganesha idols.</p> <ul style="list-style-type: none"> <li>Bal Gangadhar Tilak is Known as the Lokmanya (Accepted by the people as their leader).</li> <li>He was one of the <b>first leaders</b> of the <b>Indian independence movement</b>.</li> <li>Tilak founded the <b>Deccan Education Society</b> and started the <b>Kesari newspaper</b> to promote nationalist ideas.</li> <li>He was a staunch advocate of <b>Swaraj (self-rule)</b> (<b>Swaraj is my birthright, and I shall have it.</b>) and played a key role in the <b>Swadeshi Movement</b>.</li> <li>Tilak's efforts to mobilize the masses against British rule earned him the title "<b>Father of Indian Unrest</b>" by the British.</li> </ul> <p><b>Other Options:</b></p> <p><b>Khudiram Bose:</b></p> <ul style="list-style-type: none"> <li>He was one of the <b>youngest Indian revolutionaries</b>. Inspired by the Swadeshi Movement and the teachings of Aurobindo, he joined the revolutionary group Jugantar.</li> <li>In <b>1908, he and Prafulla Chaki</b> attempted to assassinate British judge Douglas Kingsford by throwing bombs at his carriage in <b>Muzaffarpur, Bihar</b>.</li> <li>Khudiram was arrested, tried, and executed on August 11, 1908, <b>at the age of 18</b>, making him one of the <b>first revolutionaries executed</b> by the British.</li> </ul> <p><b>Lala Lajpat Rai:</b></p> <ul style="list-style-type: none"> <li>Lala Lajpat Rai was a prominent leader in the Indian independence movement and a close associate of Tilak.</li> <li>He is <b>also known as the Punjab Kesari</b> (Lion of Punjab).</li> <li>He was a key <b>member of the LAL BAL PAL Trio</b>.</li> <li>He died on <b>November 17, 1928</b>, due to severe injuries sustained during a <b>lathi charge</b> by the police while leading a protest against the <b>Simon Commission in Lahore</b>.</li> <li>After His death, <b>Bhagat Singh</b>, along with <b>Rajguru</b> and <b>Jai Gopal</b>, conspired to avenge his death by assassinating the British police chief, <b>James A. Scott</b>. However, in a case of mistaken identity, they ended up killing <b>J.P. Saunders</b>, a British police officer, on <b>December 17, 1928</b>. This incident led to the <b>Lahore Conspiracy Case</b>, and Bhagat Singh eventually became a prominent figure in the Indian independence movement.</li> <li>Bhagat Singh was <b>hanged on March 23, 1931</b>, in <b>Lahore</b> Central Jail. He was executed along with his comrades <b>Sukhdev Thapar and Rajguru</b>.</li> </ul> <p><b>Vinayak Damodar Savarkar:</b></p> <ul style="list-style-type: none"> <li>Vinayak Damodar Savarkar, also known as <b>Veer Savarkar</b>, was a revolutionary and a prominent leader in the Indian independence movement.</li> <li>He coined the term "<b>Hindutva</b>" and was a leading figure in the <b>Hindu Mahasabha</b>.</li> </ul>

Q. 35	<p>What is the meaning of the term 'Collateral' in banking?</p> <p>a) A type of credit card </p> <p>b) A form of digital payment </p> <p>c) An investment portfolio </p> <p>d) An asset pledged as security for a loan </p>
Explanation:	<p>The correct answer is <b>An asset pledged as security for a loan.</b></p> <p><b>Explanation:</b></p> <p><b>Collateral:</b></p> <ul style="list-style-type: none"> <li>• In banking, collateral refers to an asset that a borrower offers to a lender as security for a loan. If the borrower defaults on the loan, the lender can seize the collateral to recoup their losses. Collateral can include real estate, vehicles, stocks, bonds, or other valuable assets.</li> <li>• <b>Example:</b> When taking a mortgage (money that you borrow in order to buy a house or flat), the property itself typically serves as collateral for the loan.</li> </ul> <p><b>Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>A type of credit card:</b> <ul style="list-style-type: none"> <li>◦ This is incorrect. Collateral is not a type of credit card. Credit cards are a form of unsecured debt, meaning they do not require collateral.</li> </ul> </li> <li>• <b>A form of digital payment:</b> <ul style="list-style-type: none"> <li>◦ This is incorrect. Collateral refers to a physical or financial asset used to secure a loan, not a method of payment. Digital payments include methods like online transfers, mobile payments, and e-wallets.</li> </ul> </li> <li>• <b>An investment portfolio:</b> <ul style="list-style-type: none"> <li>◦ This is incorrect. An investment portfolio is a collection of financial assets such as stocks, bonds, and other investments owned by an individual or institution. While investments in a portfolio can sometimes be used as collateral, the term itself does not describe the concept of collateral.</li> </ul> </li> </ul>

Q. 36

At what temperature do Celsius and Fahrenheit scales have the same value?

- a) 40 degree C 
- b) 32 degree C 
- c) -40 degree C 
- d) -32 degree C 

The correct answer is **-40 degrees C**.

**Explanation:**

- At **-40 degrees**, the Celsius and Fahrenheit scales converge and have the same numerical value. This is because the formula to convert Celsius to Fahrenheit is:

**Explanation:**





$$F = \frac{9}{5}C + 32$$





When you set  $C = -40$ .





$$F = \frac{9}{5}(-40) + 32 = -72 + 32 = -40$$





Thus, -40 degrees Celsius is equal to -40 degrees Fahrenheit.











<p><b>Q. 37</b></p>	<p><b>What is the Stump height of a cricket wicket as per international standards?</b></p> <p>a) 28 inches </p> <p>b) 29 inches </p> <p>c) 30 inches </p> <p>d) 31 inches </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>28 inches</b>.</p> <p><b>Explanation:</b></p> <p>According to the international standards set by the International Cricket Council (ICC), the stumps of a cricket wicket are <b>28 inches</b> (71.1 cm) in height. Each wicket consists of three vertical stumps.</p> <p><b>Details about Cricket:</b></p> <ul style="list-style-type: none"> <li>• <b>Wicket:</b> The wicket consists of three stumps and two bails placed on top of the stumps. The stumps are positioned with equal distances between them. The total width of the wicket is 9 inches (22.86 cm).</li> <li>• <b>Bails:</b> The bails are small wooden pieces that sit on top of the stumps. The bails must fall off the stumps to dismiss a batsman, either bowled, stumped, or run out.</li> <li>• <b>Pitch:</b> The cricket pitch is 22 yards (20.12 meters) long and 10 feet (3.05 meters) wide. It is the central area where most of the cricketing action takes place.</li> <li>• <b>Bowling Crease:</b> The bowling crease is the line the bowler must not overstep when delivering the ball. It is situated 4 feet (1.22 meters) in front of the stumps.</li> <li>• <b>Popping Crease:</b> The popping crease, situated 4 feet in front of the stumps, marks the area where batsmen must reach to be safe from being run out.</li> <li>• <b>Types of Matches:</b> Cricket is played in various formats, including Test matches, One Day Internationals (ODIs), and Twenty20 (T20) matches. Each format has different rules and playing conditions.</li> <li>• <b>Roles:</b> Key roles in cricket include batsmen, bowlers, wicketkeepers, and fielders. Each player has a specific responsibility to contribute to the team's success.</li> </ul>





<b>Q. 38</b>	<p>The non-metallic mineral mica is used in which of the following industries?</p> <p>a) Cement Industry </p> <p>b) Iron Industry </p> <p>c) Electrical Industry </p> <p>d) Steel Industry </p>
<b>Explanation:</b>	<p>The correct answer is <b>Electrical Industry</b>.</p> <p><b>Explanation:</b></p> <p><b>Electrical Industry:</b></p> <ul style="list-style-type: none"><li>• <b>Mica</b> is a non-metallic mineral that is widely used in the electrical industry due to its excellent insulating properties, resistance to high temperatures, and ability to be split into thin sheets.</li><li>• <b>Applications:</b> It is used in electrical insulators, capacitors, heating elements, and various electrical components. Mica-based products help ensure the safety and efficiency of electrical systems.</li></ul> <p><b>Other Options:</b></p> <ul style="list-style-type: none"><li>• <b>Cement Industry:</b><ul style="list-style-type: none"><li>◦ The primary materials used in cement production include limestone, clay, and gypsum. These components are essential for the chemical reactions that form cement.</li></ul></li><li>• <b>Iron Industry:</b><ul style="list-style-type: none"><li>◦ The iron industry primarily relies on iron ore, coke, and limestone for the production of iron and steel. Mica's properties do not make it suitable for iron smelting or processing.</li></ul></li><li>• <b>Steel Industry:</b><ul style="list-style-type: none"><li>◦ Similar to the iron industry, mica is not utilized in the steel industry. The steel industry uses iron ore, coal, and other additives in the production of steel.</li></ul></li></ul>

<p><b>Q. 39</b></p>	<p><b>Which Article of the Indian Constitution secures a living wage and a decent standard of living with social and cultural opportunities for all workers?</b></p> <p>a) Article 41 </p> <p>b) Article 43 </p> <p>c) Article 39 </p> <p>d) Article 40 </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Article 43</b>.</p> <p><b>Explanation:</b></p> <p><b>Article 43</b> of the Indian Constitution aims to secure a living wage, a decent standard of living, and social and cultural opportunities for all workers. It is part of the Directive Principles of State Policy and reads as follows:</p> <p>&gt; "The State shall endeavor to secure, by suitable legislation or economic organization or in any other way, to all workers, agricultural, industrial or otherwise, work, a living wage, conditions of work ensuring a decent standard of life and full enjoyment of leisure and social and cultural opportunities and, in particular, the State shall endeavor to promote cottage industries on an individual or co-operative basis in rural areas."</p> <p><b>Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>Article 41:</b> <ul style="list-style-type: none"> <li>◦ This Article provides the right to work, education, and public assistance in cases of unemployment, old age, sickness, and disablement. It directs the state to make effective provision for securing these rights within its economic capacity and development.</li> </ul> </li> <li>• <b>Article 39:</b> <ul style="list-style-type: none"> <li>◦ This Article includes several principles aimed at ensuring social justice and welfare. These principles include securing adequate means of livelihood for all citizens, preventing the concentration of wealth, ensuring equal pay for equal work, and protecting the health of workers.</li> </ul> </li> <li>• <b>Article 40:</b> <ul style="list-style-type: none"> <li>◦ This Article directs the state to take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.</li> </ul> </li> </ul>

<p><b>Q. 40</b></p>	<p><b>What is India's rank in the released Hurun Global Unicorn Index 2024?</b></p> <p>a) 3<sup>rd</sup> </p> <p>b) 7<sup>th</sup> </p> <p>c) 8<sup>th</sup> </p> <p>d) 2<sup>nd</sup> </p>
<p><b>Explanation:</b></p>	<p>India ranks <b>3rd</b> in the Hurun Global Unicorn Index 2024.</p> <p><b>Explanation:</b></p> <p>India secured the 3rd position with a total of <b>67 unicorns</b>, showcasing its prominent position in the global startup ecosystem. The United States topped the list with 703 unicorns, followed by China with 340 unicorns.</p> <p><b>India's Top Unicorns in Hurun Global Unicorn Index 2024</b></p> <p>India ranks <b>3rd</b> in the Hurun Global Unicorn Index 2024 with a total of <b>67 unicorns</b>. Here are some key highlights:</p> <ul style="list-style-type: none"> <li>• <b>Top Indian Unicorns:</b> <ul style="list-style-type: none"> <li>◦ <b>Swiggy:</b> On-demand food delivery startup valued at <b>USD 8 billion</b>.</li> <li>◦ <b>Dream11:</b> Fantasy sports platform valued at <b>USD 8 billion</b>.</li> <li>◦ <b>Razorpay:</b> Fintech startup valued at <b>USD 7.5 billion</b>.</li> </ul> </li> <li>• <b>Global Context:</b> <ul style="list-style-type: none"> <li>◦ The United States leads with <b>703 unicorns</b>, followed by China with <b>340 unicorns</b>.</li> <li>◦ The United Kingdom and Germany follow India with <b>53</b> and <b>36 unicorns</b>, respectively.</li> </ul> </li> <li>• <b>Notable Trends:</b> <ul style="list-style-type: none"> <li>◦ The report highlights a slight decline in unicorn creation in India, attributed to underinvestment despite favorable stock market conditions.</li> <li>◦ Indian founders have shown remarkable global reach, with <b>109 unicorns</b> founded outside India.</li> </ul> </li> </ul>

<b>Q. 41</b>	<p><b>Who has been appointed as the new Chief of the Special Protection Group (SPG) by the centre in November 2023?</b></p> <p>a) Rakesh Asthana </p> <p>b) Ashok Kumar Mishra </p> <p>c) Anil Kumar Dhasmana </p> <p>d) Alok Sharma </p>
<b>Explanation:</b>	<p>The correct answer is <b>Alok Sharma</b>.</p> <p><b>Explanation:</b></p> <p><b>Alok Sharma</b>, a 1991-batch Indian Police Service (IPS) officer from the Uttar Pradesh cadre, was appointed as the new Chief of the Special Protection Group (SPG) in November 2023. He was serving as the Additional Director General in the SPG before being promoted to this position.</p> <p>The <b>Special Protection Group (SPG)</b> is an agency under the Cabinet Secretariat of the Government of India, whose sole responsibility is protecting the prime minister of India and, in some cases, his or her family.</p> <p>It was <b>formed in 1988 by an Act of the Parliament of India</b>. The agency <b>protects the prime minister at all times</b>, both in <b>India and abroad</b>, as well as the prime minister's immediate <b>family members</b>. Family members, however, may decline security.</p>

Q. 42	<p>The historical novel, 'Train to Pakistan' was written by:</p> <p>a) Shashi Tharoor </p> <p>b) Arundhati Roy </p> <p>c) Khushwant Singh </p> <p>d) Jawaharlal Nehru </p>
Explanation:	<p>The correct answer is <b>Khushwant Singh</b>.</p> <p><b>Explanation:</b></p> <p><b>Khushwant Singh:</b></p> <ul style="list-style-type: none"> <li>• <b>"Train to Pakistan"</b> is a historical novel written by Khushwant Singh. It was first published in 1956. The novel is set against the backdrop of the Partition of India in 1947 and depicts the impact of this event on the lives of ordinary people in a small village named Mano Majra, situated near the India-Pakistan border. The novel is acclaimed for its vivid portrayal of the horrors of Partition and the human emotions it stirred.</li> </ul> <p><b>Other Options and Their Notable Works:</b></p> <ul style="list-style-type: none"> <li>• <b>Shashi Tharoor:</b> <ul style="list-style-type: none"> <li>◦ <b>"The Great Indian Novel"</b>: A satirical novel that recasts the characters and events of the Mahabharata in the context of the Indian independence movement and the early years of the Indian Republic.</li> <li>◦ <b>"Inglorious Empire: What the British Did to India"</b>: A historical account that critiques British colonial rule in India.</li> </ul> </li> <li>• <b>Arundhati Roy:</b> <ul style="list-style-type: none"> <li>◦ <b>"The God of Small Things"</b>: A Booker Prize-winning novel that explores the lives of a Syrian Christian family in Kerala, India, focusing on the childhood experiences of fraternal twins.</li> <li>◦ <b>"The Ministry of Utmost Happiness"</b>: A novel that weaves together various narratives and characters to reflect the socio-political landscape of contemporary India.</li> </ul> </li> <li>• <b>Jawaharlal Nehru:</b> <ul style="list-style-type: none"> <li>◦ <b>"The Discovery of India"</b>: An introspective and scholarly work written by Nehru during his imprisonment in 1942-1946, reflecting on India's history, culture, and his vision for its future.</li> <li>◦ <b>"Glimpses of World History"</b>: A collection of letters written by Nehru to his daughter Indira Gandhi, offering an overview of world history.</li> </ul> </li> </ul>

<p><b>Q. 43</b></p>	<p><b>What is the chemical name for the compound responsible for the cooling sensation in mint leaves?</b></p> <p>a) Ethanol </p> <p>b) Menthol </p> <p>c) Caffeine </p> <p>d) Capsaicin </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Menthol</b>.</p> <p><b>Explanation:</b></p> <p><b>Menthol:</b></p> <ul style="list-style-type: none"> <li>• <b>Chemical Name:</b> Menthol is an organic compound with the chemical formula <math>C_{10}H_{20}O</math>.</li> <li>• <b>Cooling Sensation:</b> Menthol is responsible for the cooling sensation in mint leaves. It activates cold-sensitive receptors in the skin and mucous membranes, causing a cooling effect when applied or consumed. This property makes menthol a common ingredient in various products, including cough drops, topical analgesics, and oral hygiene products.</li> </ul> <p><b>Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>Ethanol:</b> <ul style="list-style-type: none"> <li>◦ <b>Chemical Formula:</b> <math>C_2H_5OH</math>.</li> <li>◦ <b>Properties:</b> Ethanol, also known as alcohol, is a volatile, flammable liquid commonly used in alcoholic beverages, disinfectants, and as a solvent. It does not produce a cooling sensation like menthol.</li> </ul> </li> <li>• <b>Caffeine:</b> <ul style="list-style-type: none"> <li>◦ <b>Chemical Formula:</b> <math>C_8H_{10}N_4O_2</math>.</li> <li>◦ <b>Properties:</b> Caffeine is a central nervous system stimulant found in coffee, tea, and various energy drinks. It is known for its stimulating effects and ability to reduce drowsiness but does not have a cooling effect.</li> </ul> </li> <li>• <b>Capsaicin:</b> <ul style="list-style-type: none"> <li>◦ <b>Chemical Formula:</b> <math>C_{18}H_{27}NO_3</math>.</li> <li>◦ <b>Properties:</b> Capsaicin is the active compound in chili peppers responsible for their spiciness. It activates heat receptors in the skin and mucous membranes, causing a burning sensation rather than a cooling effect.</li> </ul> </li> </ul>

**Q. 44****The Brindhadeswara Temple at Tanjavur built by:****a) Rajaraja II** **b) Samudragupta** **c) Rajendra Chola** **d) Rajaraja I** 



The correct answer is **Rajaraja I**.

**Explanation:**

**Rajaraja I**, also known as Rajaraja Chola I, was the ruler of the Chola dynasty who commissioned the construction of the Brihadeeswarar Temple, also known as the Big Temple, in Thanjavur. The temple was built between 1003 and 1010 CE and is a magnificent example of Dravidian architecture. It is dedicated to Lord Shiva and is one of the largest temples in South India.

**Other Options:**





- **Rajaraja II:**
  - Rajaraja Chola II was a later Chola king who ruled from 1146 to 1173 CE. He is known for continuing the tradition of temple building and patronizing art and architecture.
- **Samudragupta:**
  - Samudragupta was a ruler of the Gupta Empire who reigned from approximately 335 to 380 CE. He is famous for his military conquests, patronage of the arts, and the expansion of the Gupta Empire. His contributions were primarily in northern India, and he had no connection to the construction of the Brihadeeswarar Temple.
- **Rajendra Chola I:**
  - Rajendra Chola I was the son of Rajaraja I and ruled from 1012 to 1044 CE. He is known for his military expeditions that expanded the Chola Empire to its greatest extent, including parts of Southeast Asia. While Rajendra Chola I built many temples and continued his father's architectural legacy, the Brihadeeswarar Temple was commissioned and completed by Rajaraja I.





**Explanation:**





**Brihadeeswarar Temple:**





- **Built by:** Rajaraja Chola I (Rajaraja I) between 1003 and 1010 CE.
- **Location:** Thanjavur, Tamil Nadu, India.
- **Significance:** A UNESCO World Heritage Site, the temple is an architectural marvel known for its grandeur, intricate carvings, and historical importance. It is dedicated to Lord Shiva and is one of the largest temples in India.











<b>Q. 45</b>	<p><b>What is “Mahawat” in India?</b></p> <p>a) Cyclonic rainfall during the winter season </p> <p>b) Hot and dry winds during the summer season </p> <p>c) Cloud burst during the monsoon season </p> <p>d) Cold waves during the winter season </p>
<b>Explanation:</b>	<p>The correct answer is <b>Cyclonic rainfall during the winter season</b>.</p> <p><b>Explanation:</b></p> <p><b>Mahawat</b> refers to the small amount of winter rainfall that occurs in North-West India due to western and north-western cyclonic disturbances. This rainfall is beneficial for the rabi crops, which are typically sown in the winter season.</p> <p><b>Other Options:</b></p> <ul style="list-style-type: none"><li>• <b>Hot and dry winds during the summer season:</b><ul style="list-style-type: none"><li>◦ This is incorrect. Hot and dry winds during the summer season are typically referred to as <b>Loo</b> in India, which can cause extreme heat and discomfort.</li></ul></li><li>• <b>Cloud burst during the monsoon season:</b><ul style="list-style-type: none"><li>◦ This is incorrect. A cloud burst is an extreme amount of precipitation in a short period, usually associated with thunderstorms during the monsoon season. It is not referred to as Mahawat.</li></ul></li><li>• <b>Cold waves during the winter season:</b><ul style="list-style-type: none"><li>◦ This is incorrect. Cold waves are periods of extremely cold weather during the winter season, but they are not referred to as Mahawat.</li></ul></li></ul>









<p><b>Q. 46</b></p>	<p><b>Identify the vector quantity among these listed physical quantities?</b></p> <p>a) Mass </p> <p>b) Density </p> <p>c) Energy </p> <p>d) Gravitational Intensity </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Gravitational Intensity</b>.</p> <p><b>Vector Quantities:</b> These quantities have both magnitude (size) and direction.</p> <ul style="list-style-type: none"> <li>• <b>Gravitational Intensity:</b> This is a vector quantity. It represents the gravitational force experienced by a unit mass at a particular point in a gravitational field. It has both magnitude (strength of the gravitational field) and direction (towards the center of the mass creating the field).</li> <li>• <b>Scalar Quantities:</b> These quantities have only magnitude.</li> </ul> <p><b>Mass</b></p> <ul style="list-style-type: none"> <li>• Mass is a fundamental property of matter that represents the amount of matter present in an object. It's a measure of an object's resistance to acceleration (inertia).</li> <li>• <b>Example:</b> A bowling ball has more mass than a tennis ball, meaning it contains more matter.</li> </ul> <p><b>Density</b></p> <ul style="list-style-type: none"> <li>• Density is the mass of a substance per unit volume. It tells you how much matter is packed into a given space.</li> <li>• <b>Example:</b> Lead is denser than wood, meaning a piece of lead with the same volume as a piece of wood will have a greater mass.</li> </ul> <p><b>Energy</b></p> <ul style="list-style-type: none"> <li>• Energy is the capacity to do work. It exists in various forms, such as kinetic energy (energy of motion), potential energy (stored energy), thermal energy (heat), and <sup>1</sup> chemical energy.</li> <li>• <b>Example:</b> A moving car possesses kinetic energy, while a stretched rubber band has potential energy.</li> </ul>

<b>Q. 47</b>	<p><b>Which Edition of the Pro Kabaddi League was started in December 2023?</b></p> <p>a) 12<sup>th</sup> </p> <p>b) 11<sup>th</sup> </p> <p>c) 10<sup>th</sup> </p> <p>d) 8<sup>th</sup> </p>
<b>Explanation:</b>	<p>The Correct Answer is: c</p> <p>The <b>2023–2024 Pro Kabaddi League</b> was the <b>tenth season</b> of the Pro Kabaddi League, a franchise based kabaddi league in India.</p> <p>Pro Kabaddi League, also known as <b>PKL</b>, is an Indian professional Kabaddi league for men.</p> <p>It is the <b>most popular kabaddi league</b> in the world and the second most watched sports league in India after the Indian Premier League.</p> <p><b>Haryana Steelers</b> are the current champions.</p> <p><b>Patna Pirates</b> have won the competition a record three consecutive times. They are the <b>only team to defend their title</b>.</p>









<p><b>Q. 48</b></p>	<p>If the tax rate increases with the taxable base, then this type of taxation is called:</p> <p>a) Digressive </p> <p>b) Progressive </p> <p>c) Regressive </p> <p>d) Proportional </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Progressive</b>.</p> <p><b>Explanation:</b></p> <p><b>Progressive Taxation:</b></p> <ul style="list-style-type: none"> <li>• <b>Definition:</b> In a progressive tax system, the tax rate increases as the taxable base (income or wealth) increases. This means that individuals or entities with higher incomes or wealth pay a higher percentage of their income or wealth in taxes compared to those with lower incomes.</li> <li>• <b>Example:</b> Income tax systems in many countries, including India and the United States, are progressive. Higher income brackets are taxed at higher rates.</li> </ul> <p><b>Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>Digressive Taxation:</b> <ul style="list-style-type: none"> <li>◦ <b>Definition:</b> In a digressive tax system, the tax rate increases up to a certain point with the increase in taxable base, but then the rate remains constant or decreases beyond that point. This type is less common and usually involves a combination of progressive and regressive elements.</li> </ul> </li> <li>• <b>Regressive Taxation:</b> <ul style="list-style-type: none"> <li>◦ <b>Definition:</b> In a regressive tax system, the tax rate decreases as the taxable base increases. This means that lower-income individuals pay a higher percentage of their income in taxes compared to higher-income individuals.</li> <li>◦ <b>Example:</b> Sales taxes and excise taxes are often considered regressive because they take a larger proportion of income from lower-income individuals.</li> </ul> </li> <li>• <b>Proportional Taxation:</b> <ul style="list-style-type: none"> <li>◦ <b>Definition:</b> In a proportional tax system, also known as a flat tax system, the tax rate remains constant regardless of the taxable base. Everyone pays the same percentage of their income or wealth in taxes, regardless of how much they earn.</li> <li>◦ <b>Example:</b> Some countries implement a flat income tax rate, where all taxpayers are taxed at the same rate.</li> </ul> </li> </ul>

<b>Q. 49</b>	<p>In which year was the 42<sup>nd</sup> Constitutional Amendment Act passed?</p> <p>a) 1978 </p> <p>b) 1986 </p> <p>c) 1976 </p> <p>d) 1998 </p>
<b>Explanation:</b>	<p>The correct answer is <b>1976</b>.</p> <p><b>Explanation:</b></p> <p>The <b>42nd Constitutional Amendment Act</b> was passed in <b>1976</b>. This amendment is often referred to as the "Mini-Constitution" due to the extensive changes it made to the Indian Constitution. It was enacted during the tenure of Prime Minister Indira Gandhi and aimed to strengthen the central government's power and reduce the judiciary's influence.</p> <p><b>Important Details:</b></p> <ul style="list-style-type: none"><li>• <b>Changes to the Preamble:</b> The words "Socialist" and "Secular" were added to the Preamble.</li><li>• <b>Fundamental Duties:</b> Part IVA was added, which included a list of fundamental duties for citizens.</li><li>• <b>Directive Principles of State Policy:</b> Several new articles were added to emphasize the importance of social and economic welfare.</li><li>• <b>Judiciary:</b> The amendment curtailed the power of the judiciary by limiting the scope of judicial review.</li><li>• <b>Emergency Provisions:</b> The amendment extended the duration of President's rule in states from six months to one year.</li></ul>

<p><b>Q. 50</b></p>	<p><b>Which nutritional disorder is caused by a deficiency of vitamin B1 in which problems with peripheral nerves and wasting occur?</b></p> <p>a) Pernicious Anaemia </p> <p>b) Xerophthalmia </p> <p>c) Beriberi </p> <p>d) Rickets </p>
<p><b>Explanation:</b></p>	<p>The correct answer is <b>Beriberi</b>.</p> <p><b>Explanation:</b></p> <p><b>Beriberi:</b></p> <ul style="list-style-type: none"> <li>• <b>Cause:</b> Beriberi is a nutritional disorder caused by a deficiency of vitamin B1 (thiamine).</li> <li>• <b>Symptoms:</b> It leads to problems with the peripheral nerves and muscle wasting. Symptoms can include weakness, pain in the limbs, edema, difficulty walking, and in severe cases, heart failure.</li> <li>• <b>Types:</b> There are two main types of beriberi: <ul style="list-style-type: none"> <li>◦ <b>Wet beriberi:</b> Affects the cardiovascular system, leading to heart failure and fluid retention.</li> <li>◦ <b>Dry beriberi:</b> Affects the nervous system, leading to muscle wasting and paralysis.</li> </ul> </li> </ul> <p><b>Other Options:</b></p> <ul style="list-style-type: none"> <li>• <b>Pernicious Anemia:</b> <ul style="list-style-type: none"> <li>◦ <b>Cause:</b> Pernicious anemia is caused by a deficiency of vitamin B12 (cobalamin) due to the inability to absorb the vitamin from the digestive tract.</li> <li>◦ <b>Symptoms:</b> Symptoms include fatigue, weakness, pale skin, shortness of breath, and neurological problems such as numbness and tingling.</li> </ul> </li> <li>• <b>Xerophthalmia:</b> <ul style="list-style-type: none"> <li>◦ <b>Cause:</b> Xerophthalmia is caused by a deficiency of vitamin A.</li> <li>◦ <b>Symptoms:</b> It leads to dryness of the conjunctiva and cornea, night blindness, and can result in complete blindness if untreated.</li> </ul> </li> <li>• <b>Rickets:</b> <ul style="list-style-type: none"> <li>◦ <b>Cause:</b> Rickets is caused by a deficiency of vitamin D, calcium, or phosphate.</li> <li>◦ <b>Symptoms:</b> It leads to weakened and softened bones, causing skeletal deformities such as bowed legs, thickened wrists and ankles, and delayed growth in children.</li> </ul> </li> </ul>

<b>Q. 51</b>	<p>Simplify the given expression.</p> $(1+x)^3 + (1-x)^3 + (-2)^3$ <p>a) <math>3(1-x^2)</math> </p> <p>b) <math>-6(1-x^2)</math> </p> <p>c) <math>-3(1-x^2)</math> </p> <p>d) <math>6(1-x^2)</math> </p>
<b>Explanation:</b>	$  \begin{aligned}  &(1+x)^3 + (1-x)^3 + (-2)^3 \\  &1 + x^3 + 3x + 3x^2 + 1 - x^3 - 3x + 3x^2 - 8 \\  &2 + 6x^2 - 8 \\  &6x^2 - 6 \\  &6(x^2 - 1) \\  &-6(1 - x^2)  \end{aligned}  $
<b>Q. 52</b>	<p>A coat marked at ₹155 is offered at ₹ 136.4. The rate of retail discount offered is:</p> <p>a) 11% </p> <p>b) 12% </p> <p>c) 13% </p> <p>d) 10% </p>
<b>Explanation:</b>	$  \begin{aligned}  \text{rate of discount} &= \frac{155 - 136.4}{155} \times 100 \\  &= \frac{18.6}{155} \times 100 = 12\%  \end{aligned}  $




<p><b>Q. 53</b></p>	<p>A public library has an average attendance of 480 on Sundays and 300 for the remaining days. The average attendance per day of a month of 30 days beginning with Sunday would be:</p> <p>a) 230 </p> <p>b) 254 </p> <p>c) 260 </p> <p>d) 330 </p>
<p><b>Explanation:</b></p>	<p>No. of Sundays = 5</p> <p>Total Attendance on Sundays = <math>5 \times 480</math> = 2400</p> <p>Total attendance on remaining days = <math>25 \times 300 = 7500</math></p> <p>Average attendance per day = <math>\frac{2400 + 7500}{30}</math> = <math>\frac{9900}{30} = 330</math></p>
<p><b>Q. 54</b></p>	<p>If <math>36 \div 4 + k \times 5 - 15 \div 3 + 6 = 50</math>, then the value of k is:</p> <p>a) 6 </p> <p>b) 8 </p> <p>c) 10 </p> <p>d) 12 </p>
<p><b>Explanation:</b></p>	<p><math>\frac{36}{4} + 5K - \frac{15}{3} + 6 = 50</math></p> <p><math>9 + 5K - 5 + 6 = 50 \Rightarrow 5K = 40</math></p> <p><math>K = 8</math></p>


Q. 55

If  $x^3 - 5x^2 + 8x - 3 = 0$ ,  $\alpha, \beta, \gamma$  are the roots, find  $\alpha^3 + \beta^3 + \gamma^3$ .

a) 12 

b) 24 

c) 14 

d) 25 

For Equation,  $Ax^3 + Bx^2 + Cx + D = 0$ ,

roots

$\alpha, \beta, \gamma$

are

Explanation:

$$(\alpha + \beta + \gamma) = -\frac{b}{a} = -\frac{-5}{1} = 5$$

$$\alpha\beta + \beta\gamma + \gamma\alpha = \frac{c}{a} = 8$$

$$\alpha\beta\gamma = -\frac{d}{a} = 3$$





$$\alpha^3 + \beta^3 + \gamma^3$$

$$= 3\alpha\beta\gamma$$





$$+ (\alpha + \beta + \gamma) [(\alpha + \beta + \gamma)^2$$

$$- 3(\alpha\beta + \beta\gamma + \gamma\alpha)]$$

$$= 3(3) + 5[5^2 - 3(8)] = 9 + 5 = 14$$





<b>Q. 56</b>	<p>Due to a decrease in manpower, the production in a factory decreases by 30%. By what percentage should the working hours be increased to restore the original production?</p> <p>a) 50% </p> <p>b) <math>42\frac{6}{7}</math> % </p> <p>c) <math>33\frac{1}{3}</math> % </p> <p>d) 25% </p>
<b>Explanation:</b>	<p>Percentage increase in working hours = <math>\frac{30}{100-30} \times 100 = 42\frac{6}{7}\%</math></p>

<b>Q. 57</b>	<p>With a uniform speed, a car covers a distance in 18 hours. Had the speed been increased by 15 km/h, the same distance would have been covered in 14 hours. The total distance covered by the car is:</p> <p>a) 1080 km </p> <p>b) 480 km </p> <p>c) 945 km </p> <p>d) 960 km </p>
<b>Explanation:</b>	<p>Let the speed = <math>x</math> km/h  <u>A.T.Q</u> Distance = Distance  <math>18x = (x+15)14</math>  <math>18x = 14x + 210 \Rightarrow x = \frac{210}{4}</math>  Total distance = <math>\frac{210}{4} \times 18 = 945</math> km</p>

Q. 58

An article is of size  $8 \text{ cm} \times 5 \text{ cm} \times 4 \text{ cm}$ . The number of such articles that can be packed in a box measuring  $56 \text{ cm} \times 40 \text{ cm} \times 20 \text{ cm}$  is:





- a) 196 
- b) 280 
- c) 343 
- d) 49 

Explanation:

$$\begin{aligned} \text{Let the No. of articles} &= n \\ n &= \frac{\text{Volume of box}}{\text{Volume of article}} \\ &= \frac{56 \times 40 \times 20}{8 \times 5 \times 4} = 280 \end{aligned}$$









Q. 59





The centres of two circles of radii 15 cm and 25 cm are 50 cm apart. What is the ratio of the length of the direct common tangent to the length of the transverse common tangent to these circles?

- a)  $2\sqrt{2}:\sqrt{3}$  
- b)  $\sqrt{3}:2\sqrt{2}$  
- c)  $3:2\sqrt{2}$  
- d)  $2\sqrt{2}:3$  

Explanation:

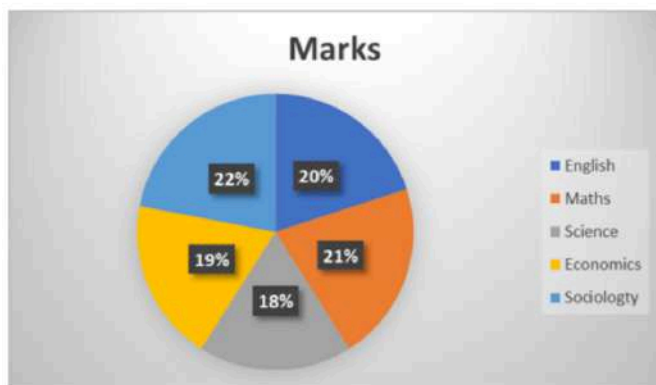
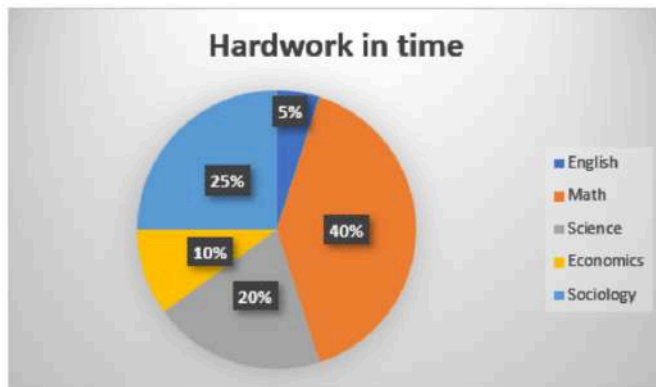
$$\begin{aligned} d(\text{distance between centres}) &= 50 \text{ cm} \\ R &= 25 \text{ cm}, r = 15 \text{ cm} \\ \text{Ratio} &= \frac{\sqrt{d^2 - (R-r)^2}}{\sqrt{d^2 - (R+r)^2}} = \frac{\sqrt{50^2 - (25-15)^2}}{\sqrt{50^2 - (25+15)^2}} \\ &= \sqrt{\frac{2500 - 100}{2500 - 1600}} = \sqrt{\frac{2400}{900}} = 2\sqrt{2}:\sqrt{3} \end{aligned}$$

<p><b>Q. 60</b></p>	<p>The length and the breadth of the floor of a rectangular hall are 126 feet and 90 feet, respectively. What will be the area (in square feet) of each of the largest identical square tiles that can be used to tile this floor in a way that no part of the floor remains uncovered?</p> <p>a) 256 </p> <p>b) 196 </p> <p>c) 324 </p> <p>d) 484 </p>
<p><b>Explanation:</b></p>	<p>The dimensions of the square tile that can fit the floor is given by.</p> <p>HCF of (126, 90)</p> <p><math>\Rightarrow</math> HCF of (126, 90) = 18</p> <p><math>\therefore</math> Dimension of square tile = 18</p> <p><math>\Rightarrow</math> Area of tile = 324 sq feet.</p>
<p><b>Q. 61</b></p>	<p>If <math>4\cos^2 A - 4\sqrt{3}\cos A + 3 = 0</math>, then find the value of A. (<math>0^\circ &lt; A &lt; 90^\circ</math>).</p> <p>a) <math>45^\circ</math> </p> <p>b) <math>30^\circ</math> </p> <p>c) <math>60^\circ</math> </p> <p>d) <math>75^\circ</math> </p>
<p><b>Explanation:</b></p>	<p><math>4\cos^2 A - 4\sqrt{3}\cos A + 3 = 0</math></p> <p>Put <math>A = 30^\circ</math></p> <p><math>4\cos^2 30 - 4\sqrt{3}\cos 30 + 3 = 0</math></p> <p><math>4\left(\frac{\sqrt{3}}{2}\right)^2 - 4\sqrt{3}\left(\frac{\sqrt{3}}{2}\right) + 3 = 0</math></p> <p><math>4 \times \frac{3}{4} - 6 + 3 = 0</math></p> <p><math>6 = 0</math> Satisfy</p> <p>Hence <math>A = 30^\circ</math> is correct answer</p>

<b>Q. 62</b>	<p>A merchant sells 250 kg of wheat for ₹15,500 at a profit of ₹5.00 per kg of wheat. What is the cost price (in ₹) of 20 kg of wheat?</p> <p>a) 1610 </p> <p>b) 940 </p> <p>c) 1140 </p> <p>d) 1250 </p>
<b>Explanation:</b>	$\begin{aligned}\text{Total profit} &= 5 \times 250 = 1250 \\ \text{Total SP} &= ₹15,500 \\ \text{Total CP} &= 15,500 - 1250 = 14,250 \\ \text{CP per Kg} &= \frac{14,250}{250} = ₹57 \\ \text{CP of 20 Kg} &= 57 \times 20 = ₹1140\end{aligned}$

Q. 63

A student has 5 subjects in an examination. The distribution of hard work of 16 hours a day over 5 subjects and marks obtained 400 out of 500 are shown in the charts.



In which subject did the student get the highest outcome of the hard work (ratio of marks to hard work time is highest)?

a) Math ☒

b) Science ☒

c) Economics ☒

d) English ☒

Explanation:

$$\frac{\text{Math}}{\text{Time}} = \frac{21}{40} = 0.525, \quad \frac{\text{Eco}}{\text{Time}} = \frac{19}{10} = 1.9$$

$$\frac{\text{Science}}{\text{Time}} = \frac{18}{20} = 0.9, \quad \frac{\text{Eng}}{\text{Time}} = \frac{22}{5} = 4.4$$





Highest ratio is for English

<p><b>Q. 64</b></p>	<p>A cuboid with dimensions 24 cm, 16 cm, and 8 cm is cut into 8 identical pieces by 3 cuts. What will be the total surface area of all the pieces?</p> <p>a) 2816 cm<sup>2</sup> ✓</p> <p>b) 2240 cm<sup>2</sup> ✗</p> <p>c) 3360 cm<sup>2</sup> ✗</p> <p>d) 1680 cm<sup>2</sup> ✗</p>
<p><b>Explanation:</b></p>	<p>dimensions of each piece after 3 cuts :</p> $l = \frac{24}{2} = 12 \text{ cm}, b = \frac{16}{2} = 8 \text{ cm}, h = 4 \text{ cm}$ $\text{TSA of all pieces} = 8 \times 2(lb + bh + lh)$ $= 16(12 \times 8 + 8 \times 4 + 12 \times 4)$ $= 16(96 + 32 + 48) = 2816 \text{ cm}^2$
<p><b>Q. 65</b></p>	<p>Which of the following ratios is the greatest?</p> <p>a) 5:2 ✓</p> <p>b) 7:5 ✗</p> <p>c) 3:4 ✗</p> <p>d) 1:6 ✗</p>
<p><b>Explanation:</b></p>	$5:2 = 2.5$ $7:5 = 1.4$ $3:4 = 0.75$ $1:6 = 0.16$ <p>5:2 is greater than all other ratios.</p>



Q. 66

5 books and 7 pens together cost Rs. 79 whereas 7 books and 5 pens together cost Rs. 77. Find the total cost of 1 book and 2 pens.

- a) ₹10   
 b) ₹20   
 c) ₹30   
 d) ₹40 

Explanation:

Let the cost of a book = ₹B

Cost of a pen = ₹P

ATQ

$$5B + 7P = 79 \quad \text{--- (1)}$$

$$7B + 5P = 77 \quad \text{--- (2)}$$

Add eq<sup>n</sup> (1) & (2)

$$12B + 12P = 156 \quad \div 12$$

$$B + P = 13 \quad \text{--- (3)}$$

Subtract eq<sup>n</sup> (1) & (2)

$$2B - 2P = -2 \quad \div 2$$

$$B - P = -1 \quad \text{--- (4)}$$

Solve eq<sup>n</sup> (3) & (4)

$$B = \frac{13-1}{2} = 6, P = \frac{13+1}{2} = 7$$

$$\text{Cost of 1 book \& 2 Pens} = 6 + 2 \times 7 = 20$$

Q. 67

Let PQRS be a quadrilateral and PR, QS be diagonals. The length of PR = 25 cm, and the heights from vertex Q and vertex S of the triangles PQR and PRS are, respectively, 10 cm and 12 cm. Find the area of the quadrilateral PQRS (in  $\text{cm}^2$ ).

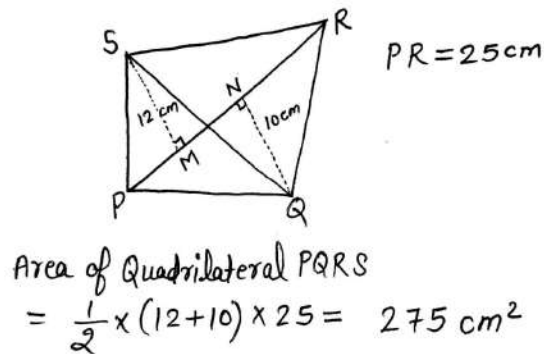
a) 275 ✓

b) 140 ✗

c) 286 ✗

d) 132 ✗

Explanation:

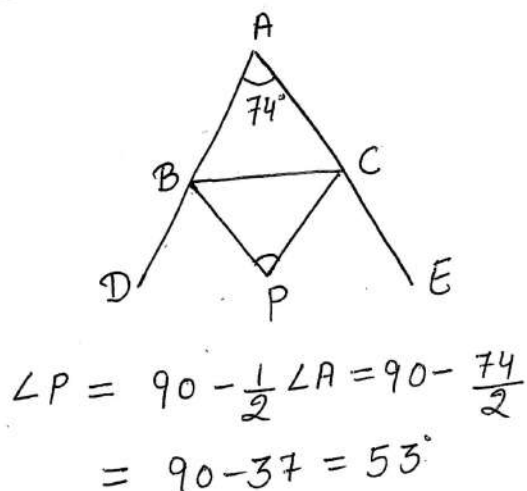


Q. 68

The sides AB and AC of  $\triangle ABC$  are produced to points D and E, respectively. The bisectors of  $\angle CBD$  and  $\angle BCE$  meet at P. If  $\angle A = 74^\circ$ , then the measure of  $\angle P$  is?

a)  $53^\circ$  ✓b)  $54^\circ$  ✗c)  $55^\circ$  ✗d)  $35^\circ$  ✗

Explanation:

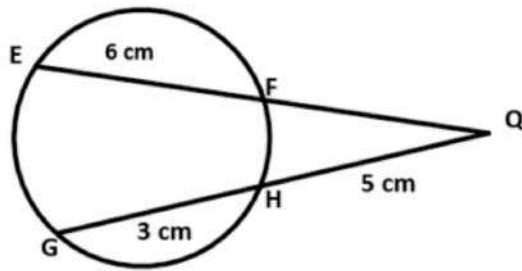


Q. 69

Chords EF and GH of a circle, when produced, meet at a point Q outside the circle. If EF = 6 cm, GH = 3 cm, and QH = 5 cm, then QF is equal to:

- a) 9 cm ☒
- b) 4 cm ☒
- c) 8 cm ☒
- d) 6 cm ☒

Explanation:



$$\text{Let } QF = x$$





$$QF \times QE = QH \times QG$$

$$x \times (x+6) = 5 \times (5+3)$$

$$x(x+6) = 5 \times 8$$

$$\Rightarrow x = 4$$

$$\text{Hence } QF = 4 \text{ cm}$$

<b>Q. 70</b>	<p>When A alone does a piece of work, he takes 25 days more than the time taken by A and B to do the work together. On the other hand, B alone takes 16 days more than the time taken by A and B to do the work together. How many days will A and B, working together, take to do the work?</p> <p>a) 23 </p> <p>b) 22 </p> <p>c) 24 </p> <p>d) 20 </p>
<b>Explanation:</b>	<p>A alone takes = 25 days more B alone takes = 16 days more</p> <p>Time taken by A &amp; B together</p> $= \sqrt{25 \times 16}$ $= 20 \text{ days}$




Q. 71

Total number of students in different subjects of a college and percentage of girls and boys are shown in the below table.

Girls students and boys students are NOT having multiple subjects.

Subjects	Number of Students	Girls %	Boys %
Mathematics	840	40	60
Chemistry	220	70	30
Physics	450	30	70
Biology	200	80	20

What is the ratio of girls students of Mathematics and Chemistry to the number of boy students of Physics and Biology?





- a) 98:71 
- b) 49:39 
- c) 61:98 
- d) 36:49 

Explanation:

$$\begin{array}{rcl}
 G_{M+C} & : & B_{P+B} \\
 840 \times \frac{40}{100} = 336 & & 450 \times \frac{70}{100} = 315 \\
 220 \times \frac{70}{100} = 154 & & 200 \times \frac{20}{100} = 40 \\
 \hline
 490 & : & 355 \\
 \text{Ratio} = 98 : 71
 \end{array}$$

Q. 72

Ramesh borrowed ₹15,000 at a certain rate of simple interest from a bank. He repaid (the principal but not interest) ₹6,000 after 5 years, and after 5 more years he paid ₹18,600 and settled his account. Find the rate of simple interest per annum.

- a) 10% 
- b) 12% 
- c) 6% 
- d) 8% 

Explanation:


$$\begin{aligned}
 &1 \text{ first 5 yrs} \\
 &2 \frac{15000 \times 5 \times r}{100} \\
 &= 750r \\
 &\text{Next five yrs} \\
 &2 \frac{9000 \times 5 \times r}{100} \\
 &= 450r \\
 &\text{Total Interest} \\
 &750r + 450r \longrightarrow 18600 - 9000 \\
 &1200r \longrightarrow 9600 \\
 &r = 8\%
 \end{aligned}$$

**Q. 73**

In an election, a candidate secures 35% of the votes, but is defeated by the only other candidate with a majority of 297 votes. Find the total number of votes recorded.

a) 990 

b) 890 

c) 770 

d) 880 

**Explanation:**

Let Total No. of votes = 100

A

B

35%

65%

└──────────┘

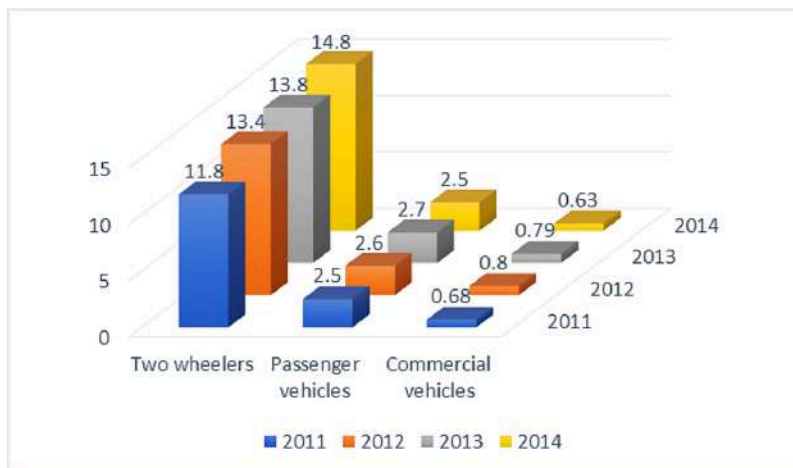
30% = 297

$$100\% = \frac{297}{30} \times 100 = 990$$

Total No. of votes = 990

Q. 74

The given chart represents the sales of automobile in India (by type, in million units) from the year 2011 to 2014. Study the chart and answer the question that follows.



The number of commercial vehicles sold in 2012 was approximate what percentage of the total number of vehicles sold in 2011? (Correct to two decimal places)

- a) 3.88% ☒
- b) 5.34% ☒
- c) 4.56% ☒
- d) 6.12% ☒

Explanation:

$$\begin{aligned}
 \text{Total vehicle sold in 2011} &= 11.8 + 2.5 + 0.68 \\
 &= 14.98 \\
 \text{Commercial vehicle in 2012} &= 0.8 \\
 \text{Required \%} &= \frac{0.8}{14.98} \times 100 = 5.34\%
 \end{aligned}$$



Q. 75

In a triangle PQR, RS intersects PQ at point S. The sides of the triangle QR = 45 cm, SQ = 30 cm, RS = 20 cm and  $\angle QRS = \angle QPR$ . What is the ratio of the perimeter of  $\Delta PRS$  to that of  $\Delta QSR$ ?

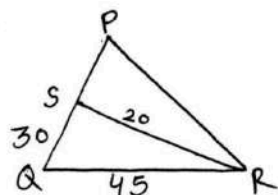
a) 19/35 ✗

b) 38/35 ✗

c) 35/38 ✓

d) 35/19 ✗

Explanation:

In  $\Delta PQR$  &  $\Delta QSR$  $\angle QRS = \angle QPR$  (Given) $\angle R = \angle R$  (Common) $\Delta PQR \sim \Delta QSR$  (By AA Similarity)and so  $\frac{PR}{RS} = \frac{QR}{SQ} = \frac{QP}{QR}$  (By CPST)









$$\frac{PR}{20} = \frac{45}{30} = \frac{30+PS}{45}$$









$$PR = 30 \text{ cm} \quad \frac{3}{2} = \frac{30+PS}{45}$$









$$PS = 37.5$$









$$\frac{\text{Perimeter of } \Delta PRS}{\text{Perimeter of } \Delta QSR} = \frac{30+20+37.5}{30+20+45}$$





$$= \frac{87.5}{95} = \frac{35}{38}$$





<p><b>Q. 76</b></p>	<p>Select the most appropriate <b>ANTONYM</b> of the given word.</p> <p><b>Admonish</b></p> <p>a) Resentment </p> <p>b) Applaud </p> <p>c) Benign </p> <p>d) Dreary </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p><b>Admonish:</b> This verb means to warn or reprimand someone firmly. It involves expressing disapproval or cautioning against certain actions.</p> <p><b>Applaud:</b> This verb means to show approval or praise, typically by clapping hands. It conveys a positive reinforcement, which is the opposite of reprimanding or expressing disapproval. Therefore, "<b>applaud</b>" is a suitable antonym for "<b>admonish</b>."</p> <p><b>The meaning of other words are:</b></p> <p><b>Resentment:</b> This noun refers to bitter indignation at having been treated unfairly. It describes a feeling of anger or displeasure about someone or something perceived as wrong or offensive.</p> <p><b>Benign:</b> This adjective describes something gentle, kind, or harmless. While it has a positive connotation, it doesn't directly oppose the action of admonishing.</p> <p><b>Dreary:</b> This adjective means dull, bleak, or lifeless. It pertains to the atmosphere or mood and doesn't relate to the act of reprimanding or praising.</p>
<p><b>Q. 77</b></p>	<p>The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options if you don't find any error, mark 'No error' as your answer.</p> <p>Vishnu and his friends / were listening to / the radio all morning.</p> <p>a) Vishnu and his friends </p> <p>b) were listening to </p> <p>c) the radio all morning </p> <p>d) No error </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>Since there are no grammatical errors in any part of the sentence, the correct choice is: <b>No error</b></p>









<p><b>Q. 78</b></p>	<p>Select the most appropriate meaning of the given idiom.</p> <p><b>A blessing in disguise</b></p> <p>a) To initiate something new </p> <p>b) Something that seems bad or unlucky at first, but results in something good happening later. </p> <p>c) Taking the first step after somebody's approach </p> <p>d) A situation in which no further progress can be made </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The idiom "<b>a blessing in disguise</b>" refers to something that initially appears unfortunate or negative but ultimately leads to a positive outcome.</p> <p>Among the given options, the most appropriate meaning is:</p> <p><b>Something that seems bad or unlucky at first, but results in something good happening later.</b></p>
<p><b>Q. 79</b></p>	<p>Select the most appropriate <b>ANTONYM</b> of the underlined word in the given sentence.</p> <p>I have great <u>admiration</u> and respect for these people; their unselfish act to understand and help people is above and beyond the call of duty.</p> <p>a) Magnificent </p> <p>b) Contempt </p> <p>c) Scathing </p> <p>d) Cynical </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The word "<b>admiration</b>" refers to a feeling of respect, approval, or high regard for someone or something.</p> <p><b>Contempt:</b> A noun that signifies a feeling that someone or something is not worthy of respect or approval; disdain. This directly opposes the feeling of admiration.</p> <p>The meanings of other options are:</p> <p><b>Magnificent:</b> An adjective meaning extremely beautiful, elaborate, or impressive.</p> <p><b>Scathing:</b> An adjective describing something that is severely critical or scornful. While it has a negative connotation, it does not directly oppose admiration.</p> <p><b>Cynical:</b> An adjective describing someone who believes that people are motivated purely by self-interest; distrustful of human sincerity or integrity.</p>









<p><b>Q. 80</b></p>	<p>The following sentence has been split into four segments. Identify the segment that contains a grammatical error.</p> <p>That accident happened /a long time ago, but / I have shuddered at / the thought of it ever for.</p> <p>a) the thought of it ever for </p> <p>b) I have shuddered at </p> <p>c) That accident happened </p> <p>d) a long time ago, but </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The segment "<b>the thought of it ever for</b>" contains a grammatical error. The phrase "<b>ever for</b>" is incorrect in this context. The correct expression should be "<b>ever since</b>", which indicates that the action has been ongoing from a specific point in the past until now. Therefore, the corrected sentence is:</p> <p><u>"That accident happened a long time ago, but I have shuddered at the thought of it ever since."</u></p>
<p><b>Q. 81</b></p>	<p>Select the option that can be used as a one-word substitute for the given sentence.</p> <p>Photographers who follow celebrities to get their pictures to sell them</p> <p>a) Paparazzi </p> <p>b) Reporter </p> <p>c) Editor </p> <p>d) Interviewer </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The term "<b>paparazzi</b>" refers to photographers who follow celebrities to capture candid photographs, often to sell them to media outlets.</p> <p>Therefore, the most appropriate one-word substitute for the given description is "<b>paparazzi</b>."</p> <p><b>The other options are:</b></p> <p><b>Reporter:</b> A person who gathers and presents news or information to the public, often working for a newspaper, magazine, television, or online media outlet.</p> <p><b>Editor:</b> An individual responsible for reviewing, revising, and preparing content (such as articles, books, newspapers, etc.) for publication.</p> <p><b>Interviewer:</b> A person who conducts interviews, typically to gather information, opinions, or insights from individuals or experts on specific topics.</p>

<p><b>Q. 82</b></p>	<p>Select the option that expresses the given sentence in indirect speech.</p> <p>He said, "Alas! I am a ruined man."</p> <p>a) He applauded with sorrow that he was a ruined man. </p> <p>b) He wished that he was a ruined man. </p> <p>c) He cried out with sorrow that he was a ruined man. </p> <p>d) He confessed with sorrow that he were a ruined man. </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>In indirect speech, exclamatory expressions like "Alas!" are often replaced with phrases such as "<b>exclaimed with sorrow</b>" to convey the emotion appropriately.</p> <p>Therefore, the option that best expresses the given sentence in indirect speech is: <b>He cried out with sorrow that he was a ruined man.</b></p> <p>This option accurately reflects the original sentiment and structure of the direct speech.</p>
<p><b>Q. 83</b></p>	<p>Select the INCORRECTLY spelled word.</p> <p>a) Unpretentious </p> <p>b) Grievance </p> <p>c) Sovereign </p> <p>d) vicious </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The word "<b>Unpretentious</b>" is incorrectly spelled. The correct spelling is "<b>Unpretentious</b>", which describes someone or something that is modest and not attempting to impress others with an appearance of greater importance or value.</p> <p>The other words are spelled correctly:</p> <ul style="list-style-type: none"> <li>• <b>Grievance:</b> A real or imagined cause for complaint or protest.</li> <li>• <b>Sovereign:</b> A supreme ruler, especially a monarch.</li> <li>• <b>Vicious:</b> Deliberately cruel or violent.</li> </ul>









<p><b>Q. 84</b></p>	<p>Select the option that expresses the given sentence in passive voice.</p> <p>They think that the Governor will resign.</p> <p>a) They thought that the Governor would be resigning. </p> <p>b) It is thought that the Governor will resign. </p> <p>c) They think that the Governor is resigning. </p> <p>d) It is thought that the Governor will be resigning. </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The sentence "They think that the Governor will resign." can be expressed in the passive voice as:</p> <p>"It is thought that the Governor will resign."</p> <p>In this construction, the impersonal phrase "It is thought" is used to convey the general belief or opinion, effectively shifting the focus from the subject "They" to the action itself.</p>





<p><b>Q. 85</b></p>	<p>Select the most appropriate option that can substitute the underlined segment in the given sentence.</p> <p>Doctor wants Tony <u>to cut back down</u> junk foods.</p> <p>a) To cut back off </p> <p>b) To cut back over </p> <p>c) To cut back out </p> <p>d) To cut back on </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The correct phrase is "<b>to cut back on</b>", which means to reduce the consumption or use of something. Therefore, the sentence should read:</p> <p>"The doctor wants Tony to cut back on junk foods."</p> <p>Here's a concise summary of the phrasal verbs with "<b>back</b>":</p> <ol style="list-style-type: none"> <li>1. <b>Back away</b>: Move backward due to fear or reluctance.</li> <li>2. <b>Back down</b>: Admit defeat or give up a stance.</li> <li>3. <b>Back off</b>: Retreat or stop being involved.</li> <li>4. <b>Back out</b>: Withdraw from an agreement.</li> <li>5. <b>Back up</b>: Support someone, move backward, or create a backup of data.</li> <li>6. <b>Back into</b>: Reverse into something, often accidentally.</li> <li>7. <b>Back onto</b>: When a property faces something at its rear.</li> <li>8. <b>Back out of</b>: Fail to fulfill a promise or withdraw from an arrangement.</li> <li>9. <b>Back at</b>: Resume an activity after a break.</li> <li>10. <b>Back in</b>: Return to a place or situation.</li> <li>11. <b>Back away from</b>: Withdraw from an idea or agreement.</li> </ol>





<b>Q. 86</b>	<p>Select the option that expresses the given sentence in active voice.</p> <p>Why was such a letter written by your brother?</p> <p>a) Why your brother wrote such a letter? </p> <p>b) Why has your brother written such a letter? </p> <p>c) Why is your brother writing such a letter? </p> <p>d) Why did your brother write such a letter? </p>
<b>Explanation:</b>	<p>The correct answer will be: <b>Why did your brother write such a letter?</b></p> <p>Active voice ----- Passive voice</p> <p>Wh family + did + subject + V1 + object ----- Wh family + was/were + object + V3 + by + subject</p>
<b>Q. 87</b>	<p>Select the option that expresses the given sentence in direct speech.</p> <p>She said to me, "Don't the children like the cake?"</p> <p>a) she asked me whether the children didn't like the cake. </p> <p>b) She enquired about whether the children liked the cake. </p> <p>c) She wondered why the children didn't like the cake. </p> <p>d) She asked me whether the children liked the cake. </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <p>In this case:</p> <ul style="list-style-type: none"> <li>• "Said" is changed to "asked."</li> <li>• The negative question "Don't the children like the cake?" is transformed into a statement using "whether."</li> <li>• The tense shifts to match the reporting verb's past tense.</li> </ul> <p><b>Answer:</b></p> <p><b>She asked me whether the children didn't like the cake.</b></p>









<p><b>Q. 88</b></p>	<p>Select the most appropriate option to fill in the blanks.</p> <p>The business operates _____ the same way as the other businesses.</p> <p>a) Had </p> <p>b) Such </p> <p>c) Much </p> <p>d) Very </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>In this context, "<b>much</b>" is used as an adverb to emphasize the similarity between how the business operates and how other businesses operate.</p> <p>This usage aligns with standard English expressions where "<b>much</b>" modifies the degree of similarity.</p> <p>The correct sentence is: "<b>The business operates much the same way as the other businesses.</b>"</p>
<p><b>Q. 89</b></p>	<p>Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.</p> <p>(A) I must tell you that I am referring to the tax year which began on 1 April</p> <p>(B) Let me be the first to wish you a very Happy New Year</p> <p>(C) In case none of your friends or family did so</p> <p>(D) Now, before you ask whether the spring sunshine has gone to my head</p> <p>a) CBDA </p> <p>b) DBAC </p> <p>c) BACD </p> <p>d) ADCB </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>(C) This sentence sets the context by suggesting that if no one else has extended a particular wish, the speaker is about to do so.</p> <p>(B) Following up, the speaker expresses the wish: "Let me be the first to wish you a very happy New Year."</p> <p>(D) Anticipating potential confusion about the timing of this New Year greeting, the speaker preempts with: "Now, before you ask whether the spring sunshine has gone to my head."</p> <p>(A) Finally, the speaker clarifies the reference: "I must tell you that I am referring to the tax year which began on 1 April."</p> <p>The answer is CBDA.</p>







<p><b>Q. 90</b></p>	<p>Select the option that can be used as a one-word substitute for the given sentence.</p> <p>The art of identifying a disease from its signs and symptoms.</p> <p>a) Biopsy </p> <p>b) Diagnosis </p> <p>c) Prognosis </p> <p>d) Autopsy </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The most appropriate one-word substitute for "the art of identifying a disease from its signs and symptoms" is <b>diagnosis</b>.</p> <p><b>The other options are:</b></p> <p><b>Biopsy:</b> A medical procedure involving the extraction of a sample of tissue for examination to determine the presence or extent of a disease.</p> <p><b>Prognosis:</b> A forecast of the likely course or outcome of a disease, indicating the chances of recovery.</p> <p><b>Autopsy:</b> A post-mortem examination of a body to determine the cause of death.</p>
<p><b>Q. 91</b></p>	<p>Select the most appropriate meaning of the given idiom.</p> <p>Costs an arm and a leg</p> <p>a) Very serious </p> <p>b) of no significance </p> <p>c) Extremely expensive </p> <p>d) Absolutely satisfied </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The idiom "<b>costs an arm and a leg</b>" means something is <b>extremely expensive</b>.</p> <p>This expression suggests that the price of an item is so high that it feels as though one would have to sacrifice something as valuable as an arm and a leg to afford it.</p>





<b>Q. 92</b>	<p>Select the most appropriate synonym of the given word.</p> <p><b>Procrastination</b></p> <p>a) Suspension </p> <p>b) Determined </p> <p>c) Elevated </p> <p>d) Dignified </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <p><b>Procrastination</b> refers to the act of delaying or postponing tasks or decisions.</p> <p><b>Suspension</b> involves a temporary halt or delay in an activity or process, aligning with the concept of postponement inherent in procrastination.</p> <p><b>The meaning of other options are:</b></p> <p><b>Determined:</b> Indicates a firm decision or resolve, which is the opposite of procrastination.</p> <p><b>Elevated:</b> Means raised or increased, unrelated to the concept of delay.</p> <p><b>Dignified:</b> Describes a state of being worthy or honorable, not connected to postponement.</p>





<b>Q. 93</b>	<p>Parts of a sentence are given below in jumbled order. Arrange the parts in the correct order to form a meaningful sentence.</p> <p>O) arid deserts</p> <p>P) from lush forests to</p> <p>Q) hikers encountered diverse ecosystems</p> <p>R) trekking through the wilderness</p> <p>a) PRQO </p> <p>b) QPOR </p> <p>c) RQPO </p> <p>d) OPQR </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <p><b>(R)</b> "trekking through the wilderness" This phrase sets the context by describing the action of trekking.</p> <p><b>(Q)</b> "hikers encountered diverse ecosystems" This follows logically, indicating what hikers experienced during their trek.</p> <p><b>(P)</b> "from lush forests to" This begins to specify the range of ecosystems encountered, starting with lush forests.</p> <p><b>(O)</b> "arid deserts" This completes the range, contrasting lush forests with arid deserts.</p> <p>The correct arrangement of the sentence parts is <b>RQPO</b>.</p>

<p><b>Q. 94</b></p>	<p>Select the most appropriate option to fill in the blank.</p> <p>You can tell yourself that you would be willing to lose everything you have in order to get something you want: all of those things you're willing to lose are what make you_____.</p> <p>a) Distract </p> <p>b) pessimist </p> <p>c) Recognizable </p> <p>d) Unfortunately </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>In this context, the sentence suggests that the possessions or attributes you're willing to sacrifice are integral to your identity—they make you recognizable. The most appropriate option to fill in the blank is <b>recognizable</b>.</p> <p>The other options are:</p> <p><b>Distract:</b> Means to divert attention, which doesn't fit the context of defining identity.</p> <p><b>Pessimist:</b> Refers to someone who expects the worst, unrelated to the concept of identity in this sentence.</p> <p><b>Unfortunately:</b> An adverb expressing regret, which doesn't logically complete the sentence.</p>
<p><b>Q. 95</b></p>	<p>Select the most appropriate synonym of the given word.</p> <p><b>Constraints</b></p> <p>a) Ambiguous </p> <p>b) Murky </p> <p>c) Restrictions </p> <p>d) Distinguished </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p><b>Constraints</b> refer to limitations or restrictions that control what can be done.</p> <p><b>Restrictions</b> similarly denote limitations imposed on someone or something, making it a suitable synonym.</p> <p>The meanings of other options are:</p> <p><b>Ambiguous</b> means unclear or open to multiple interpretations, which doesn't align with the meaning of constraints.</p> <p><b>Murky</b> describes something that is dark or unclear, unrelated to the concept of limitations.</p> <p><b>Distinguished</b> refers to someone who is respected and eminent, not connected to the idea of constraints.</p>





<p><b>Q. 96</b></p>	<p>Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.</p> <p>What are the future possibilities for space travel in the long term? (1) _____ will humans go after they have explored our solar system? It is said that 'Star Trek' could hold the (2) _____ to these questions. It is predicted that travel to other galaxies will only be (3) _____ in huge 'starships'. These will wander through space for hundreds or even thousands of years. Each of them will carry a large human (4) _____. Some of those people will take over a suitable new planet and settle down there. This search for new planets to settle in will continue until life on planet Earth could be just a (5) _____ memory.</p> <p>Select the most appropriate option to fill in the blank 1.</p> <p>a) Where </p> <p>b) Why </p> <p>c) How </p> <p>d) When </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p>The question seeks to identify the next destinations for human exploration beyond our solar system.</p> <p>"Where" inquiries about a place or location, fitting the context of seeking future destinations.</p>





  

<p><b>Q. 97</b></p>	<p>Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.</p> <p>What are the future possibilities for space travel in the long term? (1) _____ will humans go after they have explored our solar system? It is said that 'Star Trek' could hold the (2) _____ to these questions. It is predicted that travel to other galaxies will only be (3) _____ in huge 'starships'. These will wander through space for hundreds or even thousands of years. Each of them will carry a large human (4) _____. Some of those people will take over a suitable new planet and settle down there. This search for new planets to settle in will continue until life on planet Earth could be just a (5) _____ memory.</p> <p>Select the most appropriate option to fill in the blank 2.</p> <p>a) Query </p> <p>b) Answer </p> <p>c) Door </p> <p>d) solution </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p><b>Answer:</b> Fits the context as it refers to a solution or explanation to the questions posed about future space travel.</p> <p>"It is said that 'Star Trek' could hold the <b>answer</b> to these questions."</p>

<p><b>Q. 98</b></p>	<p>Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.</p> <p>What are the future possibilities for space travel in the long term? (1) _____ will humans go after they have explored our solar system? It is said that 'Star Trek' could hold the (2) _____ to these questions. It is predicted that travel to other galaxies will only be (3) _____ in huge 'starships'. These will wander through space for hundreds or even thousands of years. Each of them will carry a large human (4) _____. Some of those people will take over a suitable new planet and settle down there. This search for new planets to settle in will continue until life on planet Earth could be just a (5) _____ memory.</p> <p>Select the most appropriate option to fill in the blank 3.</p> <p>a) Imagined </p> <p>b) Possible </p> <p>c) Implemented </p> <p>d) Achieved </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p><b>Possible:</b> Indicates that such travel can occur under certain conditions, fitting the context of future predictions about intergalactic travel.</p> <p>"It is predicted that travel to other galaxies will only be <b>possible</b> in huge 'starships'."</p>

<p><b>Q. 99</b></p>	<p>Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.</p> <p>What are the future possibilities for space travel in the long term? (1) _____ will humans go after they have explored our solar system? It is said that 'Star Trek' could hold the (2) _____ to these questions. It is predicted that travel to other galaxies will only be (3) _____ in huge 'starships'. These will wander through space for hundreds or even thousands of years. Each of them will carry a large human (4) _____. Some of those people will take over a suitable new planet and settle down there. This search for new planets to settle in will continue until life on planet Earth could be just a (5) _____ memory.</p> <p>Select the most appropriate option to fill in the blank 4.</p> <p>a) Instinct </p> <p>b) Colony </p> <p>c) Proportion </p> <p>d) population </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <p><b>Population:</b> Refers to a group of individuals of the same species inhabiting a particular area. In this context, it denotes the large number of humans that the starships will carry.</p> <p>"Each of them will carry a large human <b>population</b>."</p>

<b>Q. 100</b>	<p>Fill in the blanks with the most appropriate words to complete the passage. For each blank, select the most appropriate word from the given option.</p> <p>What are the future possibilities for space travel in the long term? (1) _____ will humans go after they have explored our solar system? It is said that 'Star Trek' could hold the (2) _____ to these questions. It is predicted that travel to other galaxies will only be (3) _____ in huge 'starships'. These will wander through space for hundreds or even thousands of years. Each of them will carry a large human (4) _____. Some of those people will take over a suitable new planet and settle down there. This search for new planets to settle in will continue until life on planet Earth could be just a (5) _____ memory.</p> <p>Select the most appropriate option to fill in the blank 5.</p> <p>a) Distant </p> <p>b) Imaginary </p> <p>c) Nearest </p> <p>d) Factual </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <p><b>Distant:</b> In this context, "distant memory" is a common expression meaning something remembered faintly from the past. It implies that life on Earth has become a faint recollection due to the passage of time.</p> <p>"This search for new planets to settle in will continue until life on planet Earth could be just a <b>distant</b> memory."</p>