













# RBE SSC CGL 2025 Live Mock-30 August 31,2025





Q. 1	<p>7, 26, 63, 124, 215, ?</p> <p>a) 340 </p> <p>b) 341 </p> <p>c) 342 </p> <p>d) 343 </p>
Explanation:	<p><b>Explanation:</b> Terms = <math>n^3 - 1</math>.</p> <p><b>Try to relate with cubes</b></p> <ul style="list-style-type: none"> <li>• <math>2^3 = 8 \rightarrow 8 - 1 = 7</math></li> <li>• <math>3^3 = 27 \rightarrow 27 - 1 = 26</math></li> <li>• <math>4^3 = 64 \rightarrow 64 - 1 = 63</math></li> <li>• <math>5^3 = 125 \rightarrow 125 - 1 = 124</math></li> <li>• <math>6^3 = 216 \rightarrow 216 - 1 = 215</math></li> </ul> <p><b>Next term</b> = <math>7^3 - 1 = 343 - 1 = 342</math></p>









  






Q. 2	<p>If A = 1, B = 2... Z = 26, then value of (WORD-ROAD) = ?</p> <p>a) 22 </p> <p>b) 23 </p> <p>c) 24 </p> <p>d) 25 </p>
Explanation:	<p>WORD = <math>23 + 15 + 18 + 4 = 60</math></p> <p>ROAD = <math>18 + 15 + 1 + 4 = 38</math></p> <p>WORD - ROAD = <math>60 - 38 = 22</math></p>

Q. 3	<p><b>Assertion-Reason</b>  <b>(A):</b> Literacy in Kerala is highest.  <b>(R):</b> Kerala spends most GDP on education.</p> <p>a) Both (A) and (R) are true, and (R) is the correct explanation of (A). </p> <p>b) Both (A) and (R) are true, but (R) is not the correct explanation of (A). </p> <p>c) (A) is true, but (R) is false. </p> <p>d) (A) is false, but (R) is true. </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• Kerala indeed has the <b>highest literacy rate in India</b>.</li> <li>• But it is <b>not because</b> it spends the highest GDP % on education; factors include social awareness, missionary schools, female education drives.</li> <li>• Hence <b>A true, R false</b>.</li> </ul>



Q. 4	<p><b>Fire : Ashes :: Death : ?</b></p> <p>a) Victory </p> <p>b) Dispute </p> <p>c) Silence </p> <p>d) Discussion </p>
<b>Explanation:</b>	<p>In the analogy the second term is the natural/inevitable aftermath of the first. A fire leaves <b>ashes</b> — its final residue. Likewise, <b>death</b> commonly results in <b>silence</b> — the end of speech, breath and activity.</p> <p>So, <b>Fire : Ashes :: Death : Silence</b>.</p>

<b>Q. 5</b>	<p>If HOT is coded as 3 4 12 15, then how is BLACK coded?</p> <p>a) 5 8 9 20 23 </p> <p>b) 3 5 9 12 23 </p> <p>c) 9 12 23 3 5 </p> <p>d) 23 12 9 5 3 </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• Opposite of HOT = <b>COLD</b></li> <li>• C=3, O=15, L=12, D=4 → (3,15,12,4)</li> <li>• Alphabetical order = C(3), D(4), L(12), O(15) → <b>3 4 12 15</b></li> <li>• Opposite of BLACK = <b>WHITE</b></li> <li>• W=23, H=8, I=9, T=20, E=5 → (23,8,9,20,5)</li> <li>• Alphabetical order = E(5), H(8), I(9), T(20), W(23) → <b>5 8 9 20 23</b></li> </ul>
<b>Q. 6</b>	<p>Select the option in which the group of numbers is different from the others.</p> <p>a) 17, 19, 23, 29 </p> <p>b) 31, 37, 41, 43 </p> <p>c) 47, 53, 59, 61 </p> <p>d) 71, 73, 79, 81 </p>
<b>Explanation:</b>	<p><b>Solution</b></p> <ul style="list-style-type: none"> <li>• In option (a), all numbers (17, 19, 23, 29) are <b>prime numbers</b>.</li> <li>• In option (b), all numbers (31, 37, 41, 43) are also <b>prime numbers</b>.</li> <li>• In option (c), all numbers (47, 53, 59, 61) are <b>prime numbers</b>.</li> <li>• In option (d), 71, 73, 79 are primes but <b>81 is not a prime</b> (<math>81 = 9 \times 9</math>).</li> </ul> <p>Thus, option (d) is the odd one out.</p>

<b>Q. 7</b>	<b>Find the wrong number.</b> 1, 2, 6, 24, 120, 720, 5040, 40220 a) 24  b) 1  c) 120  d) 40220 
<b>Explanation:</b>	<b>Series:</b> 1, 2, 6, 24, 120, 720, 5040, 40220 <b>Logic:</b> Factorial series (n!) → last term should be 8! = 40320 <b>Wrong number:</b> 40220 

Q. 8

In a certain code:

 $A + B$  means A is the father of B. $A - B$  means A is the sister of B. $A \times B$  means A is the brother of B. $A \div B$  means A is the mother of B.If  $P \div Q + R - S$ , then how is P related to S?a) Mother b) Grandmother c) Aunt d) Sister **Explanation**1.  $P \div Q \rightarrow P$  is mother of Q.

(P is female, parent of Q)

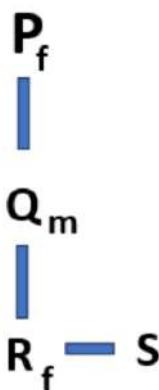
2.  $Q + R \rightarrow Q$  is father of R.





(So R is child of Q, and P becomes grandmother of R)

3.  $R - S \rightarrow R$  is sister of S.





(So R and S are siblings, both children of Q)





Thus, P is grandmother of S.

**Explanation:**





Q. 9	<p>A boy (Faiz) lives in Jahangirpuri. One night at 11 PM, he is returning home from Laxmi Nagar by metro. After getting down at the station, while walking towards his house, he sees three boys misbehaving with a 17-year-old girl.</p> <p>If you were in this situation, what would you do?</p> <p>a) Ignore the situation and walk away silently to avoid trouble. </p> <p>b) Immediately call the police helpline (100/112) and inform them while maintaining a safe distance. </p> <p>c) Confront the three boys directly and fight with them. </p> <p>d) Seek help from nearby people or security guards while also calling the police. </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• (a) is irresponsible — ignoring crime is wrong.</li> <li>• (b) is good but might take time — girl may remain unsafe till police arrive.</li> <li>• (c) is risky — alone vs 3 boys, unsafe and impractical.</li> <li>• (d) is best — ensures girl's immediate safety, involves others for support, and alerts police.</li> </ul>

Q. 10	<p><b>Statement:</b> Is buying things on instalments profitable to the customer?</p> <p><b>Arguments:</b> I. Yes. He has to pay less. II. No. Paying instalments upsets the family budget.</p> <p>a) Only Argument I is valid </p> <p>b) Only Argument II is valid </p> <p>c) Both I and II are valid </p> <p>d) Neither I nor II is valid </p>
Explanation:	<p>In buying things on instalments, a customer has to pay more as the interest is also included. So, argument I does not hold. Moreover, one who buys an item on instalments maintains his future budget accordingly as he is well acquainted with when and how much he has to pay, beforehand. So, argument II is also not valid.</p>

Q. 11	<p><b>Statement</b> Due to substantial reduction in fares by different airline services, large number of passengers so far travelling by upper classes in trains have switched over to airline services.</p> <p><b>Courses of action:</b> I. The railways should immediately reduce the fare structure of the upper classes substantially to retain its passengers. II. The railways should reduce the capacity of upper classes in all the trains to avoid loss.</p> <p>a) Only Course of Action I follows </p> <p>b) Only Course of Action II follows </p> <p>c) Either I or II follows </p> <p>d) Neither I nor II follows </p>
Explanation:	<p><b>Analysis</b></p> <ul style="list-style-type: none"> <li>• <b>Course I:</b> Valid, because when a competitor (airlines) reduces fares and passengers shift, the <b>railways must consider lowering upper-class fares</b> to remain competitive and retain passengers.</li> <li>• <b>Course II:</b> Not valid, because <b>reducing capacity</b> is only a temporary and negative step; demand can increase again, so cutting capacity is not a wise or constructive solution.</li> </ul>

Q. 12	<p>If the letters of the word KNOWLEDGE are arranged alphabetically, which letter will be third from the right?</p> <p>a) W </p> <p>b) O </p> <p>c) L </p> <p>d) N </p>
Explanation:	<p>KNOWLEDGE → D, E, E, G, K, L, N, O, W From right: 1st = W, 2nd = O, 3rd = N</p>

**Q. 13**

If

 $A \div B$  means A is multiplied by B $A \times B$  means A is divided by B $A - B$  means A is added to B $A + B$  means A is subtracted from B

Then find the value of:

$$24 \div 6 \times 4 - 8 + 2 = ?$$

a) 44



b) 43



c) 42



d) 46





**Explanation:**

Replace symbols with real operations.

- $24 \div 6 \rightarrow 24 \times 6 = 144$
- $144 \times 4 \rightarrow 144 \div 4 = 36$
- $36 - 8 \rightarrow 36 + 8 = 44$
- $44 + 2 \rightarrow 44 - 2 = 42$

**Final Answer = 42**







<b>Q. 14</b>	<p>The present age of a father is three times the age of his son. After 8 years, the father's age will be twice the age of his son. What are their present ages?</p> <p>a) 21, 7 </p> <p>b) 24, 8 </p> <p>c) 36, 12 </p> <p>d) 27, 9 </p>
<b>Explanation:</b>	<p><b>Solution (Short):</b> Let son's present age = <math>x</math> Father's present age = <math>3x</math></p> <p>After 8 years: Father = <math>3x + 8</math> Son = <math>x + 8</math></p> <p>According to condition: <math>3x + 8 = 2(x + 8)</math> <math>3x + 8 = 2x + 16</math> <math>x = 8</math></p> <p>Son's present age = 8 years Father's present age = 24 years</p> <p><b>Final Answer: Son = 8 years, Father = 24 years</b></p>

Q. 15


On which day of the week did Priya visit Delhi?

Statement I: Priya visited Delhi after Monday but before Thursday.

Statement II: Priya visited Delhi on an odd day of the week.

- a) I alone sufficient 
- b) II alone sufficient 
- c) Both together sufficient 
- d) Neither sufficient 

Explanation:





**Statement I:** Priya visited Delhi after Monday but before Thursday. Possible days = Tuesday or Wednesday.**Statement II:** Priya visited Delhi on an odd day of the week. If we take Sunday = 1, Monday = 2, Tuesday = 3, Wednesday = 4, Thursday = 5, Friday = 6, Saturday = 7 → Odd days = Sunday, Tuesday, Thursday, Saturday.**Now combine both:**

- From Statement I → {Tuesday, Wednesday}
- From Statement II → {Tuesday, Thursday, Saturday, Sunday}
- Common = **Tuesday** only.

So, Priya visited Delhi on **Tuesday**.**NOTE:** If we take Monday = 1, Tuesday = 2, Wednesday = 3, answer will be: **Wednesday**.**(Confusing Point:** Whether the day starts from Sunday or Monday, we will get a definite answer. )

Q. 16

If the animals which can walk are called 'swimmers', animals who crawl are called 'flying', those living in water are called 'snakes' and those which fly in the sky are called 'hunters', then what will a lizard be called?

- a) Swimmers 
- b) Snakes 
- c) Flying 
- d) Hunters 

Explanation:

Clearly, a lizard crawls and the animals that crawl are called 'flying'. So, a lizard is called 'flying'.

Q. 17

Five friends P, Q, R, S and T travel from Goa individually for five cities i.e. Chennai, Kolkata, Delhi, Hyderabad and Mangalore by different means of transport i.e. bus, train, aeroplane, car and boat.


The one who travelled for Delhi did not use boat.

R travelled for Mangalore by car and S travelled by boat.


Q travelled by aeroplane for Kolkata and T travelled by train.


Delhi and Chennai are not connected with bus route with Goa.

Which combination of place and transport of the following is true?

a) Kolkata – bus 

b) Delhi – aeroplane 

c) Mangalore – train 





d) Chennai – boat 

Explanation:

Person	City	Transport
P	Hyderabad	Bus
Q	Kolkata	Aeroplane
R	Mangalore	Car
S	Chennai	Boat
T	Delhi	Train

Q. 18

Amit walked 30 metres towards East, took a right turn and walked 40 metres. Then he took a left turn and walked 30 metres. In which direction is he now from the starting point?

- a) North-east 
- b) East 
- c) South-east 
- d) South 

**Solution:**

- Starting point = P
- Amit walked **30 m East** → reached Q
- Took a **right turn** (South direction) and walked **40 m** → reached R
- Took a **left turn** (East direction) and walked **30 m** → reached S

So, **final position = S**, which lies **South-east of P**.

**Explanation:**

**Answer: (c) South-east**

P ---30m-> Q

|





| 40m

|

R -----30m-----> S

Q. 19

Aman is 16th from the left end in a row of boys and Vivek is 18th from the right end. Gagan is 11th from Aman towards the right and 3rd from Vivek towards the right end. How many boys are there in the row?

- a) 40 
- b) 41 
- c) 48 
- d) Data inadequate 

Explanation:

Solution:

- Vivek is **18th from the right end**, and Gagan is **third to the right of Vivek**.  
⇒ So, Gagan is **15th from the right end**.
- Aman is **16th from the left end**.
- Gagan is **11th from Aman towards the right**.  
⇒ That means between Aman and Gagan there are **10 boys**.

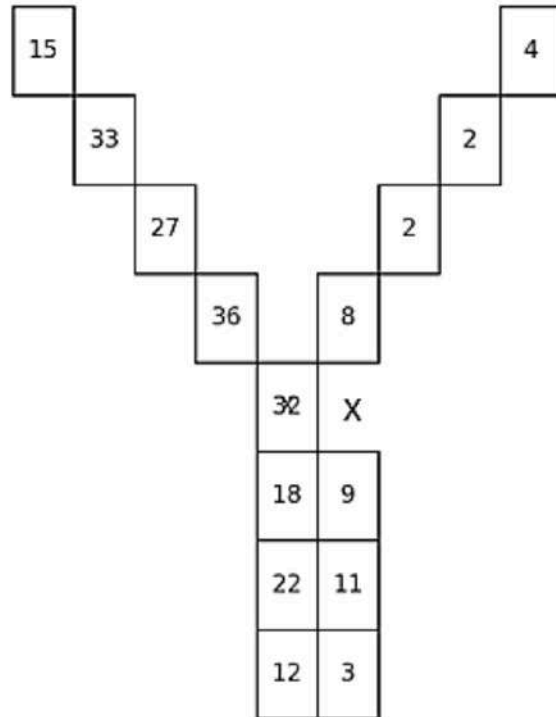
Now let's split the row:

- To the **left of Aman** = 15 boys
- **Between Aman and Gagan** = 10 boys
- **Aman himself** = 1 boy
- **Gagan himself** = 1 boy
- To the **right of Gagan** = 14 boys

So, total number of boys in the row =  $(15 + 1 + 10 + 1 + 14) = 41$ .

Q. 20

Find the value of X



a) 8

b) 4

c) 7

d) 6

**Explanation:**

The top left hand number is obtained by adding the bottom two numbers. The top right hand number is the result of dividing the bottom two numbers.

Thus,

$$12 + 3 = 15, \quad 12 \div 3 = 4;$$

$$22 + 11 = 33, \quad 22 \div 11 = 2;$$

$$18 + 9 = 27, \quad 18 \div 9 = 2.$$

So,  $32 + X = 36$  and  $32 \div X = 8$  or  $X = 4$ .

Q. 21

Which one of the following is always found in 'Bravery'?

a) Courage b) Experiences c) Power d) Knowledge 

Explanation:

Clearly, 'bravery' is a quality exhibited only by a person who possesses courage. So, the answer is (a).

Q. 22

In a certain code, a number 13479 is written as AQFJL and 2568 is written as DMPN.

How is 396824 written in that code?






a) QLPMNF b) QLPNMF c) QLPNMJ d) QLPNDF 

Explanation:





Clearly, in the given system, the numbers are coded as follows:





Number	1	3	4	7	9	2	5	6	8
Code	A	Q	F	J	L	D	M	P	N








So, 396824 is written as QLPNDF in that code.





<b>Q. 23</b>	<p>If DRIVER = 12, PEDESTRIAN = 20, ACCIDENT = 16, then CAR = ?</p> <p>a) 12 </p> <p>b) 14 </p> <p>c) 16 </p> <p>d) 6 </p>
<b>Explanation:</b>	<p><b>Solution:</b></p> <ul style="list-style-type: none"><li>• DRIVER (6 letters) <math>\rightarrow 6 \times 2 = 12</math></li><li>• PEDESTRIAN (10 letters) <math>\rightarrow 10 \times 2 = 20</math></li><li>• ACCIDENT (8 letters) <math>\rightarrow 8 \times 2 = 16</math></li><li>• CAR (3 letters) <math>\rightarrow 3 \times 2 = 6</math></li></ul> <p><b>Answer: (b) 6</b> </p>
















Q. 24	<p>A multinational company is hiring for the post of Senior Data Analyst with the following eligibility criteria:</p> <p>Candidate must have a Master's Degree in Statistics / Data Science / Mathematics.</p> <p>At least 6 years of experience in data analysis.</p> <p>Should have worked on Big Data tools (Hadoop / Spark).</p> <p>Preference will be given to candidates who have published research papers in analytics or data science.</p> <p>A candidate named Ananya Verma applies for the position. Her profile is:</p> <p>Completed B.Sc. in Mathematics (2012) and M.Sc. in Statistics (2014).</p> <p>Worked as a Data Analyst for 4 years in an IT firm.</p> <p>Worked as a Senior Business Analyst for 2 years (used SQL, Python, Excel; limited exposure to Spark).</p> <p>Published two research papers on data modelling in reputed journals.</p> <p>Based on the eligibility criteria, what should be the decision?</p> <p>a) Eligible – she fulfils all the requirements completely. </p> <p>b) Not Eligible – she lacks the Master's degree. </p> <p>c) Not Eligible – she has insufficient Big Data tools experience. </p> <p>d) Eligible – she meets the experience requirement and research papers compensate for limited Big Data exposure. </p>
Explanation:	<p>Although she has the required <b>Master's Degree</b> and <b>6 years of experience</b> (4 + 2), her exposure to <b>Big Data tools</b> like <b>Hadoop/Spark</b> is <b>very limited</b>, which is a mandatory requirement.</p>







Q. 25	<p>Find the odd number from the given series</p> <p>10, 13, 234, 681, 997</p> <p>a) 10 </p> <p>b) 13 </p> <p>c) 234 </p> <p>d) 681 </p>
Explanation:	<p><b>Solution:</b></p> <ul style="list-style-type: none"><li>• 10 <math>\rightarrow 1+0 = 1</math> (perfect square <math>\rightarrow 1^2</math>)</li><li>• 13 <math>\rightarrow 1+3 = 4</math> (perfect square <math>\rightarrow 2^2</math>)</li><li>• 234 <math>\rightarrow 2+3+4 = 9</math> (perfect square <math>\rightarrow 3^2</math>)</li><li>• 681 <math>\rightarrow 6+8+1 = 15</math> (not a perfect square)</li><li>• 997 <math>\rightarrow 9+9+7 = 25</math> (perfect square <math>\rightarrow 5^2</math>)</li></ul> <p>So, the number that does <b>not</b> follow the pattern is <b>681</b>.</p>







Q. 26	<p>Consider the following statements and answer which is/are correct?</p> <ol style="list-style-type: none"> <li>1. SWAYAM is an initiative by the Government of India aimed at providing free online courses to students, teachers, and learners across the country.</li> <li>2. NISHTHA is a capacity-building program for school teachers and principals, focusing on improving the quality of education.</li> <li>3. Both SWAYAM and NISHTHA are implemented by the Ministry of Skill Development and Entrepreneurship.</li> </ol> <p>a) 1 &amp; 2 only </p> <p>b) 2 &amp; 3 only </p> <p>c) 1 &amp; 3 only </p> <p>d) 1,2 &amp; 3 All </p>
Explanation:	<p> <b>Statement 1 – Correct</b></p> <ul style="list-style-type: none"> <li>• <b>SWAYAM</b> (Study Webs of Active–Learning for Young Aspiring Minds) is a flagship initiative of the <b>Government of India</b>.</li> <li>• It provides <b>free online courses</b> from school to university level, developed by top institutions like <b>IITs, IIMs, IGNOU, NCERT</b>, etc.</li> <li>• It aims to ensure access, equity, and quality in education.</li> </ul> <p> <b>Statement 2 – Correct</b></p> <ul style="list-style-type: none"> <li>• <b>NISHTHA</b> (National Initiative for School Heads’ and Teachers’ Holistic Advancement) is a <b>capacity-building program</b> for teachers and principals.</li> <li>• It focuses on improving <b>learning outcomes</b>, promoting <b>critical thinking</b>, and integrating <b>ICT and inclusive education</b> practices.</li> </ul> <p> <b>Statement 3 – Incorrect</b></p> <ul style="list-style-type: none"> <li>• Both <b>SWAYAM and NISHTHA</b> are implemented by the <b>Ministry of Education</b>, not the <b>Ministry of Skill Development and Entrepreneurship</b>.</li> <li>• The Ministry of Skill Development focuses on vocational training and skilling programs, not mainstream school or higher education initiatives.</li> </ul>

Q. 27	<p>What is the primary objective of the Reserve Bank of India (RBI)?</p> <p>a) To provide credit to the scheduled commercial banks. </p> <p>b) To maintain price stability while keeping in mind the objective of economic growth. </p> <p>c) To manage the forex reserves of India. </p> <p>d) To help central government in financial inclusion in the economy. </p>
Explanation:	<p><b>Explanation</b></p> <ul style="list-style-type: none"> <li>• The <b>Reserve Bank of India (RBI)</b> is India's central bank, established under the <b>RBI Act, 1934</b>.</li> <li>• Its <b>primary objective</b> is to ensure <b>price stability</b>, which means controlling inflation and maintaining the purchasing power of the currency.</li> <li>• While doing so, the RBI also aims to support <b>economic growth</b>, making it a dual mandate.</li> <li>• Other functions like providing credit to banks, managing forex reserves, and aiding financial inclusion are important, but they are <b>instrumental roles</b>, not the <b>core objective</b>.</li> </ul>








Q. 28	<p>Consider the following statements and answer which is/are incorrect?</p> <ol style="list-style-type: none"> <li>1. The Ryotwari System granted legal rights over land to the Zamindars.</li> <li>2. In the Mahalwari System, the 'village community' was recognised as a land owner.</li> <li>3. Land revenue constituted a small part of the government's total revenue, during the later half of the 19th century.</li> </ol> <p>a) 1 &amp; 2 only </p> <p>b) 2 &amp; 3 only </p> <p>c) 1 &amp; 3 only </p> <p>d) 1, 2 &amp; 3 All </p>
Explanation:	<p> <b>Statement 1 – Incorrect</b>  Ryotwari System gave land ownership rights directly to the individual cultivators (ryots), not to Zamindars.  Introduced by <b>Thomas Munro</b> in Madras and Bombay Presidencies.</p> <p> <b>Statement 2 – Correct</b>  In the Mahalwari System, the village or mahal (estate) was treated as a unit, and the village community collectively was recognized as the landowner.  Introduced in parts of <b>North-Western Provinces, Punjab, and Awadh.</b></p> <p> <b>Statement 3 – Incorrect</b>  Land revenue remained a major source of income for the colonial government even in the later half of the 19th century, especially in agrarian regions.</p>





Q. 29	<p>Consider the following statements and answer which is/are correct?</p> <ol style="list-style-type: none"> <li>1. Sasthamkotta Lake is the largest freshwater lake in Tamil Nadu and is designated as a Ramsar site.</li> <li>2. Kolleru Lake lies between the Krishna and Godavari deltas and serves as a natural flood-balancing reservoir.</li> </ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p> <b>Statement 1 – Incorrect</b></p> <ul style="list-style-type: none"> <li>• <b>Sasthamkotta Lake</b> is the <b>largest freshwater lake in Kerala</b>, not Tamil Nadu.</li> <li>• It is located in <b>Kollam district</b> and was designated a <b>Ramsar site in 2002</b>.</li> <li>• Tamil Nadu's prominent lakes include <b>Chembarambakkam</b> and <b>Veeranam</b>, but Sasthamkotta is not among them.</li> </ul> <p> <b>Statement 2 – Correct</b></p> <ul style="list-style-type: none"> <li>• <b>Kolleru Lake</b> is located in <b>Andhra Pradesh</b>, between the <b>Krishna and Godavari deltas</b>.</li> <li>• It acts as a <b>natural flood-balancing reservoir</b>, especially during monsoons.</li> <li>• It is also a <b>Ramsar wetland</b> and a <b>wildlife sanctuary</b>, supporting migratory birds and aquaculture.</li> </ul>






<b>Q. 30</b>	<p>Consider the following statements about Khan Abdul Ghaffar Khan, and answer which is/are correct?</p> <ol style="list-style-type: none"><li>1. He was also called 'Frontier Gandhi' and 'Badshah Khan'.</li><li>2. He organized a volunteer's brigade (Khudai Khidmatgar) of small and middle ranking landlords.</li></ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
<b>Explanation:</b>	<p> <b>Statement 1 – Correct</b></p> <ul style="list-style-type: none"><li>• Khan Abdul Ghaffar Khan was popularly known as '<b>Frontier Gandhi</b>' due to his non-violent ideology in the North-West Frontier Province.</li><li>• He was also called '<b>Badshah Khan</b>', a title of respect among Pashtuns.</li></ul> <p> <b>Statement 2 – Incorrect</b></p> <ul style="list-style-type: none"><li>• The <b>Khudai Khidmatgar</b> (Servants of God) movement was primarily composed of <b>peasants and common Pashtuns</b>, not landlords.</li><li>• It was a <b>non-violent resistance movement</b> aligned with the Indian National Congress.</li></ul>







Q. 31	<p><b>The Constitution (91st Amendment) Act, 2003, provides for which of the following provisions?</b></p> <ol style="list-style-type: none"> <li>1. Restricts size of the Council of Ministers at 15% of the total number of members of the Lok Sabha and the State Legislative Assembly.</li> <li>2. A member disqualified under the Tenth Schedule shall also be disqualified to be appointed as a Minister.</li> </ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p><b>Statement 1 is Correct</b> </p> <p>Council of Ministers Size Restriction – 15% Rule</p> <ul style="list-style-type: none"> <li>• Introduced by the <b>91st Constitutional Amendment Act, 2003</b>.</li> <li>• Limits the size of the Council of Ministers to <b>15% of the total strength</b> of the Lok Sabha (Union) or State Legislative Assembly (States).</li> <li>• Aimed at curbing unnecessary expansion and promoting efficiency.</li> </ul> <p><b>Statement 2 is Correct</b> </p> <ul style="list-style-type: none"> <li>• The amendment added that <b>any member disqualified under the anti-defection law (Tenth Schedule)</b> is also <b>ineligible to be appointed as a Minister</b>.</li> <li>• This ensures that defection does not lead to political rewards like ministerial posts.</li> </ul>














Q. 32	<p>Consider the following statements and answer which is/are incorrect?</p> <ol style="list-style-type: none"><li>1. The photoelectric effect demonstrates that light behaves purely as a wave.</li><li>2. Electrons are emitted from a metal surface only when the incident light has a frequency above a certain threshold.</li><li>3. The kinetic energy of emitted electrons depends on the intensity of the incident light.</li></ol> <p>a) 2 only </p> <p>b) 1 &amp; 3 only </p> <p>c) 1 only </p> <p>d) 1 &amp; 2 only </p>
Explanation:	<p> <b>Statement 1 – Incorrect</b> The photoelectric effect demonstrates the <b>particle nature of light</b>, showing that <b>light behaves as photons (particles)</b>, not purely as a wave.</p> <p> <b>Statement 2 – Correct</b> Electrons are emitted from a metal surface <b>only when the frequency of the incident light is above a certain threshold frequency specific to that metal.</b></p> <p> <b>Statement 3 – Incorrect</b> The kinetic energy of the emitted electrons <b>depends on the frequency of the incident light</b>, not on its intensity. Increasing the intensity increases the number of emitted electrons but does not affect their kinetic energy.</p>







Q. 33	<p>Currently, India is not a member of which of the following regional groupings?</p> <p>1- ASEAN 2- QUAD 3- AUKUS 4- RCEP</p> <p>a) 1, 2 &amp; 3 only  b) 2, 3 &amp; 4 only  c) 1, 3 &amp; 4 only  d) 1, 2 &amp; 4 only </p>
Explanation:	<p><b>Explanation:</b></p> <p><b>ASEAN (Association of Southeast Asian Nations)</b></p> <ol style="list-style-type: none"> <li>1. India is <b>not a member</b>, but it has strong strategic and economic ties.</li> <li>2. India engages through ASEAN-led platforms like the East Asia Summit and ASEAN Regional Forum.</li> </ol> <p><b>QUAD (Quadrilateral Security Dialogue)</b></p> <ol style="list-style-type: none"> <li>3. India is <b>a member</b>, along with the US, Japan, and Australia.</li> <li>4. Focuses on Indo-Pacific cooperation, maritime security, and emerging technologies.</li> </ol> <p><b>AUKUS (Australia–United Kingdom–United States)</b></p> <ol style="list-style-type: none"> <li>5. India is <b>not a member</b>.</li> <li>6. A trilateral defense pact focused on nuclear-powered submarines and advanced military tech.</li> </ol> <p><b>RCEP (Regional Comprehensive Economic Partnership)</b></p> <ol style="list-style-type: none"> <li>7. India was part of negotiations but officially opted out in <b>November 2019</b>.</li> <li>8. Concerns included trade imbalances, especially with China, and protection of domestic industries.</li> <li>9. So, <b>India is currently not a member</b>.</li> </ol>








Q. 34	<p>Which committee is associated with the Doubling Farmers' Income in India?</p> <p>a) Usha Thorat Committee </p> <p>b) Nachiket Mor Committee </p> <p>c) Subhash Garg Committee </p> <p>d) Ashok Dalwai Committee </p>
Explanation:	<p><b>Ashok Dalwai Committee</b> –  <b>Correct</b></p> <p>Constituted in <b>2016</b> by the <b>Ministry of Agriculture &amp; Farmers Welfare</b>, this committee submitted a <b>14-volume report</b> in <b>2018</b> outlining strategies to double farmers' income by 2022.</p> <p><b>Usha Thorat Committee</b></p> <p>Purpose: Focused on developing <b>Offshore Rupee Markets</b> to internationalize the Indian currency.</p> <p><b>Nachiket Mor Committee</b></p> <p>Purpose: Recommended creation of <b>Differentiated Banks</b> like <b>Payments Banks</b> and <b>Small Finance Banks</b> for financial inclusion.</p> <p><b>Subhash Garg Committee</b></p> <p>Purpose: Formed to study <b>Virtual Currencies</b> and propose a framework for <b>Fintech Regulation</b>.</p>

<b>Q. 35</b>	<p>Consider the following statements and answer which is/are correct?</p> <p>1- The Swasthya Portal serves as a comprehensive database on tribal health and nutrition.</p> <p>2- The Swasthya Portal has been developed by the Ministry of Health and Family Welfare.</p> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
<b>Explanation:</b>	<p><b>Statement 1 –  Correct</b></p> <ul style="list-style-type: none"><li>• The <b>Swasthya Portal</b> is a <b>comprehensive database</b> that presents health and nutrition data, research briefs, and best practices related to the <b>tribal population of India</b></li></ul> <p><b>Statement 2 –  Incorrect</b></p> <ul style="list-style-type: none"><li>• The portal was developed by the <b>Ministry of Tribal Affairs</b>, not the Ministry of Health and Family Welfare.</li></ul>







<b>Q. 36</b>	<p>Consider the following statements and answer which is/are correct?</p> <ol style="list-style-type: none"><li>1. Viruses are inert outside the host cell.</li><li>2. Viruses are able to generate energy.</li><li>3. The main purpose of a virus is to deliver its genome into the host cell to allow its expression by the host cell.</li></ol> <p>a) 1 &amp; 2 only </p> <p>b) 2 &amp; 3 only </p> <p>c) 1 &amp; 3 only </p> <p>d) 1, 2 &amp; 3 All </p>
<b>Explanation:</b>	<p><b>Statement 1 –  Correct</b></p> <ul style="list-style-type: none"><li>• Viruses are <b>inert outside the host cell</b> because they lack cellular machinery. They cannot reproduce or metabolize until they infect a host.</li></ul> <p><b>Statement 2 –  Incorrect</b></p> <ul style="list-style-type: none"><li>• Viruses <b>do not generate energy</b>. They are <b>acellular</b> and rely entirely on the host cell for replication and metabolic functions.</li></ul> <p><b>Statement 3 –  Correct</b></p> <ul style="list-style-type: none"><li>• The <b>main function of a virus</b> is to <b>inject its genetic material</b> into the host cell, hijacking the host's machinery to produce viral components.</li></ul>







<b>Q. 37</b>	<p><b>Identify the incorrectly matched pair:</b></p> <ol style="list-style-type: none"><li><b>1. Aditi Ashok – Golf</b></li><li><b>2. Divyakriti Singh – Equestrian</b></li><li><b>3. Divya Deshmukh – Chess</b></li><li><b>4. Vantika Agrawal – Table Tennis</b></li></ol> <p>a) Aditi Ashok – Golf </p> <p>b) Divyakriti Singh – Equestrian </p> <p>c) Divya Deshmukh – Chess </p> <p>d) Vantika Agrawal – Table Tennis </p>
<b>Explanation:</b>	<p><b>Aditi Ashok</b> is a professional golfer who competes on the LPGA and Ladies European Tour.</p> <p><b>Divyakriti Singh</b> is an award-winning Indian equestrian, known for her gold medal in dressage at the 2022 Asian Games.</p> <p><b>Divya Deshmukh</b> is a chess Grandmaster and winner of the 2025 FIDE Women's World Cup.</p> <p><b>Vantika Agrawal</b>, however, is <b>also a chess player</b>, not a table tennis athlete. She holds the titles of Woman Grandmaster and International Master.</p>








<b>Q. 38</b>	<p>Which of the following statements is/are correct regarding the scattering of sunlight?</p> <ol style="list-style-type: none"><li>1. The longer the radiation travels through atmosphere, the lesser is the scattering.</li><li>2. Blueish colour of the sky and reddish colour of the Sun at sunrise and sunset is because of the scattering.</li></ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
<b>Explanation:</b>	<p><b>Statement 1 – Incorrect</b> </p> <p>The longer radiation travels through the atmosphere, the <b>greater</b> the scattering, especially for shorter wavelengths like blue. This is why the sky appears blue and the sun appears red at sunrise/sunset.</p> <p><b>Statement 2 – Correct</b> </p> <p>The <b>blue colour of the sky</b> and <b>red colour of the sun</b> during sunrise/sunset are classic effects of <b>Rayleigh scattering</b>, where shorter wavelengths scatter more and longer wavelengths dominate when the sun is low.</p>







<p><b>Q. 39</b></p>	<p><b>With respect to mitochondria, consider the following statements:</b></p> <ol style="list-style-type: none"> <li><b>1. The outer membrane of mitochondria is deeply folded, while the inner membrane is porous.</b></li> <li><b>2. They release adenosine triphosphate molecules for chemical activities needed for life.</b></li> <li><b>3. They have their own DNA and ribosomes.</b></li> </ol> <p><b>Which of the statements given above are correct?</b></p> <p>a) 1 &amp; 2 only </p> <p>b) 2 &amp; 3 only </p> <p>c) 1 &amp; 3 only </p> <p>d) 1, 2 &amp; 3 All </p>
<p><b>Explanation:</b></p>	<ul style="list-style-type: none"> <li><b>Statement 1 – Incorrect:</b> </li> </ul> <p>It is the <b>inner membrane</b> of mitochondria that is deeply folded into structures called <b>cristae</b>, not the outer membrane. The <b>outer membrane</b> is smooth and selectively permeable.</p> <ul style="list-style-type: none"> <li><b>Statement 2 – Correct:</b> </li> </ul> <p>Mitochondria release <b>ATP (adenosine triphosphate)</b>, which powers essential cellular functions.</p> <ul style="list-style-type: none"> <li><b>Statement 3 – Correct:</b> </li> </ul> <p>Mitochondria have their <b>own DNA and ribosomes</b>, allowing them to produce some of their own proteins independently.</p>










Q. 40	<p>Consider the following statements and answer which is/are correct?</p> <p>1- Electronegativity generally decreases from left to right across a period in the periodic table.</p> <p>2- Electronegativity generally increases from top to bottom in a group.</p> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p> <b>Statement 1 – Incorrect</b></p> <p>As we move from left to right across a period, atomic size decreases and nuclear charge increases, so atoms attract bonding electrons more strongly. Hence, <b>electronegativity increases</b>, not decreases.</p> <p> <b>Statement 2 – Incorrect</b></p> <p>Down a group, atomic radius increases and outer electrons are farther from the nucleus, so the ability to attract bonding electrons <b>decreases</b>.</p>







Q. 41	<p>Consider the following statements and answer which is/are correct?</p> <ol style="list-style-type: none"><li>1. Sacchidananda Sinha was appointed as the constitutional advisor to the Constituent Assembly.</li><li>2. Elephant was adopted as the symbol of the Constituent Assembly.</li></ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p> <b>Statement 1 – Incorrect</b></p> <ul style="list-style-type: none"><li>• <b>Sacchidananda Sinha</b> was <b>not</b> the constitutional advisor.</li><li>• He was appointed as the <b>temporary President</b> of the Constituent Assembly on <b>9 December 1946</b>, due to being the eldest member.</li><li>• The <b>constitutional advisor</b> was <b>Sir B.N. Rau</b>, who played a key role in drafting the framework of the Constitution</li></ul> <p> <b>Statement 2 – Correct</b></p> <ul style="list-style-type: none"><li>• The <b>elephant</b> was officially adopted as the <b>symbol (seal)</b> of the Constituent Assembly.</li><li>• It represented <b>wisdom, strength, unity, and cultural heritage</b>, aligning with the solemn task of constitution-making.</li></ul>

Q. 42	<p>Consider the following statements regarding the Padma Awards 2025:</p> <ol style="list-style-type: none"><li>1. Justice (Retd.) Jagdish Singh Khehar was honored with the Padma Vibhushan for his contribution to Public Affairs.</li><li>2. Renowned folk singer Sharda Sinha received the Padma Bhushan in 2025.</li><li>3. Dr. Duvvur Nageshwar Reddy was awarded the Padma Vibhushan for Medicine.</li></ol> <p>Which of the above statements is/are correct?</p> <p>a) 1 &amp; 2 only </p> <p>b) 2 &amp; 3 only </p> <p>c) 1 &amp; 3 only </p> <p>d) 1, 2 &amp; 3 All </p>
Explanation:	<p> <b>Statement 1 – Correct</b> Awarded the <b>Padma Vibhushan</b> for <b>Public Affairs</b>.</p> <p> <b>Statement 2 – Incorrect</b> She received the <b>Padma Vibhushan (Posthumous)</b> for <b>Art</b>, not the Padma Bhushan.</p> <p> <b>Statement 3 – Correct</b> Conferred the <b>Padma Vibhushan</b> for <b>Medicine</b>.</p>







<b>Q. 43</b>	<p>Consider the following statements and answer which is/are correct?</p> <p>1- Nati is a traditional folk dance of Himachal Pradesh, often performed during festivals and has been recognized by the Guinness Book of World Records as the largest folk dance in the world.</p> <p>2- Chholiya is a sword dance from Jammu &amp; Kashmir, performed by men during wedding processions, symbolizing martial traditions and community protection.</p> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
<b>Explanation:</b>	<p> <b>Statement 1 – Correct</b></p> <p>Nati is a vibrant folk dance of Himachal Pradesh, especially popular in Kullu, Mandi, and Kinnaur. In <b>October 2015, 9,892 dancers</b> performed Nati at the <b>Kullu Dussehra</b>, earning it a place in the <b>Guinness World Records</b> as the largest folk dance ever recorded.</p> <p> <b>Statement 2 – Incorrect</b></p> <p>Chholiya is <b>not from Jammu &amp; Kashmir</b>, but from the <b>Kumaon region of Uttarakhand</b>. It is a <b>ceremonial sword dance</b> performed by <b>Rajput men</b> during <b>weddings</b>, rooted in <b>martial traditions</b> and believed to <b>ward off evil spirits</b>.</p>

Q. 44	<p>Consider the following statements and answer which is/are correct?</p> <ol style="list-style-type: none"> <li>1. Nagarhole National Park is located in Tamil Nadu.</li> <li>2. The park is bounded by the Kabini River.</li> <li>3. It is part of the Nilgiri Biosphere Reserve.</li> </ol> <p>a) 1 &amp; 2 only </p> <p>b) 2 &amp; 3 only </p> <p>c) 1 &amp; 3 only </p> <p>d) 1, 2 &amp; 3 All </p>
Explanation:	<p><b>Statement 1 – Incorrect</b> </p> <ul style="list-style-type: none"> <li>• Nagarhole National Park is located in <b>Karnataka</b>, not Tamil Nadu.</li> </ul> <p><b>Statement 2 – Correct</b> </p> <ul style="list-style-type: none"> <li>• The <b>Kabini River</b> forms a natural boundary of Nagarhole National Park.</li> </ul> <p><b>Statement 3 – Correct</b> </p> <ul style="list-style-type: none"> <li>• Nagarhole is part of the <b>Nilgiri Biosphere Reserve</b>, which spans Karnataka, Kerala, and Tamil Nadu.</li> </ul>







  







Q. 45	<p>Which of the following statements is/are correct?</p> <ol style="list-style-type: none"> <li>1. In a myopic eye, the image of a distant object is formed in front of the retina.</li> <li>2. Presbyopia is the gradual loss of your eyes' ability to focus on nearby objects.</li> </ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p><b>Statement 1 – Correct:</b> </p> <p>In <b>myopia</b> (near-sightedness), distant objects appear blurry because their images are formed <b>in front of the retina</b>.</p> <p><b>Statement 2 – Correct:</b> </p> <p><b>Presbyopia</b> is an age-related condition where the eye gradually loses the ability to focus on <b>nearby objects</b>, due to reduced lens flexibility.</p>

Q. 46	<p>With reference to Gati Shakti Master Plan, which among the following statements is incorrect?</p> <p>a) It brings multiple ministries and Departments on a single platform for integrated planning and implementation of Infrastructure projects. ❌</p> <p>b) The Ministry of Finance is the nodal Ministry for the Gati Shakti Master Plan. ✅</p> <p>c) The plan would monitor infrastructure projects implemented by both Centre and States. ❌</p> <p>d) The plan is expected to reduce logistics costs and boost exports from India. ❌</p>
Explanation:	<p>Option 1 is ✅ Correct Gati Shakti integrates multiple ministries and departments for coordinated infrastructure planning.</p> <p>Option 2 is ❌ Incorrect The <b>Ministry of Commerce and Industry</b>, specifically the <b>Department for Promotion of Industry and Internal Trade (DPIIT)</b>, is the <b>nodal ministry</b>, not the Ministry of Finance.</p> <p>Option 3 is ✅ Correct It monitors infrastructure projects of both <b>central and state governments</b>.</p> <p>Option 4 is ✅ Correct One of its key objectives is to reduce logistics costs and enhance export competitiveness.</p>
Q. 47	<p>Which of the following statements about cnidarians is correct?</p> <p>a) They exhibit bilateral symmetry. ❌</p> <p>b) They possess a pseudocoelom. ❌</p> <p>c) They have specialized stinging cells called cnidocytes. ✅</p> <p>d) They have a complete digestive system. ❌</p>
Explanation:	<ul style="list-style-type: none"> <li>Cnidarians (e.g., jellyfish, sea anemones) are known for <b>cnidocytes</b>, which are specialized cells containing stinging organelles called <b>nematocysts</b>.</li> <li>They exhibit <b>radial symmetry</b>, not bilateral.</li> <li>They are <b>acoelomates</b>, meaning they lack a body cavity.</li> <li>Their digestive system is <b>incomplete</b>—with a single opening serving as both mouth and anus.</li> </ul>

Q. 48	<p>Consider the following statements and answer which is/are correct?</p> <p>1- The Modified Interest Subvention Scheme has increased the Kisan Credit Card loan limit from ₹3 lakh to ₹5 lakh.</p> <p>2- The Prime Minister Dhan-Dhaanya Krishi Yojana aims to develop 100 agri-districts with high crop productivity and credit access.</p> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p> <b>Statement 1 is correct</b> KCC loan limit under the Modified Interest Subvention Scheme has been raised to ₹5 lakh from earlier ₹3 lakh.</p> <p><b>Statement 2:</b>  <b>Incorrect</b> The scheme targets <b>low productivity</b> districts with <b>moderate crop intensity</b> and <b>below-average credit parameters</b>.</p>





Q. 49	<p>Which of the following statements is/are correct about Constitutionalism?</p> <p>1. Constitutionalism in essence means the limited government.</p> <p>2. Constitutionalism is the antithesis of arbitrary authority.</p> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p> <b>Statement 1 is correct</b> – Constitutionalism refers to the idea that government powers must be <b>limited by law</b>, ensuring that rulers act within a defined framework and respect individual rights.</p> <p> <b>Statement 2 is correct</b> – It is indeed the <b>antithesis of arbitrary authority</b>, meaning it stands against unchecked, absolute authority. Constitutionalism demands <b>accountability, rule of law, and separation of powers</b>.</p>

Q. 50	<p>Consider the following statements and answer which is/are incorrect?</p> <ol style="list-style-type: none"><li>1. Akbar abolished the practice of forcibly converting the prisoners of war to Islam.</li><li>2. Mansabs were given to the Hindu Rulers on the basis of heredity.</li></ol> <p>a) 1 only </p> <p>b) 2 only </p> <p>c) Both 1 &amp; 2 </p> <p>d) Neither 1 &amp; 2 </p>
Explanation:	<p>Statement 1 is Correct </p> <p><b>Akbar abolished forced conversions of prisoners of war.</b></p> <ul style="list-style-type: none"><li>• In 1562, Akbar officially <b>ended the practice of forcibly converting prisoners of war to Islam</b>, as part of his liberal religious policy rooted in <b>Sulh-i-Kul (universal peace)</b></li></ul> <p>Statement 2 is Incorrect </p> <ul style="list-style-type: none"><li>• Akbar's <b>Mansabdari system</b> was based on <b>merit, loyalty, and administrative/military competence</b>, not heredity.</li><li>• Though <b>Rajput rulers</b> who accepted Mughal suzerainty were granted high mansabs, these were <b>not hereditary</b>.</li><li>• The emperor had full discretion in appointments, promotions, and removals.</li></ul>



Q. 51

A triangle with side lengths 25.9, 37 and 48.1 must be?

- a) Acute-angled 
- b) Obtuse-angled 
- c) Right-angled 
- d) None 

Explanation:

Express all sides as multiples of 37

$$\rightarrow 25.9 \div 37 = 0.7$$

$$\rightarrow 37 \div 37 = 1$$

$$\rightarrow 48.1 \div 37 = 1.3$$

So, ratio = 0.7 : 1 : 1.3  $\rightarrow$  Multiply by 10  $\rightarrow$  7 : 10 : 13Let  $a = 7$ ,  $b = 10$ ,  $c = 13$ Check if  $c^2 > a^2 + b^2$ 





$$\rightarrow a^2 + b^2 = 49 + 100 = 149$$

$$\rightarrow c^2 = 169$$


 $\rightarrow$  Since  $169 > 149 \rightarrow$  Triangle is obtuse





Q. 52

A dishonest dealer claims to sell his products at 24% loss on the cost price but uses 100 g weight instead of 200 g weight. His profit percentage is:

- a) 40% 
- b) 55% 
- c) 48% 
- d) 52% 


Explanation:

Dealer	Customer
100	76
<del>100</del>	<del>200</del>
100	152
 52% profit	

<b>Q. 53</b>	<p>What is the value of <math>\frac{\{84-(36 \div 6)+4\} \bmod 13 \div \{(7 \times 4)-(10 \times 2)\}}{(9 \times 3)-(7 \times 2)}</math> ?</p> <p>a) 1/26 </p> <p>b) 2/13 </p> <p>c) 4/17 </p> <p>d) 3/16 </p>
<b>Explanation:</b>	<p>Simplify inside the first bracket: <math>36 \div 6 = 6 \Rightarrow 84 - 6 + 4 = 82</math></p> <p>Modulus operation: <math>82 \bmod 13 = \text{remainder when } 82 \text{ is divided by } 13 = 4</math></p> <p>Second bracket: <math>(7 \times 4) - (10 \times 2) = 28 - 20 = 8</math></p> <p><math>\Rightarrow</math> First part becomes: <math>4 \div 8 = 4/8 = 1/2</math></p> <p>Third bracket: <math>(9 \times 3) - (7 \times 2) = 27 - 14 = 13</math></p> <p><math>\Rightarrow</math> Final expression: <math>(1/2) \div 13 = 1/2 \times 1/13 = 1/26</math></p> <p>Final Answer: 1/26</p>

Q. 54

If a triangle has two vertices  $(-5, 2)$  and  $(3, -4)$  and the nucleus (centroid) is the origin, then the third vertex is  $(x, y)$ . What is the value of  $(3x - 2y)$ ?




a) 0 b) 3 c) 5 d) 2 

Explanation:

**Use centroid formula**Centroid  $G = (x_1 + x_2 + x_3)/3, (y_1 + y_2 + y_3)/3$  $\Rightarrow (-5 + 3 + x)/3 = 0$  and  $(2 - 4 + y)/3 = 0$ **Solve x-coordinate:** $(-2 + x)/3 = 0 \Rightarrow -2 + x = 0 \Rightarrow x = 2$ **Solve y-coordinate:** $(-2 + y)/3 = 0 \Rightarrow -2 + y = 0 \Rightarrow y = 2$ So, third vertex is  $(2, 2)$ **Compute  $(3x - 2y)$ :** $3x - 2y = 3 \times 2 - 2 \times 2 = 6 - 4 = 2$ **Final Answer: 2**

Q. 55

An amount of money appreciates to Rs 9000 after 8 years and 12,000 after 12 years at a certain rate of Compound interest. Find the initial amount of money.

- a) ₹5250 
- b) ₹5062.5 
- c) ₹5645 
- d) ₹5826.5 

**Explanation:**

$$\text{After 8 yrs: } 9000 = P(1 + r)^8$$

$$\text{After 12 yrs: } 12000 = P(1 + r)^{12}$$

$$\frac{12000}{9000} = (1 + r)^4 \Rightarrow (1 + r)^4 = \frac{4}{3}$$


$$(1 + r)^8 = \left(\frac{4}{3}\right)^2 = \frac{16}{9}$$


$$P = \frac{9000}{16/9} = 9000 \times \frac{9}{16} = 5062.5$$


**Initial amount = Rs. 5062.50**


**Q. 56**

If  $121\cos^2A + 132\sin^2A = 124$  and  $184\cos^2B + 172\sin^2B = 175$ , then the value of  $\sec^2B \csc^2A = ?$

a)  $23/4$  

b)  $44/3$  

c)  $36/5$  

d)  $35/3$  

**Explanation:**

$$121\cos^2A + 132\sin^2A = 124$$

$$\text{Let } \cos^2A = x \rightarrow \sin^2A = 1 - x$$

$$\text{So: } 121x + 132(1 - x) = 124$$

$$\Rightarrow 121x + 132 - 132x = 124$$

$$\Rightarrow -11x = -8 \Rightarrow x = 8/11$$

$$\text{Then } \sin^2A = 3/11 \Rightarrow \csc^2A = 1/(3/11) = 11/3$$

Also:

$$184\cos^2B + 172\sin^2B = 175$$

$$\text{Let } \cos^2B = y \rightarrow \sin^2B = 1 - y$$

$$\text{So: } 184y + 172(1 - y) = 175$$





$$\Rightarrow 184y + 172 - 172y = 175$$

$$\Rightarrow 12y = 3 \Rightarrow y = 1/4 \text{ Then } \sec^2B = 1/(1/4) = 4$$

$$\text{Final answer: } \sec^2B \times \csc^2A = 4 \times (11/3) = \mathbf{44/3}$$

Q. 57

If 60 fewer had applied and 30 fewer were selected, the ratio of selected to unselected would have been 5:3. If originally the ratio of selected to unselected was 3:2, how many candidates had applied?

a) 325 b) 275 c) 250 d) 300 **Explanation:**

If 60 fewer applied and 30 fewer selected, then:

Selected =  $y - 30$

Unselected =  $x - y - 30$

Ratio = 5 : 3

So,

$$(y - 30) / (x - y - 30) = 5 / 3$$

$$\Rightarrow 3(y - 30) = 5(x - y - 30)$$

$$\Rightarrow 3y - 90 = 5x - 5y - 150$$

$$\Rightarrow 8y = 5x - 60 \dots(i)$$

Also given:

$$y / (x - y) = 3 / 2$$

$$\Rightarrow 2y = 3x - 3y$$

$$\Rightarrow 5y = 3x \dots(ii)$$

Now solve (i) and (ii):

$$\text{From (ii): } y = 3x / 5$$

Put in (i):

$$8(3x / 5) = 5x - 60$$

$$\Rightarrow 24x / 5 = 5x - 60$$


$$\Rightarrow 24x = 25x - 300$$


$$\Rightarrow x = 300$$


Final Answer: 300 candidates applied


Q. 58

In a sweet, one-third is sugar. If the price of sugar now is  $\frac{7}{6}$  of the previous price, what is the effective percentage increase in the cost of the sweet?

a)  $100/3\%$  

b)  $100/18\%$  

c)  $100/9\%$  

d)  $200/9\%$  

Explanation:

$$\begin{aligned}
 \text{Let original price} &= 1 \\
 \text{Cost of sugar} &= \frac{1}{3} \\
 \text{Cost of other} &= \frac{2}{3} \\
 \text{New price of sugar} &= \frac{7}{6} \times \frac{1}{3} = \frac{7}{18} \\
 \text{New cost of sweet} &= \frac{7}{18} + \frac{2}{3} = \frac{19}{18} \\
 \text{Effective \% increase} &= \frac{\frac{19}{18} - 1}{1} \times 100 \\
 &= \frac{100}{18} \%
 \end{aligned}$$

Q. 59

A scalene triangle ABC has two sides whose measures are 3.8 cm and 6 cm, respectively. Which of the following CANNOT be the measure (in cm) of its third side?

a) 2.2 ✓

b) 3.0 ✗

c) 2.4 ✗

d) 2.7 ✗

Explanation:

$$6 - 3.8 < 3^{\text{rd}} \text{ side} < 6 + 3.8$$
$$2.2 < 3^{\text{rd}} \text{ side} < 9.8$$

2.2 cannot be its third side.

Q. 60

The area of a circle is  $256\pi$  square cm. The length of its longest chord (in cm) is:

a) 16 ✗

b) 32 ✓

c) 34 ✗

d) 36 ✗

Explanation:

$$\text{Area of Circle} = 256\pi$$
$$\pi r^2 = 256\pi \Rightarrow r = 16 \text{ cm}$$
$$\text{Longest chord} = \text{diameter} = 2 \times 16 = 32 \text{ cm}$$



Q. 61

To do a certain work, Tanmay and Vaibhav work on alternate days, with Vaibhav starting the work on the first day. Tanmay can finish the work alone in 48 days. If the work gets completed in exactly 12 days, then Vaibhav alone can finish 7 times the same work in \_\_\_\_ days.

a) 36 days b) 48 days c) 72 days d) 60 days **Explanation:**

Let total work = W units (we'll use  $W = 48$  units for convenience)

Tanmay alone finishes work in 48 days  $\rightarrow$  Efficiency = 1 unit/day

So, 6 days of Tanmay's work =  $6 \times 1 = 6$  units

Let Vaibhav's efficiency = x units/day

Given:

6 Vaibhav + 6 Tanmay = 48 units

$$\Rightarrow 6x + 6(1) = 48$$

$$\Rightarrow 6x + 6 = 48$$

$$\Rightarrow 6x = 42$$

$$\Rightarrow x = 7 \text{ units/day}$$

So, Vaibhav's efficiency = 7 units/day

Now, time taken by Vaibhav to finish 7 times the work:





$$\text{Total work} = 7 \times 48 = 336 \text{ units}$$

$$\text{Time} = \text{Work} / \text{Efficiency} = 336 / 7 = 48 \text{ days}$$

Final Answer: 48 days

Q. 62

A container of capacity 70 litres is filled with the mixture of milk and water. If 60% of milk and 25% of water is taken out from the mixture, then overall 45% percent of the container will be vacant. Find the initial quantity of water and milk in the container.

- a) 30 litres and 40 litres 
- b) 60 litres and 80 litres 
- c) 15 litres and 20 litres 
- d) 45 litres and 60 litres 

Explanation:

Milk	Water
60%	25%
\	/
\	/
45% (mean)	
/	\
/	\
(45 - 25)	(60 - 45)
= 20	15

So, ratio of **milk : water** = 20 : 15 = 4 : 3





Now total mixture = 70 litres

Divide in 4 : 3 → Total parts = 7

→ Milk =  $(4/7) \times 70 = 40$  litres

→ Water =  $(3/7) \times 70 = 30$  litres



**Answer:** 30 litres water, 40 litres milk

<b>Q. 63</b>	<p>The radii of two circular faces of the frustum of a cone of height 28 cm are 4 cm and 5 cm respectively. What is the approximate volume of the frustum of the cone in cubic cm?</p> <p>a) <math>1542.9 \text{ cm}^2</math> </p> <p>b) <math>1788.6 \text{ cm}^2</math> </p> <p>c) <math>2324.7 \text{ cm}^2</math> </p> <p>d) <math>1238.3 \text{ cm}^2</math> </p>
<b>Explanation:</b>	<p>Volume of frustum = <math>(1/3) \times \pi \times h \times (r_1^2 + r_2^2 + r_1 \cdot r_2)</math> <math>\Rightarrow (1/3) \times \pi \times 28 \times (4^2 + 5^2 + 4 \cdot 5)</math> <math>\Rightarrow (1/3) \times \pi \times 28 \times (16 + 25 + 20)</math> <math>\Rightarrow (1/3) \times \pi \times 28 \times 61 = (1708 \pi) / 3 \approx 1788.57 \text{ cm}^3</math></p>

Q. 64

What is the mean deviation about median of the following data?

4,7,9,6,12,15,18,10,14,13,17

a) 3.73 b) 2.67 c) 4.56 d) 1.28 

Explanation:

**Arrange data in ascending order:**

4, 6, 7, 9, 10, 12, 13, 14, 15, 17, 18

**Find the median:**

Total values = 11 (odd)

Median = 6th value = 12

**Find absolute deviations from median:**

$$|4 - 12| = 8$$

$$|6 - 12| = 6$$

$$|7 - 12| = 5$$

$$|9 - 12| = 3$$

$$|10 - 12| = 2$$

$$|12 - 12| = 0$$

$$|13 - 12| = 1$$

$$|14 - 12| = 2$$

$$|15 - 12| = 3$$

$$|17 - 12| = 5$$

$$|18 - 12| = 6$$

**Sum of absolute deviations:**

$$8 + 6 + 5 + 3 + 2 + 0 + 1 + 2 + 3 + 5 + 6 = 41$$

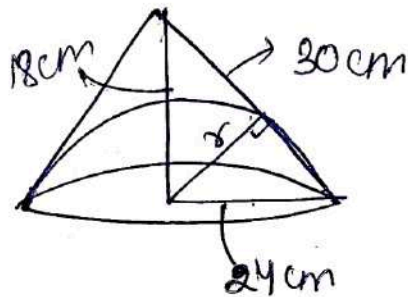
**Mean deviation about median:** = Total deviation / Number of values =  $41 / 11 \approx 3.73$ **Final Answer:** Mean deviation  $\approx 3.73$

Q. 65

Find the radius of a hemisphere with maximum volume inside a cone of height 18 cm and diameter 48 cm?

- a) 12.6 cm ☒
- b) 10.8 cm ☒
- c) 14.4 cm ☒
- d) 16.2 cm ☒

Explanation:



$$l = \sqrt{(18)^2 + (24)^2}$$

$$l = 30 \text{ cm}$$

$$\frac{1}{2} \times 18 \times 24 = \frac{1}{2} \times 30 \times r$$

$$\Rightarrow r = \frac{18 \times 24}{30}$$

$$\Rightarrow r = 14.4 \text{ cm}$$

Q. 66

A multiple choice test contains 6 questions with 5 answer choices each. Only one answer choice to each question represents a correct answer. Find the probability that a student will answer exactly 3 questions correctly if he makes random guesses on all 6 questions.

a)  $128/3125$  ✗b)  $256/3125$  ✓c)  $1024/3125$  ✗d)  $512/3125$  ✗

Explanation:

Probability that the answer  
is correct =  $\frac{1}{5}$





Probability that the answer  
is incorrect =  $\frac{4}{5}$

$${}^6C_3 \left(\frac{1}{5}\right)^3 \left(\frac{4}{5}\right)^3 = 20 \times \frac{1}{125} \times \frac{64}{125}$$

$$\Rightarrow \frac{256}{3125} \text{ (Ans.)}$$

Q. 67

If the length and breadth of a cuboid are increased by 6% and 8%, respectively, then the percentage increase in its volume (correct to two decimal places) is:

- a) 12.96% 
- b) 13.96% 
- c) 14.48% 
- d) 11.48% 





Explanation:

	Initial	final	
L	100	106	
B	100	108	
H	1	1	No change
<u>Volume</u>	<u>10000</u>	<u>11,448</u>	

$\% \text{ increase} = \frac{1448}{10000} \times 100 = 14.48\%$

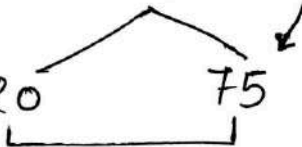
Q. 68

In an election, 95% of the total voters cast their votes. In this election, there were only two candidates A and B. The winner A, by obtaining 75% of the total votes, defeated his contestant B by 5500 votes. Find the total number of voters in the election.





- a) 12,000 
- b) 13,000 
- c) 11,000 
- d) 10,000 





Explanation:

Let Total votes = 100  
Total votes cast = 95  
 $95 - 75 = 20$   
55 units = 5500  
100 units = 10000  
↳ Total No. of votes





<b>Q. 69</b>	<p>A, B, and C start a business together. A invests ₹20,000, B invests ₹30,000, and C invests ₹25,000. A is an active partner and gets 20% of the total profit for managing the business. The remaining profit is divided among all partners in the ratio of their investments. If the total annual profit is ₹39,600, find the share of A.</p> <p>a) ₹13,276 </p> <p>b) ₹15,242 </p> <p>c) ₹16,368 </p> <p>d) ₹17,424 </p>
<b>Explanation:</b>	<p>Total profit = ₹39,600 A gets 20% for managing = 20% of ₹39,600 = ₹7,920</p> <p>Remaining profit = ₹39,600 – ₹7,920 = ₹31,680 Investment ratio: A : B : C = 20000 : 30000 : 25000 = 4 : 6 : 5 Total parts = 4 + 6 + 5 = 15 Each partner's share from remaining profit:</p> <p>A's share = <math>(4/15) \times ₹31,680 = ₹8,448</math> B's share = <math>(6/15) \times ₹31,680 = ₹12,672</math> C's share = <math>(5/15) \times ₹31,680 = ₹10,560</math></p> <p>Now add A's managing share: Final shares: A = ₹7,920 + ₹8,448 = ₹16,368</p>

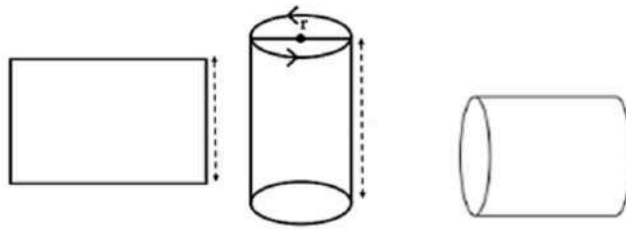
<b>Q. 70</b>	<p>25 students of a college went to a hotel. 24 of them spent Rs.225 each on their meal and the 25th student spent Rs.48 more than the average of all the 25. Find the total money spent by them.</p> <p>a) ₹5,475 </p> <p>b) ₹5,550 </p> <p>c) ₹5,675 </p> <p>d) ₹5,825 </p>
<b>Explanation:</b>	<p>24 students spent ₹225 each <math>\Rightarrow \text{Total} = 24 \times 225 = ₹5400</math></p> <p>Let average spending of all 25 students be ₹x Then, 25th student spent ₹(x + 48)</p> <p>Total spending = ₹5400 + (x + 48) Also, average = total / 25 <math>\Rightarrow x = (5400 + x + 48) / 25</math></p> <p>Multiply both sides by 25: <math>25x = 5400 + x + 48</math> <math>\Rightarrow 25x - x = 5448</math> <math>\Rightarrow 24x = 5448 \Rightarrow x = 227</math></p> <p>So, total = <math>25 \times 227 = ₹5675</math></p> <p><b>Final Answer: ₹5675</b></p>

Q. 71

Two rectangular sheets of paper, each  $60 \text{ cm} \times 36 \text{ cm}$ , are made into two right circular cylinders, one by rolling the paper along its length and the other along the breadth. The ratio of the volumes of the two cylinders, thus formed, is:

a)  $7 : 4$  ✗b)  $5 : 3$  ✓c)  $8 : 3$  ✗d)  $5 : 6$  ✗

Explanation:

Cylinder<sub>1</sub>

$$R = 60$$

$$h = 36$$

Volume,

$$\pi R^2 h$$

$$60 \times 60 \times 36$$

$$5$$

Cylinder<sub>2</sub>

$$r = 36$$

$$H = 60$$

: Volume<sub>2</sub>





$$: \pi r^2 H$$

$$: 36 \times 36 \times 60$$

$$: 3$$

Q. 72

Two trains, P and Q, are running on parallel tracks in opposite directions with lengths of 110 m and 140 m, respectively. Train P is running at a speed of 70 km/h and took 5 seconds to cross train Q. The speed of train Q is:

- a) 110 km/h 
- b) 120 km/h 
- c) 90 km/h 
- d) 100 km/h 

Explanation:

$$\text{Time} = \frac{\text{Length of both Trains}}{\text{Relative speed}}$$

$$5 = \frac{(110 + 140) \times 18}{(70 + x) \times 5}$$

$$25(70 + x) = 250 \times 18$$


$$1750 + 25x = 4500$$


$$25x = 2750 \Rightarrow x = 110 \text{ km/h}$$


Speed of train = 110 km/h

Q. 73

If  $2a + 2b + c = 0$ , then find the value of  $\frac{4a^2 + 4b^2 + 4c^2}{5c^2 - 8ab}$ .

a)  $2\sqrt{3}$  

b)  $-2\sqrt{3}$  

c) 1 

d) -1 

Explanation:


$$2a + 2b + c = 0, \text{ Put } a = 0$$
$$\Rightarrow c = -2b$$

$$\frac{4a^2 + 4b^2 + 4c^2}{5c^2 - 8ab} = \frac{4b^2 + 4(-2b)^2}{5c^2 - 8(0)b}$$


$$= \frac{4b^2 + 16b^2}{5(-2b)^2} = \frac{20b^2}{20b^2} = 1$$


Q. 74

If  $a = (\sqrt{2} - 1)^{\frac{1}{3}}$ , then the value of  $\left(a - \frac{1}{a}\right)^3 + 3\left(a - \frac{1}{a}\right)$  is:

a)  $\sqrt{2}$  

b) 2 

c) -2 

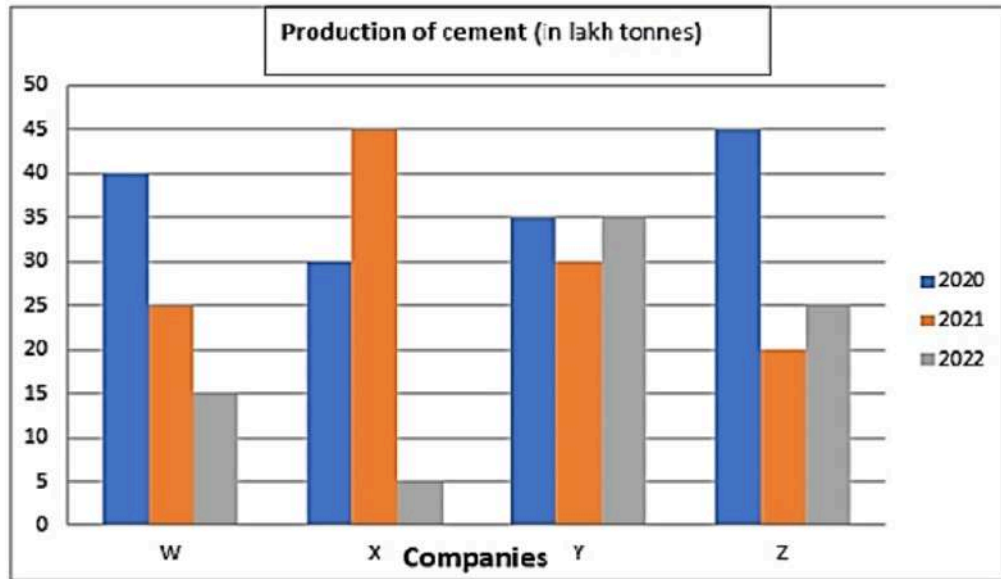
d)  $-\sqrt{2}$  

Explanation:

$$\begin{aligned} a &= (\sqrt{2} - 1)^{\frac{1}{3}} \Rightarrow a^3 = \sqrt{2} - 1 \\ \Rightarrow \frac{1}{a^3} &= \sqrt{2} + 1 \\ \text{Now, } \left(a - \frac{1}{a}\right)^3 + 3\left(a - \frac{1}{a}\right) &= a^3 - \frac{1}{a^3} \\ &= \sqrt{2} - 1 - (\sqrt{2} + 1) = -2 \end{aligned}$$

Q. 75

The following bar graph shows the production of cement (in lakh tonnes) of four companies – W, X, Y, and Z over the years.



The production of cement by company X in 2020 and production of cement by company Z in 2022 together is what percentage of the production by company W in 2021?

- a) 180 ✗
- b) 250 ✗
- c) 275 ✗
- d) 220 ✓

Explanation:

$$\text{Percentage} = \frac{2020_X + 2022_Z}{2021_W} \times 100$$

$$= \frac{30 + 25}{25} \times 100 = 220$$

Q. 76

Read the passage carefully and answer the following questions:

Japan, located on the Pacific "Ring of Fire," is highly prone to earthquakes due to its position on several tectonic plate boundaries. One of the most devastating earthquakes in recent history struck the northeastern coast of Japan on March 11, 2011. This earthquake, with a magnitude of 9.0, triggered a powerful tsunami that caused widespread destruction along the shorelines.

The earthquake caused massive damage to buildings, roads, and bridges, disrupting transportation and communication networks throughout the affected areas. The tsunami swept away entire towns, resulting in thousands of casualties and leaving many people homeless. In addition to the physical destruction, the disaster led to a critical nuclear crisis at the Fukushima Daiichi Nuclear Power Plant, where meltdowns and radiation leaks sparked fears both locally and globally.

Despite the devastation, the Japanese government and local communities responded with rapid relief efforts and efficient disaster management techniques. Emergency teams conducted rescues, provided medical care, and set up temporary shelters for displaced residents. Japan's stringent building codes and prior disaster preparedness helped minimize the potential loss of life.

The earthquake also prompted significant improvements in Japan's disaster readiness programs, including enhanced early warning systems and education campaigns. Engineers developed more advanced construction methods to make buildings more earthquake-resistant. Public awareness about disaster preparedness increased significantly as citizens participated in regular drills.

Japan's experience with this calamity serves as a powerful reminder of the importance of preparedness, resilience, and rapid response in minimizing the impact of natural disasters. The country continues to lead the world in earthquake research and disaster mitigation strategies, turning tragedy into lessons for global communities vulnerable to seismic hazards.

Choose the word that is the closest synonym of the word "devastation" as used in the passage:

- a) Celebration 
- b) Destruction 
- c) Improvement 
- d) Protection 

Explanation:

**Explanation:**

In the passage, "**devastation**" refers to the severe damage and destruction caused by the earthquake and tsunami in Japan. The word "destruction" closely matches this meaning, while the other options are unrelated or opposite in meaning.



Q. 77

Read the passage carefully and answer the following questions:

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Identify the type of phrase in the following excerpt from the passage:

"due to its position on several tectonic plate boundaries"

- a) Gerund phrase 
- b) Infinitive phrase 
- c) Prepositional phrase 
- d) Participial phrase 

Explanation:

Explanation:

- The phrase begins with the preposition "due to" and indicates a relationship or cause, making it a **prepositional phrase**.
- It is not a gerund, infinitive, or participial phrase, which have different structures and functions.

Q. 78

Read the passage carefully and answer the following questions:

Japan, located on the Pacific "Ring of Fire," is highly prone to earthquakes due to its position on several tectonic plate boundaries. One of the most devastating earthquakes in recent history struck the northeastern coast of Japan on March 11, 2011. This earthquake, with a magnitude of 9.0, triggered a powerful tsunami that caused widespread destruction along the shorelines.

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Japan's experience with this calamity serves as a powerful reminder of the importance of preparedness, resilience, and rapid response in minimizing the impact of natural disasters. The country continues to lead the world in earthquake research and disaster mitigation strategies, turning tragedy into lessons for global communities vulnerable to seismic hazards.

Choose the word that is the closest antonym of the word "advances" as used in the passage:

a) Progress



b) Improvements



c) Setbacks



d) Developments



**Explanation:****Explanation:**

- In the passage, **“advances”** refers to progress or improvements made, especially in disaster preparedness and research.
- The word **“setbacks”** is the opposite, meaning obstacles or delays that hinder progress.
- Options a), b), and d) are synonyms or related to positive movement forward.

Q. 79

Read the passage carefully and answer the following questions:

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Japan's experience with this calamity serves as a powerful reminder of the importance of preparedness, resilience, and rapid response in minimizing the impact of natural disasters. The country continues to lead the world in earthquake research and disaster mitigation strategies, turning tragedy into lessons for global communities vulnerable to seismic hazards.

Identify the figure of speech used in the phrase "Japan, located on the Pacific 'Ring of Fire'" from the passage:

a) Metaphor



b) Simile



c) Personification



d) Hyperbole



Explanation:

Explanation:

- The phrase "**Ring of Fire**" metaphorically describes the region around the Pacific Ocean known for frequent earthquakes and volcanic activity.
- It is a metaphor because it directly compares the tectonic activity zone to a "ring of fire" without using "like" or "as."
- It is not a simile, personification, or hyperbole.

Q. 80

Read the passage carefully and answer the following questions:

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Convert the following sentence from direct speech to indirect speech:

The government official said, "Japan's stringent building codes have helped minimize loss of life during earthquakes."

a) The government official said that Japan's stringent building codes had helped minimize loss of life during earthquakes. 

b) The government official said Japan's stringent building codes help minimize loss of life during earthquakes. 

c) The government official said that Japan's stringent building codes help minimize loss of life during earthquakes. 

d) The government official said Japan's stringent building codes had helped minimizing loss of life during earthquakes. 

<b>Explanation:</b>	<p>a) The government official said that Japan’s stringent building codes had helped minimize loss of life during earthquakes.</p> <p><b>Explanation:</b></p> <ul style="list-style-type: none"><li>• In indirect speech, the present perfect tense (have helped) changes to past perfect (had helped).</li><li>• The sentence uses “that” to introduce the indirect statement.</li><li>• Other options have incorrect tense changes or grammar errors.</li></ul>
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Q. 81

Read the passage carefully and answer the following questions:

Japan, located on the Pacific "Ring of Fire," is highly prone to earthquakes due to its position on several tectonic plate boundaries. One of the most devastating earthquakes in recent history struck the northeastern coast of Japan on March 11, 2011. This earthquake, with a magnitude of 9.0, triggered a powerful tsunami that caused widespread destruction along the shorelines.

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Despite the devastation, the Japanese government and local communities responded with rapid relief efforts and efficient disaster management techniques. Emergency teams conducted rescues, provided medical care, and set up temporary shelters for displaced residents. Japan's stringent building codes and prior disaster preparedness helped minimize the potential loss of life.

The earthquake also prompted significant improvements in Japan's disaster readiness programs, including enhanced early warning systems and education campaigns. Engineers developed more advanced construction methods to make buildings more earthquake-resistant. Public awareness about disaster preparedness increased significantly as citizens participated in regular drills.

Japan's experience with this calamity serves as a powerful reminder of the importance of preparedness, resilience, and rapid response in minimizing the impact of natural disasters. The country continues to lead the world in earthquake research and disaster mitigation strategies, turning tragedy into lessons for global communities vulnerable to seismic hazards.

Which of the following would be the most appropriate title for the passage?

a) Japan's Economic Growth and Development 

b) The 2011 Earthquake and Tsunami in Japan: Cause, Impact, and Response 





c) Advances in Japanese Technology 

d) Tourism Attractions in Japan 





Explanation:

Explanation:





- The passage focuses on the 2011 earthquake and tsunami in Japan, describing their causes, impacts, and the response efforts.
- Other options do not reflect the content of the passage accurately.





Q. 82	<p>Change the following sentence into indirect speech: The Prime Minister said, "Our government will introduce new measures to boost the economy next month."</p> <p>a) The Prime Minister said that their government would introduce new measures to boost the economy next month. </p> <p>b) The Prime Minister said that their government will introduce new measures to boost the economy the following month. </p> <p>c) The Prime Minister said that their government would introduce new measures to boost the economy the following month. </p> <p>d) The Prime Minister said that the government will introduced new measures to boost the economy the coming month. </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• "Will" changes to "would" in indirect speech.</li> <li>• "Next month" changes to "the following month."</li> <li>• The correct subject and tense forms are maintained only in option (c).</li> </ul>





Q. 83	<p>Choose the word that is the most appropriate antonym of "cloistered":</p> <p>a) Secluded </p> <p>b) Isolated </p> <p>c) Open </p> <p>d) Sheltered </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• <b>Cloistered</b> means kept away from the outside world; sheltered or secluded.</li> <li>• The word "<b>open</b>" is the exact opposite, suggesting being accessible or exposed to the outside world.</li> <li>• Other options (a), (b), and (d) are near-synonyms.</li> </ul>







Q. 84	<p>Convert the following sentence from passive to active voice: The detailed plan for the revival of the ancient monument, along with all necessary restorations and security arrangements, has been prepared by the expert committee after months of research and consultation with heritage conservationists.</p> <p>The expert committee has prepared the detailed plan for the revival of the ancient monument, along with all necessary restorations and security arrangements, after months of research and consultation with heritage conservationists. </p> <p>Months of research and consultation were done by the expert committee for restoring the ancient monument and making security arrangements. </p> <p>After months of research, the ancient monument was revived by the expert committee who prepared the detailed plan and arranged security. </p> <p>The detailed plan for the revival of the ancient monument was prepared by months of research along with the committee and heritage conservationists. </p>
Explanation:	<p><b>Step-by-Step Explanation:</b></p> <ol style="list-style-type: none"> <li><b>Identify the subject and agent in the passive sentence:</b> <ul style="list-style-type: none"> <li>The agent performing the action is <b>"the expert committee."</b></li> <li>The subject receiving the action is <b>"the detailed plan..."</b></li> </ul> </li> <li><b>Change the subject of the passive sentence to the agent:</b> <ul style="list-style-type: none"> <li>Make <b>"the expert committee"</b> the subject of the active sentence.</li> </ul> </li> <li><b>Convert the verb phrase from passive to active form:</b> <ul style="list-style-type: none"> <li>Passive: has been prepared</li> <li>Active: has prepared</li> </ul> </li> <li><b>Retain the rest of the sentence elements in the same order:</b> <ul style="list-style-type: none"> <li>Objects and descriptive details remain unchanged but now follow the active verb.</li> </ul> </li> <li><b>Maintain the tense and meaning:</b> <ul style="list-style-type: none"> <li>The present perfect tense has been prepared changes to has prepared in active.</li> <li>Meaning remains intact without omissions or additions.</li> </ul> </li> </ol>





Q. 85	<p>Choose the most appropriate one-word substitute for the underlined phrase in the sentence:</p> <p>The scientist's <u>fear of open spaces and crowds</u> often prevented him from attending important conferences.</p> <p>a) Xenophile </p> <p>b) Xenophobia </p> <p>c) Claustrophobia </p> <p>d) Agoraphobia </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• <b>Agoraphobia</b> means fear of open or crowded spaces, fitting the phrase accurately.</li> <li>• <b>Xenophile</b> means a person attracted to foreign people or cultures, unrelated here.</li> <li>• <b>Xenophobia</b> means fear or hatred of foreigners, not relevant.</li> <li>• <b>Claustrophobia</b> means fear of confined or small spaces, which is opposite to the context.</li> </ul>









  





Q. 86	<p>Identify the CORRECT spelling of the word that means “a close working relationship” or “communication between groups”:</p> <p>a) Liason </p> <p>b) Liaison </p> <p>c) Liasion </p> <p>d) Liaisen </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• Many candidates confuse this word due to its tricky vowel arrangement and double ‘s’.</li> <li>• The correct spelling has a ‘ison’ at the end: Liaison.</li> <li>• Common incorrect variants drop one ‘s’ or interchange vowels, like Liason, Liasion, and Liaisen, which are all wrong.</li> </ul>

<p><b>Q. 87</b></p>	<p><b>Convert the following sentence from indirect to direct speech:</b></p> <p>He asked me if I had completed the assignment on time.</p> <p>a) He asked me, "Are you completed the assignment on time?" </p> <p>b) He asked me, "Did you complete the assignment on time?" </p> <p>c) He asked me, "Had you being completed the assignment on time?" </p> <p>d) He asked me, "Do you complete the assignment on time?" </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• In indirect speech, the past perfect had completed often changes to simple past did complete in direct speech for simple past events.</li> <li>• Interrogative sentences in direct speech use the auxiliary did for past tense questions.</li> <li>• Options (a), (c), and (d) incorrectly use simple present, past perfect, or incorrect tense/forms for this context.</li> </ul>





  





<p><b>Q. 88</b></p>	<p><b>Identify the figure of speech used in the following sentence:</b></p> <p>"The classroom was a zoo during the final exam, with students rushing around and making noise."</p> <p>a) Metaphor </p> <p>b) Simile </p> <p>c) Hyperbole </p> <p>d) Personification </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• The sentence compares the classroom to a zoo directly, implying chaos, without using "like" or "as," which makes it a metaphor.</li> <li>• It is not a simile because it lacks "like" or "as."</li> <li>• It is not hyperbole since it is not an exaggerated statement but a direct comparison.</li> <li>• It is not personification because no human qualities have been given to non-human things.</li> </ul>





<p><b>Q. 89</b></p>	<p>Identify the type of the underlined clause in the following sentence:</p> <p>The house <u>that Jack built</u> is very old.</p> <p>a) Noun Clause </p> <p>b) Adjective Clause (Relative Clause) </p> <p>c) Adverbial Clause </p> <p>d) Independent Clause </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• The underlined clause "<b>that Jack built</b>" describes the noun house and provides additional information about it.</li> <li>• This makes it an <b>adjective clause</b>, also called a <b>relative clause</b>.</li> <li>• It is not a noun clause because it does not act as a noun in the sentence.</li> <li>• It is not an adverbial clause, which usually modifies a verb, adjective, or adverb.</li> <li>• It is not an independent clause because it cannot stand alone as a complete sentence.</li> </ul>
<p><b>Q. 90</b></p>	<p>Fill in the blank (3) with the most appropriate words to complete the paragraph:</p> <p>Vote chori, or electoral fraud, _____(1) the democratic process by manipulating election results through illegal means. Common methods include _____(2) ballots, tampering with electronic voting machines, and coercing voters to support a particular candidate. To ensure free and fair elections, authorities must implement stringent _____(3) and monitoring mechanisms to detect and prevent such malpractice.</p> <p>a) strengthens </p> <p>b) undermines </p> <p>c) security </p> <p>d) corruption </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• Effective security measures are essential to prevent and detect electoral fraud.</li> </ul>





Q. 91	<p>What is the name of the punctuation mark used in the following sentence where the symbol “:” appears? Please bring the following items: pen, notebook, and ruler.</p> <p>a) Comma </p> <p>b) Semicolon </p> <p>c) Colon </p> <p>d) Hyphen </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• The <b>colon (:)</b> is used to introduce a list, explanation, or elaboration in a sentence.</li> <li>• In the example, the colon introduces a list of items to bring.</li> <li>• Comma separates items within lists, semicolon links related clauses, and hyphen connects words.</li> </ul>





Q. 92	<p>Choose the sentence that correctly uses the conditional form:</p> <p>a) If she will have studied harder, she will have passed the exam. </p> <p>b) If she had studied harder, she would have passed the exam. </p> <p>c) If she studies harder, she would pass the exam. </p> <p>d) If she studied harder, she will pass the exam. </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• The third conditional expresses a past unreal condition and its possible past result.</li> <li>• It uses “<b>if + past perfect</b>” in the condition clause and “<b>would have + past participle</b>” in the result clause.</li> <li>• Option (b) correctly follows this form.</li> <li>• Other options use incorrect tenses or conditional types.</li> </ul>

<b>Q. 93</b>	<p>Choose the correct meaning of the idiom “to steal someone’s thunder” as used in the sentence below:</p> <p>Before she could announce her discovery, her colleague stole her thunder by presenting it first at the conference.</p> <p>a) To physically take something valuable from someone </p> <p>b) To take credit for someone else’s idea or achievement </p> <p>c) To spoil a plan by revealing it prematurely </p> <p>d) To criticize someone openly in a meeting </p>
<b>Explanation:</b>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"><li>• The idiom “to steal someone’s thunder” means to take away attention or praise from someone by doing something before them.</li><li>• Option (c) is close but not precise; it refers more generally to spoiling plans rather than taking credit.</li><li>• Other options do not match the idiomatic meaning.</li></ul>





<p><b>Q. 94</b></p>	<p>Rearrange the following parts (P, Q, R, S) to form a coherent and meaningful paragraph:</p> <p>P. Climate change poses a serious threat to global agriculture and food security.</p> <p>Q. Rising temperatures and unpredictable weather patterns reduce crop yields and affect livestock health.</p> <p>R. Governments and scientists are working together to develop sustainable farming practices and climate-resilient crops.</p> <p>S. Without urgent action, millions of people around the world may face hunger and malnutrition.</p> <p>a) <math>P \rightarrow Q \rightarrow S \rightarrow R</math> </p> <p>b) <math>Q \rightarrow P \rightarrow R \rightarrow S</math> </p> <p>c) <math>P \rightarrow R \rightarrow Q \rightarrow S</math> </p> <p>d) <math>S \rightarrow Q \rightarrow P \rightarrow R</math> </p>
<p><b>Explanation:</b></p>	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• <b>Part P</b> introduces the topic of climate change and its threat.</li> <li>• <b>Part Q</b> elaborates on the specific effects on agriculture.</li> <li>• <b>Part S</b> emphasizes the urgency and consequences if the problem is not addressed.</li> <li>• <b>Part R</b> concludes with actions being taken to mitigate the issue.</li> </ul>





Q. 95	<p>Choose the correct meaning of the phrasal verb “put up with” as used in the sentence below:</p> <p>She had to put up with a lot of noise from the construction site while working from home.</p> <p>a) To tolerate or endure something unpleasant </p> <p>b) To assemble or build something temporarily </p> <p>c) To increase the price of something </p> <p>d) To offer accommodation to someone </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• The phrasal verb “<b>put up with</b>” means to accept or endure something difficult or unpleasant without complaining.</li> <li>• The other options describe different meanings related to “put up” but not the full phrasal verb “put up with.”</li> </ul>





  





Q. 96	<p>Choose the correct meaning of the idiom “to rock the boat” as used in the sentence below:</p> <p>Even though the proposal was unpopular, he decided to voice his concerns because he didn’t want to rock the boat during such a critical situation like the earthquake recovery efforts.</p> <p>a) To support a team during difficult times </p> <p>b) To physically damage a boat during an earthquake </p> <p>c) To destabilize a situation or create trouble </p> <p>d) To remain silent and avoid conflict </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• The idiom “<b>to rock the boat</b>” means to cause disturbance or trouble in a stable situation.</li> <li>• In the context of earthquake recovery, it means avoiding actions that might disrupt ongoing efforts.</li> <li>• Other options misunderstand the figurative meaning of the idiom.</li> </ul>



Q. 97	<p>Choose the most appropriate one-word substitute for the phrase:</p> <p>“A person who studies and predicts the weather.”</p> <p>a) Botanist </p> <p>b) Meteorologist </p> <p>c) Geologist </p> <p>d) Hydrologist </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"><li>• A <b>meteorologist</b> is a scientist who studies and predicts weather patterns, including those related to the rainy season.</li><li>• Botanists study plants, geologists study Earth’s physical structure, and hydrologists study water resources.</li></ul>

Q. 98	<p>Choose the word that is the closest synonym of “filthy”:</p> <p>a) Neat </p> <p>b) Spotless </p> <p>c) Pristine </p> <p>d) Grimy </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"><li>• <b>Filthy</b> means extremely dirty or covered with grime.</li><li>• <b>Grimy</b> similarly means covered with dirt or soot, making it the closest synonym.</li><li>• <b>Pristine</b>, <b>Spotless</b>, and <b>Neat</b> are antonyms, meaning clean or tidy.</li></ul>

Q. 99	<p>Read the opening and closing statements and arrange the middle parts (P, Q, R, S) in the correct order to form a coherent paragraph:</p> <p><b>Opening Statement:</b> The earthquake in Japan had a profound impact on the country's infrastructure and economy.</p> <p>P. The strong tremors caused widespread damage to buildings, roads, and bridges across several prefectures.</p> <p>Q. Emergency services and rescue teams responded quickly to assist the affected populations and prevent further casualties.</p> <p>R. The disaster also led to a nuclear crisis, triggering safety concerns worldwide.</p> <p>S. Reconstruction efforts began soon after, focusing on building earthquake-resistant structures and improving disaster preparedness.</p> <p><b>Closing Statement:</b> Japan's experience highlights the importance of disaster management and resilience in earthquake-prone regions.</p> <p>a) <math>P \rightarrow R \rightarrow Q \rightarrow S</math> </p> <p>b) <math>Q \rightarrow P \rightarrow S \rightarrow R</math> </p> <p>c) <math>P \rightarrow S \rightarrow R \rightarrow Q</math> </p> <p>d) <math>R \rightarrow P \rightarrow Q \rightarrow S</math> </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• P introduces the physical damage caused by the earthquake.</li> <li>• R highlights the nuclear crisis resulting from the disaster.</li> <li>• Q explains the emergency response that followed.</li> <li>• S describes the subsequent reconstruction and preparedness efforts.</li> </ul>

Q. 100	<p>Identify the two errors in the sentence below and choose the option that corrects both errors:</p> <p>If he would have informed the managers earlier, the staffs would have better feedback about the new policy.</p> <p>a) Change “would have informed” to “had informed” and “staffs” to “staff”. </p> <p>b) Change “would have informed” to “informed” and “staffs” to “staffs” (no change). </p> <p>c) Change “would have informed” to “had informed” and “staffs” to “staffs” (no change). </p> <p>d) Change “would have informed” to “will have informed” and “staffs” to “staff”. </p>
Explanation:	<p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>• <b>Error 1 (Conditional Sentence):</b> In third conditional sentences (past unreal condition), the correct form is <b>“If + past perfect”</b> (had informed), not “would have informed” in the if-clause.</li> <li>• <b>Error 2 (Noun):</b> The noun <b>“staff”</b> is a collective noun and is <b>uncountable</b>; it should not be pluralized as “staffs.”</li> </ul>