Instructions
For the following questions answer them individually

Question 1
ABCD is a cyclic trapezium with AB || DC and AB = diameter of the circle. If angleCAB = 30°, then angleADC is

A 60°
B 120°
C 150°
D 30°

Answer: B

Explanation:
let angle CDA = x
since AB is parallel to CD, angle ACD=30 and angle CAD=30
in triangle ACD,
sum of all three angles = 180
30 + 30 + x = 180
x = 120
so the answer is option B.

SSC CGL Free Mock Test

Question 2
ABC is a triangle. The bisectors of the internal angle \( \angle B \) and external \( \angle C \) intersect at D. If \( \angle BDC=50° \), then \( \angle A \) is

A 100°
B 90°
C 120°
D 60°

Answer: A

Explanation:
In $\triangle BDC$,
\[ y + (180^\circ - 2x + x) + 50^\circ = 180^\circ \]
\[ y - x + 50^\circ = 0 \]
\[ y - x = -50^\circ \]

In $\triangle ABC$,
\[ 2y + (180^\circ - 2x) + \angle A = 180^\circ \]
\[ 2(y - x) + \angle A = 0 \]
\[ 2(-50^\circ) + \angle A = 0 \]
\[ \angle A = 100^\circ \]
\[ \text{Ans} - (A) \]

**Question 3**

AB is the chord of a circle with centre O and DOC is a line segment originating from a point D on the circle and intersecting AB produced at C such that BC = OD. If $\angle BCD = 20^\circ$, then $\angle AOD = ?$

A $\ 20^\circ$

B $\ 30^\circ$

C $\ 40^\circ$

D $\ 60^\circ$

Answer: D

**Explanation:**

It is given that OD = BC and OD = OB (radii of circle)

\[ \Rightarrow OB = BC \]

\[ \Rightarrow \angle BCO = \angle BOC = 20^\circ \] (Angle opposite to equal sides are equal)

Then, \[ \angle OBC = 180^\circ - (\angle BCO + \angle BOC) \]

\[ \Rightarrow \angle OBC = 180^\circ - 20^\circ - 20^\circ = 140^\circ \]

Also, \[ \angle OBA + \angle OBC = 180^\circ \] (Linear pair)

\[ \Rightarrow \angle OBA = \angle OAB = 180^\circ - 140^\circ = 40^\circ \]

Now, \[ \angle AOB = 180^\circ - (\angle OAB + \angle OBA) \]
Question 4
In a circle of radius 17 cm, two parallel chords of lengths 30 cm and 16 cm are drawn. If both the chords are on the same side of the centre, then the distance between the chord is

A 9 cm  
B 7 cm  
C 23 cm  
D 11 cm

Answer: B

Explanation:
Given : CD = 30 cm and AB = 16 cm  
To find : MN = ?
Solution : Perpendicular distance from the centre bisects the chord.

\[
\Rightarrow CM = \frac{30}{2} = 15 \text{ cm and } AN = 8 \text{ cm}
\]

Now, in \( \triangle OCM \),

\[
\Rightarrow (OM)^2 = (OC)^2 - (CM)^2
\]
\[
\Rightarrow (OM)^2 = (17)^2 - (15)^2
\]
\[
\Rightarrow (OM)^2 = 289 - 225 = 64
\]
\[
\Rightarrow OM = \sqrt{64} = 8 \text{ cm}
\]

Similarly, in \( \triangle OAN \),

\[
\Rightarrow (ON)^2 = (OA)^2 - (AN)^2
\]
\[
\Rightarrow (ON)^2 = (17)^2 - (8)^2
\]
\[
\Rightarrow (ON)^2 = 289 - 64 = 225
\]
\[
\Rightarrow ON = \sqrt{225} = 15 \text{ cm}
\]

\[
\Rightarrow MN = ON - OM
\]
\[
= 15 - 8 = 7 \text{ cm}
\]

\[
\Rightarrow \text{Ans - (B)}
\]
Answer: B

Explanation:
\[ \sin(A-B) = \frac{1}{2} \Rightarrow A-B = \frac{\pi}{6} \quad (1) \]
\[ \cos(A+B) = \frac{1}{2} \Rightarrow A+B = \frac{\pi}{3} \quad (2) \]

on solving (1) & (2)
\[ A = \frac{\pi}{4} \]
\[ B = \frac{\pi}{12} \]

so the answer is option C.

Question 6
The fifth term of the sequence for which \( t_1 = 1, t_2 = 3 \) and \( t_{n+2} = t_n + t_{n+1} \), is

A 5
B 10
C 6
D 8

Answer: D

Explanation:
\( t_1 = 1, t_2 = 2 \)
\[ t_{n+2} = t_n + t_{n+1} \]
put n=3, then \( t_3 = t_1 + t_2 = 1+2 = 3 \)
\[ t_3 = t_1 + t_2 = 1+2 = 3 \]
\[ t_4 = t_2 + t_3 = 2+3 = 5 \]
\[ t_5 = t_3 + t_4 = 3+5 = 8 \]

so the answer is option D.

Question 7
If \((x + 7954 \times 7956)\) be a square number, then the value of x is

A 1
B 16
C 9
D 4

Answer: A
Explanation:
\[(x + 7954 \times 7956)\]
\[= [x+(7955-1)(7955+1)]\]
\[= [x+7955^2-1]\]
to become a perfect square, \(x-1 = 0\) so \(x = 1\).
so the answer is option A.

SSC CGL Previous Papers (DOWNLOAD PDF)

Question 8
A can do a piece of work in 12 days while B alone can do it in 15 days. With the help of C they can finish it in 5 days. If they are paid Rs. 960 for the whole work how much money A gets?

A Rs. 480  
B Rs. 240  
C Rs. 320  
D Rs. 400

Answer: D

Explanation:
let C can complete the work in \(x\) days.

\[
\frac{1}{12} + \frac{1}{15} + \frac{1}{x} = \frac{1}{5}
\]
\[
\frac{1}{x} = \frac{2}{15} - \frac{1}{12}
\]
\[
x = 20.
\]
thier efficiencies are \(1/12, 1/15, 1/20\)
i.e; 5, 4, 3
If they are paid Rs. 960
the money get by A is \(\frac{5}{(5+4+3)} \times 960\)
\[
= \frac{5}{12} \times 960
\]
\[
= 400.
\]
so the answer is option D.

Question 9
Ronald and Elan are working on an Assignment. Ronald takes 6 hours to type 32 pages on a computer, while Elan takes 5 hours to type 40 pages. How much time will they take working together on two different computers to type an assignment of 110 pages?

A 7 hrs. 30 min.  
B 8 hrs.  
C 8 hrs. 15 min.  
D 8 hrs 25 min.

Answer: C

Explanation:
Ronald takes 6 hours to type 32 pages
no.of pages typed by ronald per hour = \(\frac{32}{6} = \frac{16}{3}\)
Elan takes 5 hours to type 40 pages
no. of pages typed by elan per hour = \( \frac{40}{5} = 8 \)
in 1hr, both can type \( \frac{8+16}{3} \) pages = \( \frac{40}{3} \)
time taken by both to type 110 pages = \( \frac{110}{\frac{40}{3}} = \frac{33}{4} = 8\text{hrs 15mins} \) ( \( \because \frac{1}{4} \text{hr = 15mins} \))
so the answer is option C.

Question 10
One man, 3 women and 4 boys can do a piece of work in 96 hours, 2 men and 8 boys can do it in 80 hours, 2 men and 3 women can
do it in 120 hours. 5 men and 12 boys can do it in

A 39 \( \frac{1}{11} \) hours
B 42 \( \frac{7}{11} \) hours
C 43 \( \frac{7}{11} \) hours
D 44 hours

Answer: C

Explanation:
\[ 1M + 3W + 4B = \frac{96}{1} \quad \text{(1)} \]
\[ 2M + 8B = \frac{80}{1} \quad \text{(2)} \]
\[ 2M + 3W = \frac{120}{1} \quad \text{(3)} \]
on solving (1) and (2)
\[(1) \times 2 - (2) \]
\[ \rightarrow 2M + 6W + 8B - 2M - 8B = \frac{2 \cdot 96}{1} - \frac{1 \cdot 80}{1} \]
\[ \rightarrow 6W = \frac{1 \cdot 120}{1} \]
\[ \rightarrow W = \frac{1 \cdot 20}{1} \]
on substituting \( W = \frac{1 \cdot 20}{1} \) in (3) we will get \( M = \frac{1 \cdot 480}{1} \)
on substituting both in (1), we will get \( B = \frac{1 \cdot 960}{1} \)
now, \( 5M + 12B = \frac{5 \cdot 480}{1} + \frac{12 \cdot 960}{1} = \frac{22 \cdot 960}{1} = \frac{11 \cdot 480}{1} \)
so no. of hours = \( \frac{480}{11} = 43 \frac{7}{11} \) hours.
so the answer is option C.

25 SSC CHSL Mocks for just Rs. 149

Question 11
ABC is a right angled triangle, B being the right angle. Mid-points of BC and AC are respectively B’ and A’. The ratio of the area of the
quadrilateral AA’ B’B to the area of the triangle ABC is

A 1 : 2
B 2 : 3
C 3 : 4
D None of the above
Question 12

A square ABCD is inscribed in a circle of unit radius. Semicircles are described on each side of a diameter. The area of the region bounded by the four semicircles and the circle is

A 1 sq. unit
B 2 sq. unit
C 1.5 sq. unit
D 2.5 sq. unit

Answer: B

Explanation:

Radius of the circle = 1 unit, => Diameter = BD = 2 units

Thus, side of square = \(AB = \sqrt{2}\) units

Radius of a semi-circle = \(\frac{AB}{2} = \frac{\sqrt{2}}{2} = \sqrt{2}\)

=> Area of 4 semi-circles = \(2\pi r^2\)

= \(2\pi (\sqrt{2})^2 = \pi \) sq. units \(\text{(i)}\)

Area bounded by region = Area of circle - Area of square

= \(\pi (1)^2 - (\sqrt{2})^2 = (\pi - 2)\) sq. units \(\text{-(ii)}\)

\therefore\) Required area bounded by 4 semi circles = \(\text{(i)} - \text{(ii)}\)
Question 13
If the perimeters of a rectangle and a square are equal and the ratio of two adjacent sides of the rectangle is 1 : 2 then the ratio of area of the rectangle and that of the square is

A 1 : 1  
B 1 : 2  
C 2 : 3  
D 8 : 9  

Answer: D

Explanation:
Let l, b are the length & breadth of a rectangle and s be the side of a square.

\[ \frac{l}{b} = 2 : 1 \text{ so } l = 2b. \]

given that perimeters of both are same,

\[ 2(l+b) = 4s \]

\[ 2(2b+b) = 4s \]

\[ 6b = 4s \]

\[ \frac{b}{s} = \frac{2}{3} \]

area of rectangle = \( l \times b = 2b \times b = 2b^2 \)

area of square = \( s^2 \)

ratio = \( \frac{(2b^2)}{(s^2)} \)

\[ = 2 \left( \frac{b}{s} \right)^2 \]

\[ = 2 \left( \frac{2}{3} \right)^2 \]

\[ = \frac{8}{9} = 8 : 9 \]

so the answer is option D.

Question 14
The interest on a certain sum of money is Rs. 22 and the true discount on the same sum for the same time and at the same rate is Rs. 20, Find the sum.

A Rs. 220  
B Rs. 200  
C Rs. 210  
D Rs. 212  

Answer: A

Explanation:
Interest (I) = Rs. 22 and true discount (D) = Rs. 20

\[ \text{Sum} = \frac{I \times D}{I - D} \]

\[ = \frac{22 \times 20}{22 - 20} \]

\[ = \frac{440}{2} \]

\[ = 220 \]
Question 15
A retailer purchased radiosets at the rate of Rs. 400 each from a wholesaler. He raised the price by 30% and then allowed a discount of 8% on each set. His profit will be

A 19%
B 78.4%
C 22%
D 19.6%

Answer: D

Explanation:
initial CP = 400/-
after marking 30% up, marked price = 520/-
he allowed a discount of 8%, discount = 41.6/-
selling price = 520 - 41.6 = 478.4/-
%profit = (478.4-400)/400 * 100
= 19.6%
so the answer is option D.

Question 16
A reduction in the price of apples enables a person to purchase 3 apples for Rs. 1 instead of Rs. 1.25. What is the % of reduction in price (approximately) ?

A 20
B 25
C 30
D \(\frac{1}{3}\)

Answer: A

Explanation:
initially price of one apple = 1.25/3
after reducing price, price of one apple = 1/3
reduction in price = 1.25/3 - 1/3
= 0.25/3
now, % reduction in price = (change/initial)*100
= (0.25/1.25)*100
= 20%.
so the answer is option A.
Question 17
Rs. 700 is divided among A, B, C in such a way that the ratio of the amounts of A and B is 2 : 3 and that of B and C is 4 : 5. Find the amounts in Rs. each received, in order A, B, C.

A 150, 250, 300
B 160, 240, 300
C 150, 250, 290
D 150, 240, 310

Answer: B

Explanation:
A:B = 2:3
B:C = 4:5
A:B:C = 8:12:15
amount received by A = 8/(8+12+15) * 700 = 160/-
amount received by B = 12/(8+12+15) * 700 = 240/-
amount received by C = 15/(8+12+15) * 700 = 300/-
so the answer is option B.

Question 18
The ratio of monthly incomes of A, B is 6 : 5 and their monthly expenditures are in the ratio 4 : 3. If each of them saves Rs. 400 per month, find the sum of their monthly incomes.

A 2300
B 2400
C 2200
D 2500

Answer: C

Explanation:
ratio of incomes = 6 : 5
ratio of expenditures = 4 : 3
If each of them saves Rs. 400 per month,
6x-4y = 400
5x-3y = 400
on solving these two equations, x = 200, y = 200
sum of their incomes = 6x + 5x = 11x = 11(200) = 2200/-
so the answer is option C.

Question 19
A and B have together three times what B and C have, while A, B, C together have thirty rupees more than that of A. If B has 5 times that of C, then A has

A Rs. 60
B Rs. 65
C Rs. 75
D Rs. 45
Answer: B

**Explanation:**

\[ A + B + C = A + 30 \Rightarrow B + C = 30 \] -------(1)

B has 5 times more than C \( \Rightarrow B = 5C \) -------(2)

on solving (1) & (2) B = 25, C = 5.

and given that A and B have together three times what B and C have

\[ A + B = 3(B + C) \]
\[ A + 25 = 3(30) \]
\[ A + 25 = 90 \]
\[ A = 65. \]

so the answer is option B.

---

1500 + Free Must Solved SSC Questions (With Solutions)

**Question 20**

A cricket player after playing 10 tests scored 100 runs in the 11th test. As a result, the average of his runs is increased by 5. The present average of runs is

A 45
B 40
C 50
D 55

**Answer: C**

**Explanation:**

let his average of 10 matches = x

total runs in 10 matches = 10x

in 11th match he scored 100 runs, so

total runs after 11th match = 10x + 100

average of 11 matches = \( \frac{10x + 100}{11} \)

after 11th match the average of his runs is increased by 5, so

\( \frac{10x + 100}{11} = x + 5 \)

10x + 100 = 11x + 55

x = 45

but present average = x + 5 = 45 + 5 = 50

so the answer is option C.

**Question 21**

A fruit seller buys some oranges at the rate of 5 for Rs. 10 and an equal number more at 10 for Rs. 20. He sells the whole lot at 15 for Rs. 30. What is his loss or gain per cent?

A Loss per cent 18.1%

**Answer:**

\[ \text{loss per cent} = \frac{19}{18.1}\% \]
**Question 22**

15 litres of a mixture contains alcohol and water in the ratio 1 : 4. If 3 litres of Water is mixed in it, the percentage of alcohol in the new mixture will be

A 15
B $\frac{17}{2}$
C 17
D $\frac{18}{2}$

**Answer:** B

**Explanation:**

total quantity = 15L
alcohol : water = 1 : 4
= 3 : 12

now 3 liters of water is added, so now ratio becomes 3 : 15

% of alcohol = $\frac{3}{3+15} \times 100$
= $\frac{3}{18} \times 100$
= $\frac{1}{6}$

so the answer is option B.

---

**Question 23**

A man rides at the rate of 18 km/hr, but stops for 6 mins. to change horses at the end of every 7th km. The time that he will take to cover a distance of 90 km is

A 6 hrs.
B 6 hrs 12 min.
C 6 hrs 18 min.
D 6 hrs 24 min.

**Answer:** B

**Explanation:**
Speed of man = 18 km/h
Total distance = 90 km
As he stops after 7th km, => 90 = (12 × 7) + 6
=> He stops 12 times in the journey.
Total stoppage time = 12 × 6 = 72 min
Real time = \( \frac{90}{18} \) = 5 hours
\('.\ Required time taken = 5\ hr + 72\ min
= 6\ hrs\ 12\ min
=> Ans - (B)

Question 24
A man rows down a river 15 km in 3 hrs. with the stream and returns in \( \frac{7}{2} \), The rate at which he rows in still water is
A 2.5 km/hr
B 1.5 km/hr
C 3.5 km/hr
D 4.5 km/hr

Answer: C

Explanation:
speed of man = x
speed of stream = y
he rows down the river 15 km in 3 hrs, i.e; x+y = 15/3 = 5kmph -------(1)
and he took 7.5hrs during upstream
i.e; x-y = 15/7.5 = 2kmph-------(2)
on solving (1) and (2)
x+y=5
x-y=2
x = 3.5kmph
so the answer is option C.

Question 25
There is 100% increase to an amount in 8 years, at simple interest. Find the compound interest of Rs. 8000 after 2 years at the same rate of interest.
A Rs. 2500
B Rs. 2000
C Rs. 2250
D Rs. 2125

Answer: D

Explanation:
I = \( \frac{PTR}{100} \)
there is 100% increase in amount means, interest = principle.
given, \( T = 8 \text{yrs.} \)
\[ I = P \]
\[ P = P \times 8 \times R / 100 \]
\[ R = 12.5\% \]
compound interest of 8000/- at 12.5\% for 2 years is
\[ CI = \text{total amount} - 8000/- \]
\[ = P \left(1 + \frac{R}{100}\right)^n - 8000/- \]
\[ = 8000 \left(1 + \frac{12.5}{100}\right)^2 - 8000/- \]
\[ = 10125 - 8000 \]
\[ = 2125/- \]
so the answer is option D.

Free SSC Study Material (18,000 Solved Questions)

Question 26
If the number \( p \) is 5 more than \( q \) and the sum of squares of \( p \) and \( q \) is 55, then the product of \( p \) and \( q \) is

A 10  
B -10  
C 15  
D -15  

Answer: C

Explanation:
given, \( p = q + 5 \), \( p^2 + q^2 = 55 \)
\[ p - q = 5 \]
\[ (p - q)^2 = 25 \]
\[ p^2 + q^2 - 2pq = 25 \]
\[ 55 - 2pq = 25 \]
\[ -2pq = -30 \]
\[ pq = 15 \]
so the answer is option C.

Question 27
If \( a + a^{-2} = 4 \), then the value of \( (a - 2)^2 + \left(a^{-2}\right)^2 \) is

A 0  
B 2  
C -2  
D 4  

Answer: B

Explanation:
\[ a + \frac{1}{a-2} = 4 \]
subtract 2 on both sides,
\[(a - 2) + \frac{1}{a-2} = 4 - 2\]
\[(a - 2) + \frac{1}{a-2} = 2\]
squaring on both sides
\[\left[(a - 2) + \frac{1}{a-2}\right]^2 = 4\]
\[(a - 2)^2 + \left(\frac{1}{a-2}\right)^2 + 2(a - 2)\cdot\left(\frac{1}{a-2}\right) = 4\]
\[(a - 2)^2 + \frac{1}{(a-2)^2} = 4 - 2 = 2\]
so the answer is option B.

**Question 28**

If \(a + b + c = 2s\), then \(\frac{(s-a)^2 + (s-b)^2 + (s-c)^2 + s^2}{a^2 + b^2 + c^2}\) is equal to

A \(a^2 + b^2 + c^2\)

B 0

C 1

D 2

**Answer: C**

**Explanation:**
\(a + b + c = 2s\)

put \(a = b = c = 1\), then \(2s = 3\), \(s = 3/2\)

then, \(s-a = s-b = s-c = 1/2\)
\[
\frac{(s-a)^2 + (s-b)^2 + (s-c)^2 + s^2}{a^2 + b^2 + c^2} = \frac{(1/2)^2 + (1/2)^2 + (1/2)^2 + (3/2)^2}{12 + 12 + 12}
\]
\[
= \frac{3 + (9/4)}{3}
\]
\[
= \frac{12/4}{3}
\]
\[
= 1
\]
only option C satisfies this.
so the answer is option C.

**Question 29**

If \(xy(x+y)=1\), then the value of \(\frac{1}{x^3} - x^3 - y^3\) is

A 3

B -3
Answer: A

Explanation:
\[xy(x+y)=1\]
\[x+y = \frac{1}{xy}\]
apply cube on both sides,
\[3 = x^3y^3 - x^3 - y^3\]
so the answer is option A.

Question 30
If \(a^3 - b^3 - c^3 = 0\) then the value of \(a^9 - b^9 - c^9 - 3a^3b^3c^3\) is

A 1
B 2
C 0
D -1

Answer: C

Explanation:
shortcut :
put \(c = 0\) in \(a^3 - b^3 - c^3 = 0 \Rightarrow a^3 = b^3\)
\[a^9 - b^9 - (0)^9 - 3a^3b^3(0)^3 = a^9 - b^9 = (a^3)^3 - (b^3)^3 = (a)^3 - (b)^3 = 0 \quad (\because a^3 = b^3)\]
so the answer is option C.

normal method :
\[a^3 - b^3 - c^3 = 0\]
\[a^3 = b^3 + c^3\]
cubing on both sides,
\[(a^3)^3 = (b^3 + c^3)^3\]
\[a^9 = b^9 + c^9 + 3b^3c^3(b^3 + c^3)\]
\[a^9 = b^9 + c^9 + 3b^3c^3(a^3)\]
\[a^9 - b^9 - c^9 - 3a^3b^3c^3 = 0\]
so the answer is option C.

Question 31
The minimum value of \((x-2)(x-9)\) is

A \(-\frac{11}{4}\)
B \( \frac{49}{4} \)

C 0

D \( \frac{49}{4} \)

Answer: D

Explanation:
\[ f(x) = (x-2)(x-9) \]
\[ = x^2 - 11x + 18 \]
\[ f'(x) = 2x - 11 \]
\[ = 0 \]
\[ x = \frac{11}{2} \]
\[ f''(x) = 2 \] (positive) so \( f(x) \) has minimum value at \( x = \frac{11}{2} \)

the minimum value is \( f(\frac{11}{2}) = -\frac{49}{4} \).

so the answer is option D.

SSC Free Preparation App

Question 32
If \( x + y + z = 6 \) and \( x^2 + y^2 + z^2 = 20 \) then the value of \( x^3 + y^3 + z^3 - 3xyz \) is

A 64
B 70
C 72
D 76

Answer: C

Explanation:
We know that
\[ x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - xz) \]
\[ x^3 + y^3 + z^3 - 3xyz = (6)(20 - xy - yz - xz) \]
Hence the solution must be a multiple of 6.
Out of the given options only Option C is a multiple of 6.
Hence Option C is the correct answer.

Question 33
The third proportional to \( \frac{x}{y} \) and \( \sqrt{x^2 + y^2} \) is

A \( xy \)
B \( \sqrt{xy} \)
C \( 3\sqrt{xy} \)
D \( 4\sqrt{xy} \)

Answer: A

Explanation:
Let the third proportion be \( x \).
\( \frac{x}{y} : \sqrt{x^2 + y^2} :: \sqrt{x^2 + y^2} : z \)
\( \frac{x^2 + y^2}{xy} : \sqrt{x^2 + y^2} :: \sqrt{x^2 + y^2} : z \)
Question 34

In a triangle ABC, the side BC is extended up to D. Such that CD = AC, if \( \angle BAD = 109^\circ \) and \( \angle ACB = 72^\circ \) then the value of \( \angle ABC \) is

A 35°
B 60°
C 40°
D 45°

Answer: A

Explanation:

\[
\text{Angle ACB} = 72^\circ \\
\text{Angle ACD} = 108^\circ \\
\text{Angle CAD} = \text{Angle ADC} = 36^\circ \\
\text{Angle BAD} = \text{Angle BAC} + \text{Angle CAD} = 109^\circ \\
\text{Angle BAC} = 73^\circ \\
\text{Angle ABC} = 180 - \text{Angle BAC} - \text{Angle ACB} = 180 - 73 - 72 = 35^\circ \\
\]

Hence Option A is the correct answer.

Daily Free SSC Practice Set

Question 35

Two circles touch each other internally. Their radii are 2 cm and 3 cm. The biggest chord of the greater circle which is outside the inner circle is if length

A \( 2\sqrt{2} \) cm
B \( 3\sqrt{2} \) cm
C \( 2\sqrt{3} \) cm
D \( 4\sqrt{2} \) cm

Answer: D

Explanation:
The biggest chord lying outside the inner circle must be tangential to it. By Pythagoras theorem, 
\[ x = \sqrt{3^2 - 1^2} = \sqrt{9 - 1} = \sqrt{8} = 2\sqrt{2} \]
The length of the chord is \(2x = 4\sqrt{2}\) 
Hence Option D is the correct answer.

Question 36
ABCD is a cyclic quadrilateral. AB and DC are produced to meet at P. If \(\angle ADC = 70^\circ\) and \(\angle DAB = 60^\circ\), then the \(\angle PBC + \angle PCB\) is

A 130°  
B 150°  
C 155°  
D 180°  

Answer: A  

Explanation:
\[\begin{align*} 
\therefore ABCD \text{ is cyclic quadrilateral.} \\
\therefore \angle DAB + \angle DCA &= 180 \\
\angle DCA &= 120 \\
\text{Similarly, } \angle ABC &= 110 \\
\angle PBC &= 180 - \angle ABC \\
\angle PBC &= 70 \\
\text{Similarly, } \angle PCB &= 60 \\
\therefore \angle PBC + \angle PCB &= 70 + 60 = 130 \\
\text{Hence, Option A is correct.} 
\end{align*}\]

Question 37
From a point which is at a distance of 13 cm from centre O of a circle of radius 5 cm, in the same plane, a pair of tangents PQ and PR are drawn to the circle. Area of quadrilateral PQOR is

A 65 cm²
Answer: B

**Explanation:**

\[ \therefore PQ \text{ is a tangent to circle at } Q, \]
\[ \therefore \angle OQP = 90 \]

In \( \triangle POQ \),
\[ PO^2 = OQ^2 + PQ^2 \]
\[ 13^2 = 5^2 + PQ^2 \]
\[ PQ = 12 \text{ cm} \]

Similarly, \( PR = 12 \text{ cm} \)

\[ \therefore \triangle POQ \text{ is a right-angled triangle}, \]
\[ \therefore \text{Area of } \triangle POQ = \frac{1}{2} \times PQ \times OQ \]
\[ = \frac{1}{2} \times 5 \times 12 \]
\[ = 30 \]

Area of quadrilateral \(\text{POQR} = 2 \times \text{Area of } \triangle POQ \]
\[ = 2 \times 30 \]
\[ = 60 \text{ cm}^2 \]

Hence, Option B is correct.

**Question 38**

A horse is tied to a post by a rope. If the horse moves along a circular path always keeping the rope stretched and describes 88 metres when it has traced out 72° at the centre, the length of the rope is \( (\text{Take } \pi = \frac{22}{7}) \)

A 70 m
B 75 m
C 80 m
D 65 m

Answer: A

**Explanation:**

Let \( r \) be the length of rope.

Angle traced at the centre=72°
\[ \theta = \frac{2\pi \times 72^\circ}{180^\circ} \]
\[ \theta = \frac{2\pi}{5} \]

\[ r\theta = d \text{ (d is the distance travelled by horse)} \]
\[ r = \frac{88 \times 7 \times 5}{2 	imes 22} \]
Question 39
Maximum value of \((2\sin \theta + 3\cos \theta)\) is

A. 2
B. \(\sqrt{13}\)
C. \(\sqrt{15}\)
D. 1
Answer: B

Explanation:
\[\text{Maximum Value of } a \sin \theta + b \cos \theta = \sqrt{a^2 + b^2}\]
\[\therefore \text{Maximum Value of } 2 \sin \theta + 3 \cos \theta = \sqrt{2^2 + 3^2} = \sqrt{13}\]
Hence, Correct option is B.

Question 40
The value of \(152(\sin 30^\circ+2\cos^245^\circ+3\sin 30^\circ+4\cos^245^\circ+\cdots+17\sin 30^\circ+18\cos^245^\circ)\) is

A. an integer but not a perfect square
B. a rational number but not an integer
C. a perfect square of an integer
D. irrational
Answer: C

Explanation:
Given, \(152\sin 30^\circ+2\cos^245^\circ+3\sin 30^\circ+4\cos^245^\circ+\cdots+17\sin 30^\circ+18\cos^245^\circ\)
Rearranging, \(\sin 30^\circ\) and \(\cos^245^\circ\) terms
\[152[(1+3+5+\cdots+17)\sin 30^\circ+(2+4+\cdots+18)\cos^245^\circ]\]
\[152[(81*0.5) + (90*0.5)]\]
\[12996\]
\[114^2\]

SSC CHSL Previous Question papers (download pdf)

Question 41
If \((1 + \sin \alpha)(1 + \sin \beta)(1 + \sin \gamma) = (1 - \sin \alpha)(1 - \sin \beta)(1 - \sin \gamma)\) then each side is equal to

A. \(\pm \cos \alpha \cos \beta \cos \gamma\)
B. \(\pm \sin \alpha \sin \beta \sin \gamma\)
C \( \pm \sin \alpha \cos \beta \cos \gamma \)

D \( \pm \sin \alpha \sin \beta \cos \gamma \)

Answer: A

Explanation:
Let \((1 + \sin \alpha)(1 + \sin \beta)(1 + \sin \gamma) = k \) ... (1)
and \((1 - \sin \alpha)(1 - \sin \beta)(1 - \sin \gamma) = kk \) ... (2)
now \((1) \times (2)\) gives
\((1^2 - \sin^2 \alpha)(1^2 - \sin^2 \beta)(1^2 - \sin^2 \gamma) = k^2\)
\(\cos^2 \alpha \cos^2 \beta \cos^2 \gamma = k^2\)
Hence, \(k = \pm \cos \alpha \cos \beta \cos \gamma\)

Question 42
One of the four angles of a rhombus is \(60^\circ\). If the length of each side of the rhombus is 8 cm, then the length of the longer diagonal is

A \(8\sqrt{3}\) cm

B 8 cm

C \(4\sqrt{3}\) cm

D \(\frac{8}{\sqrt{3}}\) cm

Answer: A

Explanation:
Consider a rhombus ABCD, and let the diagonals bisect each other at point O. So, assuming AC to be the longer diagonal,
We are given, \(AB = 8\) cm, angle \(DAB = 60^\circ\).
Consider the triangle AOB,
\(\angle OAB = 30^\circ\) (diagonal of a rhombus bisects the angle)
Also,
\(\angle AOB = 90^\circ\) (diagonals of a rhombus bisect each other at right angles)
So triangle AOB is right angled at O. Hence,
\(\cos 30^\circ = OA/AB\)
\(OA = AB \times (\sqrt{3}/2)\)
\(OA = 8 \times (\sqrt{3}/2)\) cm.
Since, longer diagonal \(AC = 2 \times OA\)
therefore, \(AC = 8\sqrt{3}\) cm

Question 43
If the arcs of a same length in two circles subtend angles of \(60^\circ\) and \(75^\circ\) at their centres, the ratio of their radii is

A 3 : 4

B 4 : 5

C 5 : 4

D 3 : 5

Answer: C

Explanation:
Let the length of the circle be \(L\)
Angle of the circle \(1 = 60^\circ\)
Angle of the circle \(2 = 75^\circ\)
Let the radius be \(r_1\) and \(r_2\)
Since $L$ is same for both the circles,
\[ r_1 \times \frac{\pi}{3} = r_2 \times \frac{\pi}{12} \]
\[ r_1 : r_2 = 5 : 4 \]

**Question 44**

Study the above bar graph showing the production of food grains (in million tons). What is the ratio between the maximum production and the minimum production during the given period?

Graph should be drawn

**Answer:** D

**Explanation:**
Clearly, in the year 2007, maximum production of 100 mil tonnes is observed. While in the year 2008, minimum production of 40 mil tonnes is observed. Hence, the ratio is 100:40 = 5:2

**Instructions**
Study the following Histogram and answer the following questions.
Question 45

The total number of students involved in the data is

A 33
B 32
C 43
D 42

Answer: A

Explanation:
Total no. of students involved in the data is 4 +6 +10+ 8+ 5 = 33.

Question 46

The maximum number of students got the marks in the interval of

A 10-20
B 20-30
C 30-40
D 40-50

Answer: B

Explanation:
Clearly, the maximum no. of 10 students got in the interval of 20-30 marks

Question 47

The least number of students got the marks in the interval

A 40-50
B 20-30
C 10-20

Downloaded from cracku.in
Question 48
The ratio of the students obtaining marks in the first and last interval is

A  5 : 4
B  6 : 5
C  4 : 5
D  3 : 4

Answer: C

Explanation:
The first interval of 10 marks is achieved by 4 students and the first interval is achieved by 5 students. Hence the required ratio is 4:5

Instructions
For the following questions answer them individually

Question 49
Cost estimated by a family in renovation of its house Total cost estimate Rs. 2,40,000

During the process of renovation the family actually incurs miscellaneous expenditure of Rs. 20,400. The miscellaneous expenditure incurred by the family is what percent of the total estimated cost?

A  9.5
B  9
C  8.5
D  10.5
E  None of the above

Answer: C
Question 50

In a certain country, allocations to various sectors of the yearly budget per Rs.1000 crores are represented by this pie-diagram. The expenditure (in Rs.) on Agriculture is

A 250 crores  
B 150 crores  
C 300 crores  
D 200 crores  

Answer: D

SSC CGL Free Mock Test

Verbal

Instructions

In the following questions, four words are given in each question, out of which only one word is correctly spelt. Find the correctly spelt word as your answer.

Question 51

151

A humorous  
B humourous  
C humorus  
D humourus  

Answer: A

125 SSC CGL Mocks for just Rs. 199

Question 52

152
In the following questions, you have two passages with 5 questions in each passage. Read the passages carefully and choose the best answer to each question out of the four alternatives.

Pidgins are languages that are not acquired as mother tongue and that are used for a restricted set of communicative functions. They are formed from a mixture of languages and have a limited vocabulary and a simplified grammar. Pidgins serve as a means of communication between speakers of mutually unintelligible languages and may become essential, in multilingual areas. A creole develops from a pidgin when a pidgin becomes the mother tongue of the community. To cope with the consequent expansion of communicative functions the vocabulary is increased and the grammar becomes more complex. Where a Creole and the standard variety of English coexist, as in the Caribbean, there is a continuum from the most extreme form of Creole to the form that is closest to the standard language. Linguists mark off the relative positions on the Creole continuum as the 'basilect' (the furthest from the standard language), the 'mesolect', and the 'acrolect'. In such situations, most Creole speakers can vary their speech along the continuum and many are also competent in the standard English of their country.

**Question 53**
A pidgin develops in a situation when

A. Different and mutually unintelligible languages exist side by side  
B. A Creole becomes the mother tongue of a linguistic community  
C. A language with restricted vocabulary undergoes an expansion in grammar and vocabulary  
D. Two similar languages are mixed to create a new language

**Answer:** A

**Question 54**
According to the given passage a pidgin becomes a Creole when

A. It ceases to be means of communication  
B. It becomes the mother tongue for a new generation of speakers  
C. Its vocabulary undergoes some kind of change  
D. Two or more languages are mixed with an existing pidgin

**Answer:** B

**Question 55**
According to the passage, a Creole continuum is

A. A linguistic term for the mixture of more than two languages  
B. A scale which measures the linguistic competence of the speaker

**SSC CGL Previous Papers (DOWNLOAD PDF)**

Downloaded from cracku.in
C A scale in which the proximity of the Creole to the standard language is measured

D A record of the continuous history of Creole

Answer: C

Question 56
According to the passage ‘basilect’ means

A An impure form of a Creole

B A form of Creole which is furthest from the standard language

C A form of creole which has an extended vocabulary

D A form of creole which is very close to the standard language

Answer: B

Question 57
Find out a word in the passage which is opposite in meaning to the word ‘Simplified’

A Complex

B Expansion

C Restricted

D Consequent

Answer: A

25 SSC CHSL Mocks for just Rs. 149

Instructions

There were four of us - George, and William Samuel Harris, and myself, and Montmorency. We were sitting in my room, smoking and talking about "how bad we were - bad from a medical point of view I mean, of course. We all were all feeling seedy, and we were getting quite nervous about it. Harris said he felt such extraordinary fits of giddiness come over him at times, that he hardly knew what he was doing; and then George said that he had fits of giddiness too, and he hardly knew what he was doing. With me, it was my liver that was out of order. I knew it was my liver that was out of order, because I had just been reading a patent liver-pill circular, in which were detailed the various symptoms by which a man could tell when his liver was out of order. I had them all.

It is a most extraordinary thing, but I never read a patent medicine advertisement without being impelled to the conclusion that I am suffering from the particular disease therein dealt with in its most virulent form. The diagnosis seems in every case to correspond exactly with all the sensations that I have ever felt.

Question 58
The four felt down and out because

A the room was too smoky

B they could never read patent medicine advertisement

C they thought they were ill

D they had experienced a most extraordinary thing

Answer: C
Question 59
Whenever the speaker read a liver pill circular

A he suffered from an extraordinary surge of giddiness
B he felt sure that he had a liver disorder
C he felt the urge to smoke
D All of the above
Answer: B

Question 60
The author of the above passage seems to be suffering from

A fits of morbid depression without real cause
B an abnormal anxiety about his health
C melancholia
D an unnecessarily dark, gloomy and pessimistic attitude of life
Answer: D

Question 61
Harris was troubled by

A symptom of vertigo
B garrulity
C tribulation
D frailty
Answer: A

Question 62
The word which is closest in meaning to virulent is

A fantastic
B vital
C viral
D fatal
Answer: D

Explanation:
Virulent means something deadly or fatal.

Instructions
In the following questions, some of the sentences have errors and some have none. Find out which part of a sentence has an error. The number of that part is your answer. If there is no error, your answer is (D) i.e., No error

Question 63
I whistled thrice (A)/ with full might and raise my arms (B)/ towards the sky. (C) / No error (D)

A A
B B
C C
D D

Answer: B

Explanation:
The error is in the B part of the sentence.
Replace 'raise' with 'raised'.
As the sentence is in the past tense.
Whistled (verb) is in the past form.
So, raise should also be the past form.

Question 64
Science and religion (A)/ are both necessary for man and for their (B)/ outer and inner self respectively. (C)/ No error (D)

A A
B B
C C
D D

Answer: B

Explanation:
The error is in part B of the sentence.
use both for man and their in place of both necessary
Both" should be placed near the word it modifies.
In the sentence both modifies man and their outer and inner self that's why it should be placed near the word "man".

Question 65
At certain seasons (A), some areas on Mars (B)/ is subject to strong winds. (C)/ No error (D)

A A
B B
C C
D D

Answer: C
Explanation:
The error is in the part C Replace ‘is’ with ‘are’.
Subject (areas) is in plural form so verb should also be in plural form.
So usage of ‘are’ will be correct.

Question 66
As an artist (A)/ Raju is an good (B)/, if not better than, Ramesh. (C)/ No error (D)

A A
B B
C C
D D
Answer: B

Explanation:
Part B is having error in it.
An is used wrongly here. Instead of an, so good or very good should be used.

1500 + Free Must Solved SSC Questions (With Solutions)

Question 67
The scientists (A)/ could not hardly (B)/ complete all the experiments, (C)/ No error (D)

A A
B B
C C
D D
Answer: B

Explanation:
Part B is having error in it.
Could not and hardly means the same thing.
Here both the words are used together and it’s called superfluous.
To correct the sentence remove either ‘could not’ or ‘hardly’.

Instructions
In the following questions, sentences are given with blanks to be filled in with an appropriate words(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four.

Question 68
Google is one of the most popular search engines, it is ______ by the internet users.

A utilized
B effected
C examined
D flabbergasted

Answer: A

Explanation:
Utilized means to be used.
Effected means out come of the cause.
Examined means to observe carefully.
Flabbergasted means Appalled, annoyed, exhausted or disgusted.
So utilised Best fits the given sentence.

Question 69
Raj was tired of Puja’s ______ approach, so he asked her to make her final decision by that evening.

A silly - willy
B dilly - dally
C wasting
D dilly - nally

Answer: B

Explanation:
Dilly-Dally Means to waste time.
These kind of words are formed by Reduplication of the actual words.
No other option suits the sentence and they don’t give any proper meaning.

General Science Notes for SSC CGL

Question 70
Ria is ______ at speaking languages. It is difficult to ------- one puppy for animal shelter.

A adept, adapt
B adapt, adapt
C adept, adopt
D adapt, adopt

Answer: C

Explanation:
The correct answer is option number is -C.
Adept - well skilled.
Adopt -to take by choice into relationship as child, pet etc.
Meaning of adapt -to make, suitable, to fit by alternation.

Question 71
School days are considered to be the best years of your life. When my ______ year in school began, I began to think of those past enjoyable days and of my future also.

A penultimate
B absolute
C integral
D termination

Answer: D

Explanation:
Penultimate means 'last but one'.
Absolute means 'unconditional'
Integral means necessary or not removable.
Termination means discontinue, stop or break off.
Here the sentence indicates the debarment of a year. So option D is correct answer.

Question 72
Being ________, the judge gave a favourable verdict.

A sagacious
B pugnacious
C malicious
D tenacious

Answer: A

Explanation:
The correct choice is -A.
Sagacious- having /showing keen discernment, sound judgement.
The sentence implies here that because of good judgement he gives good verdict.
Tenacious- holding together, having good memory.
Malicious- evil, harmful.
Pugnacious- Aggressive, hostile.
So the correct choice is Sagacious.

Free SSC Study Material (18,000 Solved Questions)

Instructions
In the following questions, out of the four alternatives, choose the one which is best expresses the meaning of the given word.

Question 73
Garrulous

A talkative
B sedative
C vocative
D positive

Answer: A
Question 74
Tinsel
A  tinkle  
B  decoration  
C  tin  
D  colourful  
**Answer: B**

Question 75
Labyrinth
A  meandering  
B  rotating  
C  pacing  
D  wriggling  
**Answer: A**

**Instructions**
In the following questions, choose the word opposite in meaning to the given word.

Question 76
Cordial
A  fast  
B  heartfelt  
C  friendly  
D  hostile  
**Answer: D**

Question 77
Instinctive
A  innate  
B  rational  
C  inherent  
D  inborn  
**Answer: B**
Question 78
Venial

A minor
B pardonable
C unpardonable
D clean

Answer: C

Instructions
In the following questions, four alternatives are given for the Idiom/Phrase printed in bold in the sentence. Choose the alternative which best express the meaning of the Idiom/Phrase.

Question 79
Hard work plays in the long run.

A always
B over a period of time
C indefinitely
D never

Answer: B

Question 80
I felt a fish out of water among the lawyers.

A special
B happy
C uncomfortable
D proud

Answer: C

Question 81
The Cauvery water issues led to apple of discord between the two Governments.

A cause of anger
B cause of hatred
C cause of quarrel
D cause of animosity

Answer: C
Question 82
The construction remains unfinished and the workers have let the grass grow under their feet.

A  grown grass all over the lawn
B  gone on a luxury tour
C  delay doing the work
D  demanded more benefits

Answer: C

Question 83
The police smelt the rat behind the death of the girl.

A  got very much confused
B  identified the cause of death
C  suspected that something is fishy or wrong
D  jumped to the conclusion

Answer: C

Explanation:
Smell the rat means something is wrong.

Instructions
In the following questions, a sentence / part of the sentence is printed in bold. Below are given alternatives to the bold sentence / part of the sentence at (A), (B) and (C) which may improve the sentence. Choose the correct alternative. In case no improvements is needed, your answer is (D)

Question 84
The disparity of the GDP between the rich and the poor has broadened in the last some decades.

A  have widened 'in the last some decades
B  has widened in the last few decades
C  have broadened in the last few decades
D  No improvement

Answer: B

Explanation:
The correct choice is B
Some - it is used with uncountable & countable noun.
Whereas Few is used for countable nouns.
Last few decades is the correct expression.
Question 85
How is beyond my understanding, the boy could fall into the ditch.

A How the boy could fall into the ditch is beyond my understanding
B beyond my understanding is how the boy could fall into the ditch
C How could the boy fall into the ditch is beyond my understanding
D No improvement

Answer: A

Explanation:
The correct choice is A.
After `how' there should be the part which qualifies `how'.
So how the boy could fall into the ditch
after that verb `is' will come and then the remaining part of the sentence.

Question 86
The pioneer spacecraft went beyond Pluto.

A made its way past
B went across
C went after
D No improvement

Answer: A

Question 87
The firm buys frozen seafood in bulk, packs it into smaller pouches and then they sell them to the local grocery stores.

A it sells them
B sell them
C they sell the pouches
D No improvement

Answer: A

Explanation:
The correct choice is A.
The firm is the subject so the correct pronoun should be `It'.

SSC CHSL Previous Question papers (download pdf)
C are expected
D No improvement

**Answer:** C

**Explanation:**
The correct choice is C.
Expected to - means anticipate, to hope for.
Meant - to intend, to plan to do something.
Intend - to stretch or extend
Suggested - to recommend.
So only option C best fits here

**Question 89**
Fuji’s invention of super computer will be enable to make Japan supercede America in computer technology.

A will make Japan
B will enable Japan
C can make Japan
D No improvement

**Answer:** B

**Explanation:**
The correct choice is B.
Will enable Japan is the correct construction.
The sentence seems to imply that Fuji’s invention will enable Japan to replace America in case of computer technology.

**Question 90**
I could never repay the debt I owe to my place of study.

A Alma Mater
B Motherland
C Place of worship
D No improvement

**Answer:** A

**Free SSC Study Material (18,000 Solved Questions)**

**Question 91**
She cries all the time.

A mostly everytime
B Day in and day out
C pretty frequently
No improvement

Answer: D

Explanation:
The given sentence is grammatically correct.
The meaning of all the time - constantly or very frequently.
Day in & day out - It means on every day or on each day but ultimately in the sense of all the time.
Pretty frequently- something often happens, or that something happens a lot

Question 92
For a week last month, the team’s 20 players were stranded because the Government-issued passport is not up to international standards.

A Government-issued passports were not up to international standards
B Government-issued passports are not up to international standards
C The passports issued by the government were not up to international standards
D No improvement

Answer: A

Explanation:
The correct answer is option number A
The sentence is in the past tense.
We can identify that from usage if `for a week last month & were'
So as per the rule of parallelism, usage if 'is' will be wrong. So replace 'is' with 'were'

Question 93
Since July 2008, our customers will be able to use the ATM network of BBY Bank, the bank that was acquired by us during that year.

A have been able to use
B were using
C will have been able to use
D No improvement

Answer: A

Explanation:
The correct answer is option number A.
Since is used to show action taken place from past to present.
The correct sentence will be 'have been able to use'.
Present perfect tense is used to express an action which begin in past & continued at the month of speaking.
The sentence implies here that From July 2008, customers have been able to use the ATM of BBY bank which was acquired by them.
Question 94
One who is unaffected or indifferent to joy, pain, pleasure or grief

A Tolerant  
B Resigned  
C Passive  
D Stoic  
Answer: D

Question 95
A person who is greatly respected because of wisdom

A veracious  
B vulnerable  
C venerable  
D verger  
Answer: C

Question 96
An excessively morbid desire to steal

A stealomania  
B kleptomania  
C cleftomania  
D keptomania  
Answer: B

Question 97
Prohibited by law or treaty from being imported or exported

A contraband  
B smuggled  
C counterfeit  
D forged  
Answer: A

Question 98
Intentional destruction of racial groups
A regicide
B genocide
C homicide
D fratricide
Answer: B

Question 99
A person in a vehicle or on horseback escorting another vehicle
A Navigator
B Escort
C Outrider
D Security
Answer: B

SSC CGL Free Mock Test

Question 100
A person specially interested in the study of coins and medals.
A medalist
B coinist
C numismatist
D numerist
Answer: C
Explanation:
A person specially interested in the study of coins and medals is called numismatist.

125 SSC CGL Mocks for just Rs. 199

General Awareness

Instructions
For the following questions answer them individually

Question 101
Solids which conduct electricity at higher temperature but not lower temperature are called
A super-conductor
B metallic-conductor
C semi-conductor
D insulator
Question 102
Which atomic particle has greatest mass?
A electron
B proton
C neutron
D hydrogen nucleus
Answer: C

Question 103
A television channel is characterised by
A frequency of transmitted signal
B velocity of transmitted signal
C physical dimension of television screen
D size of picture tube
Answer: A

Question 104
The first computer mouse was built by
A Douglas Engelbart
B William English
C Daniel Coogher
D Robert Zawacki
Answer: A

Question 105
An organization’s profitability depends on
A Quality of data processed
B Quantity of data processed
C Speed of the processing data
D Both (a) and (c)
Answer: C
Question 106
The density of water is 1 g/cc. This is strictly valid at

A 0 C
B 4 C
C 25 C
D 100 C

Answer: B

Question 107
The process of photosynthesis involves conversion of

A chemical energy into radiant energy
B chemical energy into mechanical energy
C solar energy into chemical energy
D mechanical energy into solar energy

Answer: C

Question 108
A colloidal system in which a liquid is dispersed in a liquid is called

A gel
B emulsion
C sol
D precipitate

Answer: B

Question 109
The antiseptic compound present in dettol is called

A Iodine
B Enloroxylenol
C Biothional
D Cresol

Answer: B
Question 110
As per the TRIPS Agreement 1994, a good originating from a region with specific character / quality / reputation is covered / to be protected under the IPR as

A Patent
B Trademark
C Trade secret
D GI (Geographic Indicator)

Answer: D

Question 111
Which of the following crop cultivation is banned by the Hon'ble Supreme Court of India?

A Lathyrus (Khesari)
B Genetically modified brinjal
C Bt cotton for export
D Bt cotton local use

Answer: A

Question 112
Ice glacier’s melting is a common phenomenon linked to the rise in seawater level. The glacier are predominantly present in

A Greenland
B Antarctica
C Himalayas
D Arctic

Answer: B

Question 113
Who is known for establishing the “Anand Van”?

A Jubilant Buddha
B H. N. Bahuguna
C Baba Amte
D Motilal Nehru

Answer: C
Question 114
The civilian Airport of highest altitude is in ...... .

A Tibet
B Nepal
C India
D China

Answer: D

Explanation:
The civilian Airport of the highest altitude is in China. It is located at an elevation of 4,411m.

Question 115
Genomic (DNA) studies in camel have been completed recently by the scientists of

A South Africa
B India
C China
D Pakistan

Answer: D

Question 116
International Simon Bolivar Prize was recently awarded to Aung San Suu Kyi by the government of

A Mauritius
B China
C Venezuela
D Cuba

Answer: C

General Science Notes for SSC CGL

Question 117
BCCI conferred “Col. C. K. Naydu Lifetime Achievement Award” during 2012 to

A Sachin Tendulkar
B M. S. Dhoni
C VVS Laxman
D Sunil Gavaskar

Answer: D
Question 118
Air quality depicting PM 2.5 is more hazardous to
A Archeological Monuments
B National Parks
C Botanical Gardens
D Old Men and Women
Answer: D

Question 119
Which of the following is not a fundamental right as per the Indian Constitution?
A Right to Education
B Right to Information
C Right to Speech
D Right to Life
E None of the above
Answer: E

Explanation:
There are six fundamental rights as per the Indian Constitution which are Right to Equality, Right to Freedom, Right against Exploitation, Right to Freedom of Religion and Right to Constitutional Remedies.

Free SSC Study Material (18,000 Solved Questions)

Question 120
Who is custodian of the Indian Constitution?
A President of India?
B Chief Justice of India
C Prime Minister of India
D Chairman of Rajya Sabha
Answer: B

Question 121
Piped Natural Gas (PNG) is used for
A Mining
B Welding
C Anaesthesia
D Cooking
Answer: D
Question 122
Greenpark Stadium is in

A  Bengaluru  
B  Dehradun  
C  Chandigarh  
D  Kanpur  
Answer: D

Question 123
Rowlatt Act 1919 was enacted during the period of

A  Lord Chelmsford  
B  Lord William  
C  Lord Minto  
D  Lord Bentinck  
Answer: A

Question 124
Panchayati Raj System was implemented first in which pair of states

A  Andhra Pradesh and Rajasthan  
B  Assam and Bihar  
C  Arunachal Pradesh and Uttar Pradesh  
D  Punjab and Chandigarh  
Answer: A

Question 125
Human Environment Conference-1972 was held at

A  Stockholm  
B  Paris  
C  Geneva  
D  Australia  
Answer: A
Question 126
‘Gold’ is mainly related to

A Local market
B National market
C International market
D Regional market

Answer: C

Question 127
Bilateral monopoly refers to the market situation of

A two sellers, two buyers
B one seller and two buyers
C two sellers and one buyer
D one seller and one buyer

Answer: D

Question 128
The economist who believed that unemployment is impossible and that market mechanism has a built in regularly system to meet any ups and downs

A J. M. Keynes
B Ohlin
C J. B. Say
D Galbraith

Answer: C

Question 129
Constituent Assembly of India was formulated on the recommendation of

A Wavel plan
B Cripps Mission
C August Offer
D Cabinet Mission

Answer: D

Question 130
Which of the following is an essential element of the state?
A Sovereignty
B Government
C Territory
D All these
Answer: D

Question 131
Which has became a legal right under 44th Constitutional Amendment Act?

A Right to Education
B Right to Property
C Right to Judicial Remedies
D Right to work
Answer: B

SSC CGL Free Online Coaching

Question 132
By which Constitution Amendment Act, Right to Property ceased to remain a fundamental right?

A 44th
B 42nd
C 43rd
D 45th
Answer: A

Question 133
Who said “Truth is the ultimate reality and it is God”?

A Swamy Vivekananda
B Rabindra Nath Tagore
C M. K. Gandhi
D Radhakrishnan
Answer: C

Question 134
Which tribe is associated with the “Tana Bhagat” movement?

A Uraon
B Munda

Downloaded from cracku.in
Question 135
Who founded the Naujawan Bharat Sabha?

A  B. C. Pal
B  G. Subramania Iyer
C  Sardar Bagat Singh
D  Rukmani Lakshmipath

Answer: C

Question 136
The Narendra Mandal or Chamber of Princes was inaugurated in 1921 by

A  Lord Curzon
B  Lord Wellesley
C  Duke of Cannaught
D  Duke of Wellingdon

Answer: C

Question 137
Buddha, Dhamma and Sangha together are known as

A  Triratna
B  Trivarga
C  Trisarga
D  Trimurthi

Answer: A

Question 138
Who was called Lichchavi Dauhita?

A  Chandragupta I
B  Skandagupta
C  Kumaragupta

Downloaded from cracku.in
Question 139
Which hill station is called as the ‘Queen of the Satpuras’?

A Pachmarhi
B Nilgiri
C Mahendragiri
D Cardamom
Answer: A

Question 140
Which national highway connects Delhi and Kolkata via Mathura and Varanasi?

A NH4
B NH2
C NH10
D NH6
Answer: B

Question 141
The country where drip irrigation is more efficiently used is

A India
B Israel
C Sri Lanka
D England
Answer: B

Question 142
Which of the following is an endangered species?

A Black buck
B Blue sheep
C Gangetic dolphin
D Mithun
Answer: B
Question 143
Of the following man-made disasters, which is socially induced?

A Debris Avalanche  
B Salt Water Intrusion  
C Arson  
D Ozone depletion

Answer: C

Explanation:
Arson is socially induced man-made disasters among the given options.

Join SSC Daily Quiz Telegram Group

Question 144
Which endocrine gland is situated in the neck?

A Pancreas  
B Thyroid  
C Pituitary  
D Adrenals

Answer: B

Question 145
The seat of intelligence is situated in the

A cerebrum  
B cerebellum  
C medulla  
D thalamus

Answer: A

Explanation:
Cerebrum is the Part of brain which is also known as seat of intelligence, the prefrontal cortex (PFC) is the cerebral cortex which covers the front part of the frontal lobe. The prefrontal cortex is in charge of abstract thinking and thought analysis, it is also responsible for regulating behaviour.

Question 146
What is the Normal Blood Volume in human adult?

A One litre  
B Three litres  
C Five litres  
D Seven litres
Answer: C

Question 147
The fasting blood glucose level in adults in mg/100 ml is

A  200
B  160
C  100
D  60

Answer: C

Question 148
Entomology is the study of

A  Birds
B  Insects
C  Fossils
D  Fungi

Answer: B

Question 149
Exobiology is a science that deals with

A  extinct forms
B  life in other planets
C  life in the outer space
D  life in the marine habitat

Answer: C

Question 150
In radio-communication, the signals emitted by transmitting antenna are reflected on

A  stratosphere
B  ozonosphere
C  ionosphere
D  troposphere

Answer: C
Instructions
In each of the following questions, which of the following interchange of signs would make the given equation correct?

**Question 151**

\[10 + 10 \div 10 - 10 \times 10 = 10\]

A + and -

B + and ÷

C + and ×

D ÷ and +

**Answer:** C

**Explanation:**
Expression: \(10 + 10 \div 10 - 10 \times 10 = 10\)

(A): \(10 - 10 \div 10 + 10 \times 10\)
\[= 10 - 1 + 100 = 109 \neq 10\]

(B): \(10 \div 10 + 10 - 10 \times 10 = 10\)
\[= 1 + 10 - 100 = -89 \neq 10\]

(C): \(10 \times 10 \div 10 - 10 + 10 = 10\)
\[= 10 - 10 + 10 = 10\]

(D): \(10 \div 10 + 10 - 10 \times 10 = 10\)
\[= 1 + 10 - 100 = -89 \neq 10\]

\(\Rightarrow\) Ans - (C)

**Question 152**

\[(8 - 8) + 8 \times 32 = 64\]

A ×, +, −

B −, ÷, +

C +, ÷, +

D +, ÷, ×

**Answer:** D

**Explanation:**
Expression: \((8 - 8) + 8 \times 32 = 64\)

(A): \(x, +, −\)
\[\Rightarrow (8 \times 8) + 8 - 32\]
If 'R' stands for '-', 'A' stands for '+', 'B' stands for ÷, then 'C' stands for ×, then what is the value of the given equation? (BODMAS rule will not be applicable)

25 A 37 C 2 B 4 R 1 = ?

A 32
B 35
C 30
D 27

Answer: C

Explanation:
Expression: 25 A 37 C 2 B 4 R 1 = ?
=> 25 + 37 × 2 ÷ 4 - 1

Without applying BODMAS rule,
= \( \frac{62 \times 2}{4} - 1 \)
= 31 - 1 = 30
=> Ans - (C)

Instructions
In each of the following questions, select the related letter/word/number from the given alternatives.

Question 154

Chisel : Sculptor : : Harrow : ?

A Gardener
B Mason
C Blacksmith
D Guard

Answer: A

Explanation:
Expression: Chisel : Sculptor : : Harrow : ?
A sculptor is a person who uses chisel to make sculptures, similarly, a gardener uses harrow to plough field.

=> Ans - (A)

**SSC CGL Tier-2 Previous Papers PDF**

**Question 155**

Moon : Satellite : : Earth : ?

A  Sun  
B  Planet  
C  Solar system  
D  Round  

**Answer:** B

**Explanation:**
Expression : Moon : Satellite : : Earth : ?

Just like moon is a satellite, in a similar manner, earth is a planet.

=> Ans - (B)

**Question 156**

BJCI : JBIC : : CXDW : ?

A  JCDU  
B  BCJU  
C  EVFU  
D  XCWD  

**Answer:** D

**Explanation:**
Expression : BJCI : JBIC : : CXDW : ?

The first two and the last two letters are swapped in the first word.

Similarly, CX DW = XC WD

=> Ans - (D)

**Question 157**

AB : NO : :LM : ?

A  OL  
B  KP  
C  PK  
D  YZ  

**Answer:** D

**Explanation:**
Expression : AB : NO : :LM : ?

Downloaded from cracku.in
A + (14 letters) = N and B + (14 letters) = O
Similarly, LM + (14 letters) = YZ
=> Ans - (D)

SSC CGL Important Questions PDF

Question 158
AG : IO : : EK : ?

A  LR
B  MS
C  PV
D  SY

Answer: B

Explanation:
Expression : AG : IO : : EK : ?
A + (8 letters) = I and G + (8 letters) = O
Similarly, EK + (8 letters) = MS
=> Ans - (B)

Question 159
25 : 175 : : 32 : ?

A  150
B  170
C  162
D  160

Answer: D

Explanation:
Expression : 25 : 175 : : 32 : ?
=> 25 \times (2 + 5) = 25 \times 7 = 175
Similarly, 32 \times (3 + 2) = 32 \times 5 = 160
=> Ans - (D)

Instructions
In each of the following questions, select the one which is different from the other three responses.

Question 160
A  Shimla
B  Darjeeling
C  Ooty
D  Agra

Answer: D
Among the given options, Shimla, Darjeeling and Ooty are hill stations while Agra is not.
=> Ans - (D)

Question 161

A Foal
B Hen
C Lamb
D Leveret

Answer: B

Explanation:
Foal, lamb and leveret are the young ones of horse, sheep and hare respectively, while hen is a grown up.
=> Ans - (B)

Question 162

A BADC
B XWZY
C VUST
D NMPO

Answer: C

Explanation:
Dividing the words in groups of 2 and then swapping letters in each group, we get:
BA DC - ABCD
XW ZY - WXYZ
VUST - UVTS
NMPO - MNOP
Clearly, only the third option is not part of the alphabetical order.
=> Ans - (C)

Question 163

A DCFG
B FEHI
C JILM
D HGJL

Answer: D

Explanation:
Dividing the words in groups of 2 and then swapping letters in the first group, we get:
DC FG - CD FG
Clearly, only in the fourth option, one letter is missing between J and L.

=> Ans - (D)

**Question 164**

A (1, 0)
B (2, 3)
C (5, 64)
D (4, 27)

**Answer:** B

**Explanation:**
The pattern is: \([n, (n-1)^3]\)

\((5, 64) = (5, 4^3)\)

Similarly, \((4, 27) = (4, 3^3)\)

But \((2, 1^3) = (2, 1)\)

=> Ans - (B)

**Question 165**

A (96, 24)
B (39, 18)
C (81, 54)
D (82, 64)

**Answer:** D

**Explanation:**
Except \((82, 64)\) in all the other number pairs, both the numbers are multiples of 3.

=> Ans - (D)

**Instructions**
For the following questions answer them individually

**Question 166**

Which one of the given responses would be a meaningful order of the following words in ascending order?

A. Accommodation
B. Perception
C. Scheme formation
D. Assimilation
E. Sensation

A 1, 2, 3, 5, 4
B 5, 2, 3, 4, 1
Free SSC Study Material (18,000 Solved Questions)

Question 167
Which of the given responses be a meaningful order of the following starting from the inner layer?
A. Hydrosphere
B. Atmosphere
C. Biosphere
D. Lithosphere

A 4,1,3,2
B 2,4,3,1
C 3,1,2,4
D 1,2,3,4

Answer: A

Explanation:
Meaningful order starting from the inner layer is:
Lithosphere -> Hydrosphere -> Biosphere -> Atmosphere
≡ 4,1,3,2
=> Ans - (A)

Instructions
In each of the following questions, a series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

Question 168
EJO, FKP, GLQ, HMR, ?

A  ABC
B  DEF
C  MNO
D  INS

Answer: D

Explanation:
Each letter of the respective words are in alphabetical order.
First letter : E,F,G,H - I
Question 169

BOCNDME??

A. LF
B. OP
C. KL
D. IN

Answer: A

Explanation:
Expression: B O C N D M E ??
Alternate number of letters form a sequence.
B, C, D, E - F
O, N, M - L
Thus, correct sequence = B O C N D M E L F
=> Ans - (A)

Question 170

7, 2 = 59; 5, 3 = 28; 9, 1 = 810; 2, 1 = 13; 5, 4 = ?

A. 19
B. 9
C. 20
D. 239

Answer: A

Explanation:
The first digit is formed by subtracting the numbers and the second (and third) digit(s) is formed by adding the numbers.
7, 2 = (7 - 2), (7 + 2) = 59
and 9, 1 = (9 - 1), (9 + 1) = 8 10
Similarly, 5, 4 = (5 - 4), (5 + 4) = 19
=> Ans - (A)

Question 171

120, 440, 960, 1680, ?

A. 2600

Answer: A

Explanation:
The first digit is formed by subtracting the numbers and the second (and third) digit(s) is formed by adding the numbers.
7, 2 = (7 - 2), (7 + 2) = 59
and 9, 1 = (9 - 1), (9 + 1) = 8 10
Similarly, 5, 4 = (5 - 4), (5 + 4) = 19
=> Ans - (A)
B 3240
C 3040
D 2400

Answer: A

Explanation:
The difference of these numbers forms a pattern.
440-120 = 320
960-440 = 520
1680-960 = 720
Thus, the next difference should be 920, => Next number = 1680+920 = 2600
=> Ans - (A)

Instructions
For the following questions answer them individually

Question 172
81 64 16
9 49
36 16 25
108 96 ?

A 230
B 140
C 120
D 410

Answer: B

Explanation:
First column = \(\sqrt{81} \times \sqrt{4} \times \sqrt{36}\)
= 9 \times 2 \times 6 = 108

Similarly, second column = \(\sqrt{64} \times \sqrt{9} \times \sqrt{16}\)
= 8 \times 3 \times 4 = 96

\therefore\) Third column = \(\sqrt{16} \times \sqrt{49} \times \sqrt{25}\)
= 4 \times 7 \times 5 = 140
=> Ans - (B)

Question 173
25 5 5
30 5 6
35 ? 5

A 5
B 4
C 6
D 7

Answer: D

Explanation:
In the first row, \(25 = 5 \times 5\)
Similarly, in the second row, \(30 = 5 \times 6\)
\(\therefore\), in the third row, \(35 = x \times 5\)
\(\Rightarrow x = \frac{35}{5} = 7\)
\(\Rightarrow\) Ans - (D)

Question 174

A 135
B 235
C 347
D 407

Answer: D

Explanation:
In the first column, \((24 \times 2) + 5 = 53\)
Similarly, in the second column, \((51 \times 4) + 7 = 211\)
\(\therefore\), in the third column, \((67 \times 6) + 5 = 407\)
\(\Rightarrow\) Ans - (D)

Question 175

G is fatter than H but not as fat as M. Q is also not fat as M. Who is the most lean person in the group?

A Q
B H
C G
D Cannot be determined

Answer: D

Explanation:
G is fatter than H but not as fat as M, \(\Rightarrow M > G > H\)
Q is also not fat as M, \(\Rightarrow M > Q\)
We do not know between Q and H as to who is more fat and thus we cannot determine the most lean person in the group.
\(\Rightarrow\) Ans - (D)
Question 176
A man walks 15 metres south. Then turning to his right he walks 15 metres. Then turning to his left, he walks 10 metres. Again turns to his left and walks 15 metres. How far is he from his initial position?

A 10 m  
B 25 m  
C 15 m  
D 60 m

Answer: B

Explanation:
Let the man be at A initially and his final position is at E.
Thus, AE = 15 + 10 = 25 m
=> Ans - (B)

Question 177
There are five buses M, N, O, P, Q in a row on a road. Bus M is standing at the front and Q is standing at back end. Bus N stands between M and O. Bus P stands between O and Q. Which bus is in the middle of five?

A M  
B P  
C N  
D Q  
E None of the above

Answer: E

Explanation:
Bus M is standing at the front and Q is standing at back end, => M _ _ _ Q
Bus N stands between M and O, => M N O _ Q
Thus, in the remaining position bus P is standing.
∴ Positions of bus: M N O P Q
Bus O is at the middle.
=> Ans - (E)

Question 178
DISTANCE
A DANCE
B STAND
C SANE
D TEASE
Answer: D

Explanation:
The word 'DISTANCE' does not have 2 E's, thus the word TEASE cannot be formed.
=> Ans - (D)

Question 179
RESURRECTIONIST

A TOURIST
B NOISE
C SORCERER
D TENDER
Answer: D

Explanation:
The word 'RESURRECTIONIST' does not have any D, thus the word TENDER cannot be formed.
=> Ans - (D)

Question 180
COMMERCIALISM

A CROME
B LANCER
C MISER
D OSCAR
Answer: B

Explanation:
The word 'COMMERCIALISM' does not have any N, thus the word LANCER cannot be formed.
=> Ans - (B)

Question 181
If DIVINE is coded as AFSFKB, then POWERFUL is coded as

A XLHOJVIM
B MLTBDCRI
C MLWBOCRI

Answer: A

Explanation:
DIVINE coded as AFSFKB
=> D ~ A
=> I ~ F
=> V ~ S

POWERFUL
=> P ~ A
=> O ~ F

Therefore, POWERFUL is coded as AFSFKB, which is XLHOJVIM.
E None of the above

Answer: E

Explanation:
DIVINE <=> AFSKB

The pattern followed is:

<table>
<thead>
<tr>
<th>D</th>
<th>I</th>
<th>V</th>
<th>I</th>
<th>N</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
</tr>
<tr>
<td>A</td>
<td>F</td>
<td>S</td>
<td>F</td>
<td>K</td>
<td>B</td>
</tr>
</tbody>
</table>

Similarly,

<table>
<thead>
<tr>
<th>P</th>
<th>O</th>
<th>W</th>
<th>E</th>
<th>R</th>
<th>F</th>
<th>U</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
<td>(-3)</td>
</tr>
<tr>
<td>M</td>
<td>L</td>
<td>T</td>
<td>B</td>
<td>O</td>
<td>C</td>
<td>R</td>
<td>I</td>
</tr>
</tbody>
</table>

POWERFUL <=> MLTBOCRI

=> Ans - (E)

SSC CHSL Previous Question papers (download pdf)

Question 182
If NOTE is written as PQVG, then TIME is written as

A VQOG
B VKOG
C VOKG
D VGKO

Answer: B

Explanation:
NOTE <=> PQVG

The pattern followed is:

<table>
<thead>
<tr>
<th>N</th>
<th>O</th>
<th>T</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+2)</td>
<td>(+2)</td>
<td>(+2)</td>
<td>(+2)</td>
</tr>
<tr>
<td>P</td>
<td>O</td>
<td>V</td>
<td>G</td>
</tr>
</tbody>
</table>

Similarly,

<table>
<thead>
<tr>
<th>T</th>
<th>I</th>
<th>M</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+2)</td>
<td>(+2)</td>
<td>(+2)</td>
<td>(+2)</td>
</tr>
<tr>
<td>V</td>
<td>K</td>
<td>O</td>
<td>G</td>
</tr>
</tbody>
</table>

∴, TIME <=> VKOG

=> Ans - (B)

Question 183
If SMART is coded as UKCPV, then WONDER is coded as
A  YMPPRT
B  YMPBGP
C  YMPBFp
D  YMBPPG

Answer: B

Explanation:
SMART <=> UKCPV
The pattern followed is:

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>A</th>
<th>R</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+2)</td>
<td>(−2)</td>
<td>(+2)</td>
<td>(−2)</td>
<td>(+2)</td>
</tr>
</tbody>
</table>

Similarly,

<table>
<thead>
<tr>
<th>W</th>
<th>O</th>
<th>N</th>
<th>D</th>
<th>E</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+2)</td>
<td>(−2)</td>
<td>(+2)</td>
<td>(−2)</td>
<td>(+2)</td>
<td>(−2)</td>
</tr>
</tbody>
</table>

∴ WONDER => YMPBGP

=> Ans - (B)

Question 184

If ‘+’ stands for ‘multiplication’ ‘−’ stands for ‘division’, ‘÷’ stands for ‘subtraction’, ‘*’ stands for ‘addition’ and ‘×’ stands for ‘greater than’, identify which expression is correct.

A  20 − 4 ÷ 8 < 2 × 26
B  20 × 8 + 15 < 5 ÷ 9 − 8
C  20 < 2 + 10 ÷ 4 − 6 × 100
D  20 < 5 + 25 ÷ 10 − 2 × 96

Answer: C

Explanation:
(A): 20 − 4 ÷ 8 < 2 × 26 ⇔ 20 + 4 − 8 ÷ 2 > 26
L.H.S = 24 − 32 ÷ 2 = 8 which is not greater than R.H.S
(B): 20 × 8 + 15 < 5 ÷ 9 − 8 ⇔ 20 > 8 × 15 ÷ 5 − 9 + 8
R.H.S = 8 × 3 − 1 = 23 which is not less than L.H.S.
(C): 20 < 2 + 10 ÷ 4 − 6 × 100 ⇔ 20 ÷ 2 × 10 − 4 + 6 > 100
L.H.S = 10 × 10 + 2 = 102 which is greater than R.H.S

=> Ans - (C)

Free SSC Study Material (18,000 Solved Questions)

Question 185

One day, Nita left home and cycled 10 m southwards, turned right and cycled 5 m and turned right and cycled 10 m and turned left and cycled 10 m. How many meters will she have to cycle to reach her home straight?
Let Nita be at A initially and her final position is at E.

Thus, AE = 10 + 5 = 15 m

=> Ans - (B)

Question 186

Rajat moves from his office to the canteen straight at a distance of 12 metres. Then he turned left and walked for 2 metres. Then he turns left again and walks straight for 12 metres. How far is he from his office.

A 10 metres
B 12 metres
C 8 metres
D 2 metres

Answer: D

Explanation:

Let Rajat started from A and head north for 12 m to reach B.
His final position is at D.
Thus, AD = 2 m
=> Ans - (D)

Instructions

In each of the following questions, two/four statements are given followed by two/four conclusions I, II, III and IV. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements.
Question 187

Statements:
I. All apples are bananas.
II. All bananas are sweet

Conclusions:
I. Some apples are sweet.
II. Some bananas are apples.

A. Conclusion I follows
B. Conclusion II follows
C. Either conclusion I or II follows
D. Both conclusion I and II follows

Answer: D

Explanation:

Conclusions: All apples are sweets, and thus some apples are also sweets.
Since, all apples are bananas, and thus some bananas are apples.
Thus, both conclusion I and II follows.

=> Ans - (D)

Question 188

Statements:
I. All metals are silver
II. All silver are diamond
III. Some diamonds are gold
IV. Some gold are marbles

Conclusions:
I. Some gold are metals
II. All metals are diamonds
III. Some silver are marble
IV. Some gold are silver

A. Only conclusion I follows
B. Only conclusion II follows
C. Only conclusion III follows

Answer: A

Explanation:

Conclusions:

Latest Job Updates on Telegram - Join here
Only conclusion IV follows

Answer: B

Explanation:

Some gold may not be metals. Some silver may not be marbles. Similarly, some gold is not silver.

All metals are definitely diamonds.

Thus, only conclusion II follows.

=> Ans - (B)

Instructions
For the following questions answer them individually

Question 189

A word is represented by only one set of numbers as given in any one of the alternatives. The set of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered-from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., 'B' can be represented by 01, 31 etc. and 'P' can be represented by 67, 75 etc. Similarly, you have to identify the set for the word 'CARD'.

Matrix I

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>1</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>B</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>C</td>
<td>D</td>
<td>A</td>
<td>E</td>
</tr>
</tbody>
</table>

Matrix II

<table>
<thead>
<tr>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>6</td>
<td>Q</td>
<td>S</td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>7</td>
<td>P</td>
<td>T</td>
<td>R</td>
<td>S</td>
</tr>
<tr>
<td>8</td>
<td>Q</td>
<td>S</td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>9</td>
<td>T</td>
<td>P</td>
<td>S</td>
<td>Q</td>
</tr>
</tbody>
</table>

A 32, 00, 56, 10
B 40, 21, 68, 44
C 11, 33, 57, 22
Answer: C

Explanation:
(A) : 32, 00, 56, 10 - CAQD
(B) : 40, 21, 68, 44 - CARB
(C) : 11, 33, 57, 22 - CARD
(D) : 02, 42, 77, 20 - CARB
=> Ans - (C)

Question 190
Which of the following cubes can be created by folding the given figure?

Answer Figures

(1) (2) (3) (4)

A 1
B 2
C 3
D 4
Answer: B

Explanation:
By folding the squares, E will be the base and C will become the top of the cube.
Similarly, F will face B and D will face A.
Thus, BFE, BEC and EDA cannot be the adjacent sides of the cube.
=> Ans - (B)
Question 191

Two positions of a dice are given. Which number would be at the top when bottom is 2?

A 4
B 1
C 5
D 6

Answer: D
Identify the response figure from which the question figure's pieces have been cut?

Question Figure

Answer Figures

A 1
B 2
C 3
D 4

Answer: D

Explanation:
In the question figure, there are 2 quadrilaterals, one of which is a trapezium and 2 triangles. Only in the last option, there are 2 quadrilaterals, one of which is a trapezium and 2 triangles are given.

=> Ans - (D)
Question 193

In the above figure, the circle stands for employed, the square stands for social worker, the triangle stands for illiterate and the rectangle stands for truthful. Employed, truthful and illiterate social workers are indicated by which region?

A 5
B 4
C 2
D 1

Answer: D

Explanation:
Employed is represented by = 1+2+3+4+5+9
Truthful = 1+4+5+8+10+12
Illiterate = 1+2+3+6+7+8
Social worker = 1+2+5+7+8+10+11
The common sector is = 1
Thus, employed, truthful and illiterate social workers are indicated by region 1.

=> Ans - (D)

SSC CGL Free Mock Test

Question 194
Find the missing numbers.

A  37
B  45
C  47
D  57

Answer: C

Question 195
In the above diagram, parallelogram represents women, triangle represents the sub-inspector of police and circle represents the graduates. Which numbered area represents women graduates sub-inspectors of police?
Answer: B

Explanation:
Women is represented by = 3+4+8+10
Graduates = 3+4+5+10+13
Sub-inspector of police = 3+5+6
The common sector is = 3
Thus, women graduates sub-inspectors of police are indicated by region 3.
=> Ans - (B)

Instructions
In each of the following questions, which answer figure will complete the pattern in the question figure?

Question 196

Question Figure

Answer Figures

(1)  (2)  (3)  (4)
Answer: C

Explanation:
In the answer figure, there should be two 9's and one arc which is represented by the third figure.
=> Ans - (C)

125 SSC CGL Mocks for just Rs. 199

Question 197

A 1
B 2
C 3
D 4

Answer: B

Explanation:
Clearly, top left piece of a square is missing which should have 2 parallel lines.
Figure 2 fits the above description.
=> Ans - (B)
Question 198

From the given answer figures, select the one in which the question figure is hidden/embeded.

Question Figure

Answer Figures

(1)  (2)  (3)  (4)

A  1
B  2
C  3
D  4

Answer: C

Explanation:

The question figure is inscribed in above figure (3) in blue colour.

=> Ans - (C)
Question 199

A piece of paper is folded and punched as shown below in the question figure, indicate how it will appear when opened.

Question Figure

Answer Figures

Answer: D
Question 200

Which of the answer figures is exactly the mirror image of the given pattern of numbers when the mirror is held at MN?

Answer Figures

A

B

C

D

Answer: C

Explanation:
There is a vertical mirror, thus the numbers will be reversed which means the first row will contain the mirror image of 6,4,2 in that order.

Thus, second and fourth options are ruled out.

In the first option, mirror image of 7 is not present there and thus it is also ruled out.

=> Ans - (C)
SSC CGL Previous Papers (DOWNLOAD PDF)

25 SSC CHSL Mocks for just Rs. 149

SSC CGL Tier-2 Previous Papers PDF

SSC CGL Important Questions PDF

1500 + Free Must Solved SSC Questions (With Solutions)

General Science Notes for SSC CGL

Free SSC Study Material (18,000 Solved Questions)

SSC Exam Free Videos (Youtube)

SSC Free Preparation App

Daily Free SSC Practice Set

SSC CGL Free Online Coaching

SSC CHSL Previous Question papers (download pdf)

Free SSC Study Material (18,000 Solved Questions)

Latest Job Updates on Telegram - Join here

Join SSC Daily Quiz Telegram Group