## Ssc Cgl Tier I Previous Year Question Paper Overview

Here, you can solve all the questions asked in Ssc CgI Tier I Previous Year Question Paper on 2022-12-06 in the Morning exam. The detailed solutions are also provided for every previous year question and some of these questions can be asked again in your Ssc CgI Tier I exam. There are 100 questions in the exam and 60 minutes are provided for the Ssc CgI Tier I exam. The Cutoff of the exam was 140 marks hence you should try to score at least 150 marks.

## Ssc Cgl Tier I Previous Year Question Paper : Questions and Solutions

## Question 1 :

The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer. The prisoner was / accused for stealing / from his landlord.

Difficulty : Moderate
Average Time : 52 Seconds

## Options :

1. accused for stealing
2. The prisoner was
3. from his landlord
4. No error

## Solution :

The correct answer is Option 1 i.e. accused for stealing.

- The error in the sentence is in part 2: "accused for stealing."
- The correct preposition to use after the verb "accused" is "of" instead of "for."
- Here, the verb "accused" is followed by the preposition "of" to indicate the crime or offense that the person is being accused of.

Thus, the corrected sentence would be:

The prisoner was accused of stealing from his landlord.
Question 2 :
According to the archaeologists, in Harappan cities, the part to the west was smaller and higher and was known as $\qquad$ .

## Average Time : 60 Seconds

## Options :

1. citadel
2. Olympus
3. lower town
4. colosseum

## Solution :

The correct answer is Option 1 i.e. citadel.
According to the archaeologists, in Harappan cities, the part to the west was smaller and higher and was known as a Citadel.

Indus civilization, also called Indus Valley civilization or Harappan civilization. Harappa was discovered in 1921 by Dayaram Sahni.

## Question 3 :

Four different positions of the same dice are shown, the six faces of which are numbered 1 to 6 . Select the number that will be on the face opposite to the one showing ' 4 '.

## Options:

1. 1
2. 2
3. 3
4. 5

## Solution :

The correct answer is Option 1 i.e. 1.

In the third and fourth dice, 3 is common. So, start rotating either in the clockwise or anticlockwise direction.
Clockwise direction:
Dice 3: 364
Dice 4: 351
So, 4 is opposite to 1 .
Anticlockwise direction:
Dice 3: 346
Dice 4: 315
So, 4 is opposite to 1 .
Hence, option 1 is the correct answer.

## Question 4 :

A solid hemisphere has radius 21 cm . It is melted to form a cylinder such that the ratio of its curved surface area to total surface area is $2: 5$. What is the radius (in cm ) of its base (take $=22 / 7$ )?

Average Time : 55 Seconds

## Options :

1. 23
2. 21
3. 17
4. 19

## Solution :

The correct answer is Option 2 i.e. 21.

## Given:

Radius of hemisphere $=21 \mathrm{~cm}$
Ratio of CSA and TSA of cylinder $=2: 5$.

## Concept Used:

Volume of hemisphere $=\backslash\left(\{2\right.$ lover 3$\} \backslash$ pi $\left.r^{\wedge} 3 \backslash\right)$

Volume of cylinder $=\backslash\left(\mid p i r^{\wedge} 2 h \backslash\right)$
CSA of cylinder $=\backslash(2$ pi rh $\backslash)$
TSA of cylinder $=\backslash(2$ lpi $r(r+h) \backslash)$

## Explanation:

According to the given question,
<br>(\{ 2 pi rh lover 2|pi $r(r+h)\}=\{2$ lover 5\} $\}$ )
<br>(\{h lover ( $r+h$ ) \}=\{2 lover 5\}〉)
$5 h=2 r+2 h$
$2 \mathrm{r}=3 \mathrm{~h}$
$r=\(\{3$ lover 2\}h<br>) h = <br>(\{2 \over 3\}r<br>)
Now, <br>(|pi r^2h $)=\backslash\left(\{2\right.$ lover 3$\left.\} \backslash p i(21)^{\wedge} 3 \backslash\right)$
$\backslash\left({ }^{\wedge} 2\right.$ ltimes $\left\{2\right.$ lover3\}rl) $=\backslash\left(\{2\right.$ lover 3$\left.\}(21)^{\wedge} 3 \backslash\right)$
$r^{3}=21^{3}$
$r=21$
HEnce the radius of the ylinder is 21 cm .

## Question 5 :

$A, B$ and $C$ can do a piece of work in 11 days, 20 days and 55 days respectively. If $B$ works daily and is supported by $A$ and $C$ on alternate days beginning with $A$, then in how many days will the work be finished?

## Options :

1. 10
2. <br>(9\{\{1\} \over 3$\} \backslash)$
3. 12
4. 8

## Solution :

The correct answer is $\mathbf{2}$ i.e. $\backslash(9\{\{1\}$ lover 3$\} \backslash)$

## Concept Used:

$\backslash($ Efficiency = \{total\ work lover number\of days\}$\}$ )

## Explanation:

Let the total work done be $\operatorname{LCM}$ of $(11,20,55)=220$ units.
Now, efficiency of $\mathrm{A}=\backslash(\{220$ lover 11\} $=20 \backslash$ units/day $)$ )
Efficiency of $B=\backslash(\{220$ lover 20$\}=11 \backslash$ units/day $\backslash)$
Efficiency of $\mathrm{C}=\backslash(\{220$ lover 55 $\}=4 \backslash$ units/day $\backslash)$
According to the given question, work done is as follows
$(B+A)+(B+C)+(B+A)+(B+C) \ldots$ so on
So, work done in 2 days $=(11+20)+(11+4)=46$ units
Then, work done in $(2 \times 4)=8$ days $=(46 \times 4)=184$ units
Now $(B+A)$ work for 1 day, work done in 9 days $=184+31=215$ units
Remaining work to be done $=220-215=5$ units
So, $(B+C)$ complete 15 units in one day, they will complete 5 units in $\backslash(1$ lover3l) days.
Hence the total time taken to complete the whole work is $\backslash(9\{\{1\}$ lover 3$\} \backslash)$ days.

## Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. I will tell you what I will do and what I will not do. I will not (1) $\qquad$ that in which I no longer believe, (2) $\qquad$ it calls itself my home, my fatherland, or my church: and I will try to (3) myself in some mode of life or art as (4) $\qquad$ as I can and as wholly as I can, using for my defense the only arms I (5) $\qquad$ myself to use: silence, exile and cunning.

## Question 6 :

Select the most appropriate option to fill in blank number 5 .

## Options :

1. behave
2. allow
caution
3. effeminate

## Solution :

The correct answer is Option 2 i.e. allow.
The meaning of the given words is:

- Allow: Permit, authorize, grant
- Behave: Act, conduct oneself, behave properly
- Caution: Warning, alert, heed
- Effeminate: Feminine, having qualities typically associated with women.
- Thus, the most appropriate filler for the given blank is allow.

Therefore, the completed sentence is:
... as wholly as I can, using for my defense the only arms I allow myself to use: silence, exile and cunning.

## Question 7 :

A Number $n$ when divided by 6 , leaves a remainder 3 . What wil be the remainder when $(n 2+5 n+8)$ is divided by 6 ?

Difficulty : Moderate
Options:

1. 1
2. 3
3. 5
4. 2

## Solution :

The correct answer is Option 4 i.e. 2.

## Given:

A number n when divided by 6 leaves remainder 3 .

## Explanation:

Let the number n be 9 .
So, $\left(n^{2}+5 n+8\right)=81+45+8=134$
Now, $134=6 \times 22+2$
Hence the remainder will be 2.

## Question 8 :

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series. QRM, PWD, OBU, NGL,?

## Options :

1. MLC
2. MQR
3. MRS
4. MCL

## Solution :

The correct answer is Option 1 i.e. MLC.
Given series: QRM, PWD, OBU, NGL,?
The series follows this pattern:
QRM, PWD
$Q-1=P$
$R+5=W$
$M-9=D$
Similarly;
NGL,?
$N-1=M$
$G+5=L$
$L-9=C$

So, the next term in the series is MLC.

## Question 9 :

Select the most appropriate ANTONYM of the word ESTABLISHED from the given sentence: Siben feels great satisfaction and gratified when he finds his pupils established successfully in the society when a lot have been displaced because of several failed attempts

Difficulty : Moderate

Average Time : 56 Seconds

## Options :

1. displaced
2. fail
3. gratified
4. pupils

## Solution :

The correct answer is Option 1 i.e. displaced.
The meaning of the given words is:

- Established: Set up or created; brought into existence or introduced officially.
- Displaced: Forced to leave one's home or usual environment, often due to conflict, disaster, or other circumstances.
- Fail: To be unsuccessful in achieving a desired outcome or goal; to not meet expectations or requirements.
- Gratified: Satisfied or pleased, often as a result of having a desire or expectation fulfilled.
- Pupils: Students or learners, especially those attending school or receiving instruction in a particular subject.

Thus, the most appropriate antonym for the given word is displaced.

## Question 10 :

Select the correct direct form of the given sentence. Raveena asked me if I had her maid's number.

## Options:

1. Raveena asked me, "Do you have my maid's number?"
2. Raveena asked me, "Are you having my maid's number."
3. Raveena said to me, "Does you have my maid's number."

Raveena asked to me, "Have you have my maid's number."

## Solution :

The correct answer is Option 1 i.e. Raveena asked me, "Do you have my maid's number?"

Following steps should be followed to convert the given indirect speech sentence into its direct form:

- Identify the reporting verb and reporting clause: In this case, the reporting verb is "asked" and the reporting clause is "me if I had her maid's number."
- Begin the direct speech with a reporting verb: Start the direct speech sentence with a reporting verb such as "ask" or "inquire."
- Remove the reporting clause: Remove the reporting clause "me if I had her maid's number" and change it in an interrogative form i.e., "Do you have my maid's number?'.
- Adjust the pronouns: Adjust the pronouns in the reported speech to match the perspective of the direct speech. In this case, "her" changes to "my" to reflect the first-person perspective.

Thus, the most appropriate direct form of the given sentence is:
Raveena asked me, "Do you have my maid's number?"

## Question 11 :

After arranging the given words according to dictionary order, which word will come at the 'Third' position? 1. Series 2. Serious 3. Serein 4. Serial 5. Serried

Difficulty : Moderate
Average Time : 102 Seconds

## Options:

1. Series
2. Serein
3. Serial
4. Serious

## Solution :

The correct answer is Option 1 i.e. Series.
In this question, you need to arrange the words as they would appear in the English dictionary and then find the word which will come in the third position.

1. Serein
2. Serial
3. Series
4. Serious
5. Serried

Hence, the word that comes in the third position is 'Series.'

## Question 12 :

The mid points of $A B$ and $A C$ of a â$\dagger A B C$ are $X$ and $Y$, respectively. If $B C+X Y=24$ units, then the value of $B C X Y$ is:

## Options :

1. 5 cm
2. 4 cm
3. 6 cm
4. 8 cm

## Solution :

The correct answer is Option 4 i.e. 8 cm .
Given:
Mid points of $A B$ and $A C$ are $X$ and $Y$ respectively
$B C+X Y=24$

## Concept Used:

Suppose a triangle $A B C$, the mid-points of $A B$ and $A C$ are $D$ and $E$ respectively. $S$, the line joining $D$ and $E$ is parallel to $B C$ and is half the length of $B C$.
i.e. $\backslash(D E \backslash \backslash p a r a l l e \ \ B C \backslash) \quad . .(i)$ and $D E=1 / 2 B C$

## Explanation:

Let the length of BC be 2 xcm .
Using Equation (ii) $\mathrm{XY}=\mathrm{x} \mathrm{cm}$

Now according to the given question, $2 x+x=24$
$3 x=24$
$\mathrm{x}=8 \mathrm{~cm}$
And $2 x=16 \mathrm{~cm}$
Now, required difference $=16-8=8 \mathrm{~cm}$.
Hence the value of $B C-X Y$ is 8 cm .

## Question 13 :

The table given below shows the production of beauty products by five different companies. What is the ratio of production of beauty product by A to the production of beauty product by E? Companies Production A 30 B 50 C 32 D 15 E 25

Average Time : 79 Seconds

## Options :

1. $7: 4$
2. $4: 5$
3. $6: 5$
4. $5: 6$

## Solution :

The correct answer is Option 3 i.e. $6: 5$.

## Explanation:

According to the given table,
Production of beauty product by $\mathrm{A}=30$
Production of beauty product by $\mathrm{E}=25$
Now, the required ratio $=30: 25=6: 5$
Hence the ratio of production of beauty product by $A$ to the production of beauty product by $E$ is $6: 5$.

## Question 14 :

In a College, the number of students with different majors are as follows. Subject Number of students Mathematics 45 Physics 60 History 30 Hindi 65 Sanskrit 45 Find the average number of students in each subject.

## Options :

1. 55
2. 49
3. 42
4. 35

## Solution :

The correct answer is Option 2 i.e. 49.

## Concept Used:

$\backslash($ Average $=\{\{$ sum $\backslash$ of $\backslash$ terms $\}$ lover $\{$ Number\ of $\backslash$ terms $\}\} \backslash)$

## Explanation:

According to the given question,
Total number of students in all subjects $=(45+60+30+65+45)=245$
Now, average number of students in each subject $=245 / 5=49$.
Hence the average number of students in each subject is 49 .

## Question 15 :

$A D$ is the median of triangle $A B C$. $P$ is the centroid of triangle $A B C$. If $A P=14 \mathrm{~cm}$, then what is the length of $P D$ ?

## Options:

1. 14 cm
2. 28 cm
3. 21 cm
4. 7 cm

## Solution :

The correct answer is Option 4 i.e. 7 cm .
Given:
AD is median and $P$ is centroid

## Concept Used:

When a median is drawn in a triangle, and $G$ is the centroid, then $G$ divides the median in the ratio $2: 1$.

## Explanation:

In triangle $A B C, A D$ is the median and $P$ is centroid
Then according to the concept used,
$A P: P D=2: 1$
Let the length of AP be 2 xcm and length of PD be xcm .
Now, it is given that $A P=2 x=14 \mathrm{~cm}$
$x=7 \mathrm{~cm}$.
Hence the length of $P D=x=7 \mathrm{~cm}$.

## Question 16 :

Successive discounts of $18 \%$ and $22 \%$ are equal to a single discount of $\qquad$ .

Difficulty : Moderate

## Average Time : 62 Seconds

## Options :

1. $36.04 \%$
2. $35.04 \%$
3. $37.04 \%$
4. $34.04 \%$

## Solution :

The correct answer is Option 1 i.e. 36.04\%.
Given:
First discount = 18\%
Second discount $=22 \%$

## Concept Used:

Single discount $=\backslash(X+Y-\{X Y$ lover 100 $\} \backslash$
X = First discount
$\mathrm{Y}=$ second discount

## Explanation:

Using equation (i), we get
Single discount $=\backslash(18+22-\{18 \backslash$ times $22 \backslash$ lover 100 $\} \backslash$
Single discount $=40-3.96$
Single discount $=36.04$
HEnce the single discount for $18 \%$ and $22 \%$ is $36.04 \%$.

## Question 17 :

If $(x+\{\{1\}$ over $x\}=1)$, then the value of $x 12+x 9+x 6+x 3+1$ is $\qquad$

## Options :

1. 1
2. -1
3. 0
4. -2

## Solution :

The correct answer is Option 1 i.e. 1.
Given:
$\backslash(x+\{\{1\}$ lover $x\}=1 \backslash)$

## Concept Used:

If $\backslash(x+\{\{1\}$ \over $x\}=1 \backslash)$, then $x^{3}=-1$

## Explanation:

According to the given question,

$$
\begin{aligned}
& x^{12}+x^{9}+x^{6}+x^{3}+1 \\
& \left(x^{3}\right)^{4}+\left(x^{3}\right)^{3}+\left(x^{3}\right)^{2}+x^{3}+1 \\
& (-1)^{4}+(-1)^{3}+(-1)^{2}+(-1)+1
\end{aligned}
$$

1
Hence the value of $x^{12}+x^{9}+x^{6}+x^{3}+1$ is 1 .

## Question 18 :

The value of $97 \times 103$ is $\qquad$ .

Difficulty : Moderate Average Time : 62 Seconds

## Options:

1. 7999
2. 9991
3. 8991
4. 9981

## Solution :

The correct answer is Option 2 i.e. 9991.

## Concept Used:

$(a-b)(a+b)=a^{2}-b^{2}$

## Explanation:

According to the given question,
$97 \times 103=(100-3)(100+3)$
Now using the formula from equation (i), we get
$(100-3)(100+3)=100^{2}-3^{2}$
10000-9 = 9991
Hence the value of $97 \times 103$ is 9991 .

## Question 19 :

What happens to the decomposition rate when detritus is rich in lignin and chitin?

## Options :

1. It is negligible

It is faster
3. There is no movement
4. It is slower

## Solution :

The correct answer is Option 4 i.e. It is slower.
Detritus that is high in lignin and chitin decomposes more slowly than detritus which is high in nitrogen and water-soluble materials, such as sugars.

## Question 20 :

Sonali applied for a job of Science teacher in a school. In the test for job, she scored 8 in Physics, 8 in Chemistry, 6 in Biology, and 6.5 in the interview. For calculating the final score, weightage of $2,3,3$, and 4 were assigned to Physics, Chemistry, Biology and interview, respectively. What is the weighted average score of Sonali?

Difficulty : Moderate
Average Time : 51 Seconds

## Options :

1. 7
2. 8.4
3. 7.2
4. 21

## Solution :

The correct answer is Option 1 i.e. 7.

## Given:

Scores of Sonali in Physics, Chemistry, Biology and interview are 8, 8, 6 and 6.5 respectively.
Weightage of Physics, Chemistry, Biology and interview are 2, 3, 3 and 4 respectively.

## Concept Used:

Weighted Average $=\backslash(\{$ sum $\backslash$ of $($ number $\backslash$ times $\backslash$ weighing factor $)\}$ lover Sum of all weights $\backslash$

## Explanation:

Weighted average score of Sonali $=\backslash(\{2$ times $8+3 \backslash$ times $8+3 \backslash$ times $6+4$ times 6.5$\}$ ไover $\{2+3+3+4\} \backslash)=\backslash(84$ lover 12 ) $=7$.

Hence the weighted average score of Sonali is 7.

## Question 21 :

The given pie- chart represents the survey report on the favourite games of a group of young people. If a total of 4980 persons were surveyed, how many of them said football is their favourite game?

## Options :

1. 1324
2. 1200
3. 1430
4. 1494

## Solution :

The correct answer is Option 4 i.e. 1494.

## Explanation:

The number of persons whose favorite game is football are 30\% of 4980
$\backslash(\{30$ \over 100$\} \backslash$ times $4980 \backslash)=1494$
Hence 1494 person said that football is their favourite game.

## Question 22 :

Select the set in which the numbers are related in the same way as the numbers of the following set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits.) $(2,8,36)(4$, 9, 25)

Difficulty : Moderate
Average Time : 47 Seconds

## Options :

1. $(14,18,9)$
2. $(13,20,49)$
3. $(21,15,35)$
4. $(12,14,26)$

## Solution :

The correct answer isOption 2 i.e. (13, 20, 49).
The logic used here is:
$(2,8,36)$
$8-2=6$
$6^{2}=36$
$(4,9,25)$
$9-4=5$
$5^{2}=25$
Similarly,
$(13,20,49)$
$20-13=7$
$7^{2}=49$
Hence, option 2 is the correct answer.

## Question 23 :

Which of the following letter clusters will replace the question mark (?) in the given series? MU, NE, PX, QF, SA, TG, ?

## Options :

1. UC
2. VE
3. VD
4. VC

## Solution :

The correct answer is Option 3 i.e.VD.
Given series: MU, NE, PX, QF, SA, TG,?
The series follows this pattern:
MU, NE
$\mathrm{M}+1=\mathrm{N}$
$\mathrm{U}+11=\mathrm{E}$
NE, PX
$N+2=P$
$E+19=X$
PX, QF
$P+1=Q$
$X+8=F$
QF, SA
$Q+2=S$
$F+21=A$
SA, TG
$S+1=T$
$A+6=G$
TG,?
$\mathrm{T}+2=\mathrm{V}$
$G+23=D$
So, the next term in the series is VD.

## Question 24 :

In a certain code language, 'PLANNED' is written as 'RNCNPGF', and 'PROMOTE' is written as 'RTQMQVG'. How will 'IMPROVE' be written in that language?

## Options :

1. KORTQXG
2. KORRQXG
3. KOQRQXG

## KORTOXG

## Solution :

The correct answer is Option 2 i.e. KORRQXG.
The logic used here is:
'PLANNED' is written as 'RNCNPGF'
$\mathrm{P}+2=\mathrm{R}$
$\mathrm{L}+2=\mathrm{N}$
$A+2=C$
$\mathrm{N}=\mathrm{N}$
$\mathrm{N}+2=\mathrm{P}$
$\mathrm{E}+2=\mathrm{G}$
$\mathrm{D}+2=\mathrm{F}$
'PROMOTE' is written as 'RTQMQVG'
$\mathrm{P}+2=\mathrm{R}$
$R+2=T$
$0+2=0$
$M=M$
$\mathrm{O}+2=\mathrm{Q}$
$\mathrm{T}+2=\mathrm{V}$
$\mathrm{E}+2=\mathrm{G}$
Similarly;
Code for the word IMPROVE:
I + 2 = K
$M+2=0$
$\mathrm{P}+2=\mathrm{R}$
$R=R$
$O+2=Q$
$V+2=X$
$\mathrm{E}+2=\mathrm{G}$
Hence, option 2 is the correct answer.

## Question 25 :

In a certain code language, 'BELL' is coded as '111141', and 'HEAR' is coded as '172647'. How will 'MIKE' be coded in that language?

## Options :

1. 410813
2. 410811
3. 410812
4. 410612

## Solution :

The correct answer is Option 3 i.e. 410812.
The logic used here is:
'BELL' is coded as '111141'
First, reverse the code.
$B E L L=141111$
$B-1=1$
$E-1=4$
$L-1=11$
$L-1=11$
'HEAR' is coded as '172647'
HEAR = 742617
$H-1=7$

E-1 = 4
A-1 $=26$
$R-1=17$
Similarly;
Code for the word MIKE:
M-1 = 12
$1-1=8$
$K-1=10$
E-1 = 4
MIKE $=410812$
Hence, option 3 is the correct answer.

## Question 26 :

Select the correct mirror image of the given figure when the mirror is placed at $A B$ as shown.

Options:
1.

3.


## Solution :

The correct answer is Option 1 i.e.


The mirror image of the question figure is shown below:


Since the mirror is placed right to the question figure, the right-hand side of the original image will be now the left-hand side of the mirror image.

Hence, option 1 is the correct answer.

## Question 27

By interchanging the given two signs which of the following equation will be not correct? $\times$ and -

Average Time : 74 Seconds

## Options :

1. $15+5 \div 1-9 \times 4=70$
2. $5-6 \times 3+16 \div 4=31$
3. $11+6 \times 3-8 \div 2=5$
4. $15-4 \times 3+6 \div 1=63$

## Solution :

The correct answer is Option 1 i.e. $15+5 \div 1-9 \times 4=70$.
Given conditions: $\times$ and -
Option 1: $15+5 \div 1-9 \times 4=70$
After interchanging the expression becomes:
$=15+5 \div 1 \times 9-4=70$
$=15+5 \times 9-4$
$=15+45-4$
$=60-4$
$=56$ is not equal to 70 .
As we have found our answer, so, there is no need of checking further options.
Hence, option 1 is the correct answer.

## Question 28 :

Select the word pair that best represents a similar relationship to the one expressed in the given pair of words. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word) Police: Protection

## Options:

1. Minister: Governance
2. Thief: Jail

King: Kingdom
4. Teacher: Class

## Solution :

The correct answer is Option 1 i.e. Minister: Governance.
The logic used here is:
Police: Protection
Police give protection to the citizens of the country.
Similarly,
Minister: Governance
Minister is responsible for the governance of the country.
Hence, option 1 is the correct answer.

## Question 29

Select the figure that will come next in the following figure series.

## Options :

1. 


2.

3.



## Solution :

The correct answer is Option 4 i.e.


The logic used here is:
The figure is moving 45 degrees in the anticlockwise direction.
The series of figures is:


## Question 30 :

Which of the following numbers will replace the question mark (?) in the given series? $67,78,71,82,75,86$,?

Difficulty : Moderate

## Options :

1. 97
2. 92
3. 84
4. 79

## Solution :

The correct answer is Option 4 i.e.79.
Given series: 67, 78, 71, 82, 75, 86,?
The series follows this pattern:
$67+11=78$
$78-7=71$
$71+11=82$
$82-7=75$
$75+11=86$
$86-7=79$

So, the next term in the series is 79 .

## Question 31

Select the option that is related to the fifth letter cluster in the same way as the second letter cluster is related to the first letter cluster and the fourth letter cluster is related to the third letter cluster. LEISURE: USIELER:: INTENSE: NETNIES:: EXCITED:?

## Options :

1. CTEDEXI
2. TICXEDE
3. EXEDTCI
4. XEDETCI

## Solution :

The correct answer is Option 2 i.e. TICXEDE.
The logic used here is:
LEISURE: USIELER


INTENSE: NETNIES


Similarly,
EXCITED:?


Hence, option 2 is the correct answer.

## Question 32 :

Select the correct mirror image of the given combination when the mirror is placed at 'MN' as shown below.

## Options :




4. 4 ๑ ЈK Я ЯQb M

## Solution :


The mirror image of the question figure is shown below:

Since the mirror is placed right to the question figure, the right-hand side of the original image will be now the left-hand side of the mirror image.

Hence, option 3 is the correct answer.

## Question 33 :

Three of the following letter clusters are alike in some manner and hence form a group. Which letter cluster does not belong to that group?

## Options:

1. SXHP
2. UZFR
3. XCCU
4. VCDR

## Solution :

The correct answer is Option 4 i.e. VCDR.
The logic used here is:
Opposite of 1st letter = 3rd letter
2nd letter - $8=4$ th letter
Option 1: SXHP
Opposite of S = H
$X-8=P$
This follows the logic.
Option 2: UZFR
Opposite of $\mathrm{U}=\mathrm{F}$
Z-8 = R
This follows the logic.
Option 3: XCCU
Opposite of $\mathrm{X}=\mathrm{C}$
C- $8=U$
This follows the logic.

Option 4: VCDR
Opposite of $\mathrm{V}=\mathrm{E}$
C-8 $=\mathrm{U}$
This does not follow the logic.
Hence, option 4 is the odd one out.
Question 34 :
$A$ \& $B$ means ' $A$ is the son of $B$ ' $A$ \# $B$ means ' $A$ is the sister of $B$ ' $A$ @ means ' $A$ is the brother of $B$ ' $A \% B$ means ' $A$ is the father of $B^{\prime} A B$ means 'A is the daughter of $B^{\prime} A$ * $B$ means 'A is the wife of $B^{\prime}$ If $C$ \# $D @ E \% Z \& L \# M-N$ * $P$, then how is $E$ related to $L$ ?

Difficulty : Moderate

## Average Time : $\mathbf{8 5}$ Seconds

## Options:

1. Husband
2. Son
3. Father
4. Son-in-law

## Solution :

The correct answer is Option 1 i.e. Husband.
In the diagram shown;
Square shows males, the circle shows females, vertical lines show generations, a single horizontal line shows brothers or sisters, and double lines show a couple.


From the above tree, E is the husband of L .
Hence, option 1 is the correct answer.

## Question 35 :

If $A-B$ means that $A$ is the brother of $B, A+B$ means that $A$ is the sister of $B, A \times B$ means that $A$ is the father of $B$. Then which of the following expression shows that $P$ is the brother of $R$ ?

## Average Time : 60 Seconds

## Options :

1. $P-Q+R$
2. $P+Q-R$
3. $P \times Q+R$
4. $P-Q \times R$

## Solution :

The correct answer is Option 1 i.e. $\mathbf{P}-\mathbf{Q}+\mathbf{R}$.
In the diagram shown;
Square shows males, the circle shows females, vertical lines show generations, a single horizontal line shows brothers or sisters, and double lines show a couple.

Option1: P - Q + R


From the above tree, $P$ is the brother of $R$.
Hence, option 1 is the correct answer.

## Question 36

Select the correct combination of mathematical signs to replace the * signs and balance the given equation. 5 * 15 * 320 * 2 * $45=190$

## Options :

1.,$+ \div, x$,
2. $\times,+, \div$,
3. $+, x, \div$,
4. $\times, \div,+$

## Solution :

The correct answer isOption 2 i.e. $\mathbf{x}, \boldsymbol{+}, \div$,
Given equation: 5 * 15 * 320 * 2 * $45=190$
Option 1: +, $\div$, $\times$,
After interchanging the expression becomes:
$=5+15 \div 320 \times 2-45=190$
$=-39.90$ is not equal to 190 .
Option 2: $\times,+, \div$,
After interchanging the expression becomes:
$=5 \times 15+320 \div 2-45=190$
$=5 \times 15+160-45$
$=75+160-45$
= 235-45
$=190$ is not equal to 190 .
As we have found our answer, so, there is no need of checking further options.
Hence, option 2 is the correct answer.

## Question 37 :

Select the set in which the numbers are related in the same way as the numbers of the following sets: $(7,11,72)(5,8,39)$ (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 - Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)

Difficulty : Moderate

## Options:

1. $(4,7,33)$
2. $(2,3,1)$
3. $(5,2,23)$
4. $(5,6,13)$

## Solution :

The correct answer isOption 1 i.e. (4, 7, 33).
The logic used here is:
$(7,11,72)$
$(7+11) \times(11-7)=18 \times 4=72$
$(5,8,39)$
$(8+5) \times(8-5)=13 \times 3=39$
Similarly,
$(4,7,33)$
$(7+4) \times(7-4)=11 \times 3=33$
Hence, option 1 is the correct answer.

## Question 38

Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation. 30 * 4 2 2 1 * 121

## Options :

1. $x,+,=$
2. $\times, \div=$
3. $\times,,+,=$
4. $\div+,+,=$

## Solution :

The correct answer is Option 1 i.e. $\times,+$, , $=$
Given equation: 30 * 4 * 2 * 1 * 121
Option 1: $\times,+$, , $=$
After interchanging the expression becomes:
$=30 \times 4+2-1=121$
$=120+2-1$
= 122-1
$=121$ is not equal to 121 .
As we have found our answer, so, there is no need of checking further options.
Hence, option 1 is the correct answer.

## Question 39 :

Select the set in which the numbers are NOT related in the same way as the numbers of the given set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed) $(267,128,139)$

Difficulty : Moderate

## Options:

1. $(267,132,135)$
2. $(325,112,215)$
3. $(365,154,211)$
4. $(297,146,151)$

## Solution :

The correct answer is Option 2 i.e. $(325,112,215)$.
The logic used here is:
(267, 128, 139)
$267-128=139$
Option 1: $(267,132,135)$
$267-132=135$
This follows the logic.
Option 2: (325, 112, 215)
$325-112=215$
This does not follow the logic.
Hence, option 2 is the odd one out.

## Question 40 :

In the following question, four number pairs are given. In each pair, the number on the left side of $(-)$ is related to the number on the right side of $(-)$ with some Logic/Rule/Relation. Three pairs are similar on the basis of the same Logic/Rule/Relation. Select the odd one out from the given alternatives. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 - Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

Difficulty : Moderate

## Average Time : 69 Seconds

## Options :

1. $15-220$
2. $9-84$
3. $13-172$
4. $11-124$

## Solution :

The correct answer is Option 1 i.e. 15-220.
The logic used here is:
$(1 \text { st number) })^{2}+3=2$ nd number
Option 1: 15-220
$(15)^{2}+3=225+3=228$
This does not follow the logic.
Hence, option 1 is the odd one out.

## Question 41 :

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

## Options :

1. Only conclusions II and III follow

Only conclusions I and II follow
3. Only conclusions I and III follow
4. All conclusions follow

## Solution :

The correct answer is Option 2 i.e. Only conclusions I and II follow.
The least possible Venn Diagram for the given statements is drawn below:


## Conclusions

I. Some theories are exams True (As some exams are viva, and all viva are theories, so, some theories are exams is also true.)
II. Some theories are viva True (As all viva are theories, so, some theories are viva is also true.)
III. Some tests are viva False (It is possible, but no definite conclusion can be drawn.)

## Hence, Only conclusions I and II follow.

## Question 42 :

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

## Options:

1. 


2.

3.


## Solution :

The correct answer is Option 1 i.e.


The logic used here is:
The number of lines increases by one.
The series of figures is:


## Question 43 :

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements. Statements: I. All Z are X. II. All G are X. Conclusions: I. Some G are Z. II. All X are G. III. Some Z are X.

## Options :

Both conclusions I and III follows
2. Only conclusion III follows
3. Neither conclusion follows
4. Both conclusions II and III follows

## Solution :

The correct answer is Option 2 i.e. Only conclusion III follows.
The least possible Venn Diagram for the given statements is drawn below:


## Conclusions:

I. Some G are Z False (It is possible, but no definite conclusion can be drawn.)
II. All X are G False (It is possible, but no definite conclusion can be drawn.)
III. Some $Z$ are $X$ True (As all $Z$ are $X$, so, some $Z$ are $X$ is also true.)

Hence, Only conclusion III follows.

## Question 44 :

The chemical formula of washing soda is $\qquad$ .

## Options:

1. $\mathrm{Na}_{2} \mathrm{CO}_{3} \cdot 10 \mathrm{H}_{2} \mathrm{O}$
2. $\mathrm{Na}_{2} \mathrm{SO}_{4}$
3. NaOH
4. $\mathrm{NaHCO}_{3}$

## Solution :

The correct answer is Option 1 i.e. $\mathrm{Na}_{2} \mathrm{CO}_{3} \cdot \mathbf{1 0 \mathrm { H } _ { 2 }} \mathrm{O}$.

Washing soda is sodium carbonate decahydrate. Its chemical formula is $\mathrm{Na}_{2} \mathbf{C O}_{3} . \mathbf{1 0 \mathrm { H } _ { 2 }} \mathbf{O}$.
NaOH : Sodium hydroxide is called caustic soda.
Sodium bicarbonate is known as baking soda.

## Question 45 :

Which of the following is NOT a feature of National Income?

## Options:

1. It is a macroeconomic concept.
2. It is a flow concept.
3. It is always expressed with reference to the financial year
4. It is included only in intermediate goods

## Solution :

The correct answer is Option 4 i.e. It is included only in intermediate goods.
National income is the sum total of the value of all the goods and services manufactured by the residents of the country, in a year.
"It is included only in intermediate goods" is NOT a feature of National Income.

## Question 46 :

According to census 2011, the child sex ratio was $\qquad$ females per 1000 males.

## Options:

1. 919
2. 909
3. 929
4. 939

## Solution :

The correct answer is Option 1 i.e. 919.
According to census 2011, the child sex ratio was 919 females per 1000 males.

According to data from the 2011 Population Census, there are 943 females for every 1000 males in India.

## Question 47 :

Bharatanatyam and Kuchipudi dancer Yamini Krishnamurthy was awarded which of the following awards in 2016 ?

## Options :

1. Padma Bhushan
2. Padma Shri
3. Tagore Puraskar
4. Padma Vibhushan

## Solution :

The correct answer is Option 4 i.e. Padma Vibhushan.
Bharatanatyam and Kuchipudi dancer Yamini Krishnamurthy was awarded Padma Vibhushan in 2016.

- Yamini Krishnamurthy was born in Madanapalli, Chittoor District, Andhra Pradesh.
- Bharatanatyam is an Indian classical dance form that originated in Tamil Nadu.


## Question 48 :

In November 2022, retired Army officer Raj Shukla has been appointed as a member of the $\qquad$ .

## Options:

1. Insurance Regulatory and Development Authority
2. Union Public Service Commission
3. Employees' Provident Fund Organisation
4. Bureau of Indian Standards

## Solution :

The correct answer is Option 2 i.e. Union Public Service Commission.
Raj Shukla, a retired Army officer, has been appointed to the Union Public Service Commission (UPSC). Manoj Soni is the chairman of UPSC.

## Question 49 :

In June 2022, the Supreme Court directed that every protected forest, national park, and wildlife sanctuary across the country should have a mandatory eco-sensitive zone (ESZ) of a minimum $\qquad$ starting from their demarcated boundaries.

## Options:

1. 1 km
2. 3 km
3. 2 km
4. 5 km

## Solution :

The correct answer is Option 1 i.e. $1 \mathbf{k m}$.
The Supreme Court on Wednesday modified its June 2022 order that ruled each national park and wildlife sanctuary must have an eco-sensitive zone (ESZ) of a minimum of 1 km , measured from the demarcated boundary of such protected forest, while also lifting a complete ban on development and construction activities within ESZs.

## Question 50 :

Rani Karnaa Nayak, who was awarded the Padma Shri in 2014, was a $\qquad$ dancer.

## Options:

1. Odissi
2. Mohiniyattam
3. Kathak
4. Kathakali

## Solution :

The correct answer is Option 3 i.e. Kathak.
Rani Karnaa Nayak, who was awarded the Padma Shri in 2014, was a Kathak dancer.
Rani Karna was born in 1939 in a Sindhi family in Hyderabad.

- Kathak is one of the eight major forms of Indian classical dance. It is a classical dance form from Uttar Pradesh.
- Mohiniyattam (Mohiniattam) is a classical dance form of Kerala.

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## Question 51 :

Black Card given to a badminton player during the game indicates:

Difficulty : Moderate
Average Time : 48 Seconds

## Options :

1. suspension
2. fault
3. warning
4. disqualification

## Solution :

The correct answer is Option 4 i.e. disqualification.
Penalty cards are used in many sports as a means of warning, reprimanding, or penalising a player, coach, or team official.

- A black card is used in the sport of badminton to indicate disqualification.
- A red card in badminton is given when a player makes a continued breach of misconduct or a significant breach of misconduct.
- A yellow card is given for misconduct on the court. Remember, two yellow cards make one red card.


## Question 52

Who has been appointed as NITI Aayog's new Vice Chairman in May 2022?

## Options :

1. S Somnath
2. Suman Bery
3. Tarun Kapoor
4. Manoj Pande

## Solution :

The correct answer is Option 2 i.e.Suman Bery.

- An experienced policy economist and research administrator, Mr. Bery took over as NITI Aayog Vice Chairperson on 1 May 2022.

The NITI Aayog serves as the apex public policy think tank of the Government of India. NITI Aayog was formed via a resolution of the Union Cabinet on 1 January 2015. NITI stands for National Institution for Transforming India.

## Question 53 :

Who among the following is said to have devised many Raagas or melodies in Hindustani music?

Difficulty : Moderate
Average Time : 49 Seconds

## Options :

1. Tansen
2. Raja Beerbal
3. Todar Mal
4. Raja Man Singh

## Solution :

The correct answer is Option 1 i.e. Tansen.
Tansen is said to have devised many Raagas or melodies in Hindustani music.

- Tansen was a singer and instrumentalist who composed many ragas. He was born in Gwalior.
- Tansen is best remembered for his epic Dhrupad compositions, composing several new ragas as well as writing two classic books on music, the Shri Ganesh Stotra and the Sangita Sara. Sangeet Samrat Tansen was one of the priceless Navratnas of Akbar.


## Question 54 :

Vernacular Press Act was enacted in which year?

## Average Time : 51 Seconds

## Options :

1. 1875
2. 1876
3. 1878
4. 1877

## Solution :

The correct answer is Option 3 i.e. 1878.
The Vernacular Press Act was enacted to curtail the freedom of the Indian press and prevent the expression of criticism

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toward British policies 1878. It was proposed by Lord Lytton.
The law was repealed in 1881 by Lytton's successor as viceroy, Lord Ripon (governed 1880-84).

## Question 55 :

Which of the following is NOT a conductor?

Difficulty : Moderate
Average Time : 40 Seconds

## Options :

1. Hard rubber
2. Copper
3. Silver
4. Nickel

## Solution :

The correct answer is Option 1 i.e. Hard rubber.
A substance or material that permits the flow of electricity is referred to as a conductor. When voltage is given to a conductor, electrical charge carriers, often electrons or ions, travel easily from atom to atom.

Examples of heat conductors are iron, aluminum, copper, silver, brass, lead, and stainless steel.

## Question 56 :

Article 19 of the Indian Constitution provides for how many types of freedoms?

## Options :

1. 3
2. 4
3. 5
4. 6

## Solution :

The correct answer is Option 4 i.e. 6.
Article 19 of the Constitution provides freedom of speech which is the right to express one's opinion freely without any fear through oral/written/electronic/ broadcasting/press.
Article 19: the Indian Constitution provides for 6 types of freedoms:

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(a)Right to freedom of speech and expression.
(b)Right to assemble peaceably and without arms.
(c) Right to form associations or unions.
(d)Right to move freely throughout the territory of India.
(e) Right to reside and settle in any part of the territory of India.
(g) Right to practice any profession, or to carry on any occupation, trade, or business.

## Question 57 :

Who among the following belonged to the ancient chiefly family of the Cholas from Uraiyur, captured the Kaveri delta from the Muttaraiyar in the middle of the ninth century?

Difficulty : Moderate
Average Time : 62 Seconds

## Options:

1. Gandaraditya
2. Vijayalaya
3. Parantaka I
4. Aditya I

## Solution :

The correct answer is Option 2 i.e. Vijayalaya.
In the middle of the ninth century, Vijayalaya, a member of the ancient Chola main family from Uraiyur, conquered the delta from the Muttaraiyar. He created the town of Thanjavur and a temple dedicated to the goddess Nishumbhasudini there.

Question 58 :
Sarojini Naidu was elected the first Indian woman President of the Indian National Congress at $\qquad$ .

## Options :

1. Kanpur
2. Ahmedabad
3. Delhi
4. Nagpur

## Solution :

The correct answer isOption 1 i.e. Kanpur.
Sarojini Naidu was elected as the President of the Indian National Congress Party in 1925 at Kanpur, the first-ever woman to assume that position. The first woman president of the Indian National Congress was Annie Besant.

## Question 59 :

Which branch of the government is responsible for implementing laws and policies?

## Options :

1. Judiciary
2. Legislature
3. Executive
4. NITI Aayog

## Solution :

The correct answer is Option 3 i.e. Executive.

- The executive branch of government is in charge of putting the laws and regulations that the legislature has passed into effect.
- Legislature of the Union, which is called Parliament, consists of the President and two Houses, known as Council of States (Rajya Sabha) and House of the People (Lok Sabha).


## Question 60 :

In a food chain, secondary producers are $\qquad$ .

## Options :

1. omnivores
2. herbivores
3. carnivores
4. decomposers

## Solution :

The correct answer is Option 2 i.e. Herbivores.

- Food chain, in ecology, is the sequence of transfers of matter and energy in the form of food from organism to
organism.
- Autotrophs or primary producers are organisms that acquire their energy from sunlight and materials from nonliving sources.
- Herbivores are regarded as secondary producers since they generate their own biomass utilising the main producers' energy.


## Question 61:

Which among the following crops is related to the "Rabi" season in North India?

## Options:

1. Rice
2. Jowar
3. Maize
4. Barley

## Solution :

The correct answer is Option 4 i.e. Barley.
The rabi crops are sown around mid-November, preferably after the monsoon rains are over, and harvesting begins in April / May.
Rabi crops- wheat, barley, oats, gram, mustard, linseed.
Kharif crops- rice, maize, millet, ragi, pulses, soybean, groundnut.

## Question 62 :

Thousands of people from all walks of life took part in the $\qquad$ organised at Hyderabad in May 2022 to mark the 25-day countdown to International Day of Yoga.

## Options:

1. Yoga Sutra
2. Yoga Utsav
3. Yoga Mahotsav
4. Yoga Umang

## Solution :

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The correct answer is Option 2 i.e. Yoga Utsav.

- Thousands of people from all walks of life joined the Yoga Utsav at Hyderabad.
- The event was organised by the Ministry of Ayush, Government of India with active support from the Government of Telangana.
- The event was conducted by the Morarji Desai National Institute of Yoga.
- The event was aimed at creating awareness about the various dimensions of Yoga and its ability to enrich human lives. The theme of the Utsav was "Make Yoga a Part of Your Life".


## Question 63 :

Mango showers are common in $\qquad$ .

Difficulty : Moderate
Average Time : 53 Seconds

## Options:

1. Uttar Pradesh
2. Kerala
3. Maharashtra
4. West Bengal

## Solution :

The correct answer is Option 2 i.e. Kerala.
Pre-monsoon rains known as "mango showers" are frequent in the states of Kerala and Karnataka. The end of the summer season is often when these rains occur. The mangoes benefit from these showers as they ripen. As a result, these rains are frequently referred to as "mango showers."

## Question 64 :

In the first phase of the green revolution, the use of HYV seeds was restricted to the more affluent of which group of states?

Difficulty : Moderate

## Options:

1. Punjab, Rajasthan and Madhya Pradesh
2. Punjab, Haryana and Madhya Pradesh
3. Punjab, Tamil Nadu and Andhra Pradesh
4. Punjab, Tamil Nadu and Madhya Pradesh

Average Time : 48 Seconds

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## Solution :

The correct answer is Option 3 i.e. Punjab, Tamil Nadu and Andhra Pradesh.
The adoption of HYV seeds was first limited to wealthier states like Punjab, Andhra Pradesh, and Tamil Nadu.
The Green Revolution significantly increased agricultural output in Punjab, where it was originally implemented, boosting India's national economy.
The country's status was transformed from one of the world's leading agricultural nations as a result of the green revolution, which was a huge success. It began in 1967 and continued until 1978.

## Question 65 :

Sunanda Nair is famous for performing which of the following dance forms?

## Average Time : 56 Seconds

## Options:

1. Kathak
2. Odissi
3. Yakshagana
4. Mohiniyattam

## Solution :

The correct answer is Option 4 i.e. Mohiniyattam.
One of the well-known Indian classical dancers, Sunanda Nair, played a significant part in the spread of Mohiniyattam. Nair took her initial training in Bharatanatyam at age six.
Mohiniyattam (Mohiniattam) is a classical dance form of Kerala.

## Question 66 :

The flat-topped table land standing above the surrounding area is called $\qquad$ .

Difficulty : Moderate

## Average Time : 41 Seconds

## Options:

1. Hill
2. Plateau
3. Mountain
4. Valley

## Solution :

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The correct answer isOption 2 i.e. Plateau.
A plateau is an elevated flat land. It is a flat-topped table land standing above the surrounding area. A plateau may have one or more sides with steep slopes. The height of plateaus often varies from a few hundred meters to several thousand meters.

## Question 67 :

Select the most appropriate synonym of the underlined word in the given sentence. The promises made by the old minister were fulfilled.

## Options :

1. Contemporary
2. Aged
3. Recent
4. Vernal

## Solution :

The correct answer is Option 2 i.e., Aged.
The meaning of the given words is:

- Old: "Old" refers to something that has existed or been in existence for a long time.
- Aged: "Aged" is similar to "old" and also refers to something that has reached an advanced age.
- Contemporary: "Contemporary" refers to something that belongs to the same time period or era.
- Recent: "Recent" indicates something that has occurred, happened, or been created in the near past or not long ago.
- Vernal: "Vernal" relates to springtime or the season of spring.

Thus, the most appropriate synonym for the given word is Aged.

## Question 68 :

Select the word that is OPPOSITE in meaning to the underlined word in the given sentence. He consolidated his position as the leader of the political party.

## Options :

Weakened
2. Devised
3. Strengthened
4. Formulated

## Solution :

The correct answer is Option 1 i.e. Weakened.
The meaning of the given words is:

- Consolidated: The term "consolidated" refers to the act of combining or merging separate elements or entities into a unified whole.
- Weakened: "Weakened" indicates a decrease in strength, power, or effectiveness.
- Devised: "Devised" means to create, invent, or come up with a plan, strategy, or solution.
- Strengthened: "Strengthened" refers to the act of making something stronger, more robust, or more resilient.
- Formulated: "Formulated" means to develop or create a system, theory, concept, or idea in a structured and organized manner.

Thus, the most appropriate antonym for the underlined word is weakened.

## Question 69 :

Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph. A.It is a very popular character and is the mascot for Walt Disney company. B.Mickey generally appears with his girlfriend Minnie Mouse and pet Pluto. C.The animated movies on Mickey mouse have been nominated for the Academy award. D.Mickey mouse is a fictional cartoon character created by Walt Disney in 1928.

## Options:

1. $D A B C$
2. ADBC
3. ACDB
4. BACD

## Solution :

The correct answer is Option 1 i.e. DABC.

- The paragraph begins by introducing the character of Mickey Mouse in sentence D, providing background information about its creation by Walt Disney.
- Sentence A states that Mickey Mouse is a popular character and serves as the mascot for the Walt Disney company.
- Sentence B mentions Mickey's companions, his girlfriend Minnie Mouse and pet Pluto.
- Sentence C highlights the recognition of the animated movies featuring Mickey Mouse with Academy Award nominations.
- The sentences, when arranged in this order, form a coherent paragraph that presents information about Mickey Mouse and his significance.

Thus, the correctly arranged paragraph is:
Mickey mouse is a fictional cartoon character created by Walt Disney in 1928. It is a very popular character and is the mascot for Walt Disney company. Mickey generally appears with his girlfriend Minnie Mouse and pet Pluto. The animated movies on Mickey mouse have been nominated for the Academy award.

## Question 70 :

Select the most appropriate meaning of the underlined idiom in the given sentence. The lecture by the French professor seemed Latin and Greek to the young students.

Difficulty : Moderate

## Options:

1. Interesting
2. Lucid
3. Unbiased
4. Incomprehensible

## Solution :

The corret answer is Option 4 i.e. Incomprehensible.

- The meaning of the given idiom, 'Latin and Greek' is "something difficult to understand; incomprehensible'.

Thus, the most appropriate choice among the given options is Incomprehensible.

## Question 71 :

Select the most appropriate option to fill in the blank. We ensure that you will get a $\qquad$ chauffeur with the right car for your day.

## Options :

1. novice
2. uniformed
3. dabbler
4. riotous

## Solution :

The correct answer is Option 2 i.e. uniformed.
The meaning of the given words is:

- Uninformed: Refers to someone who lacks knowledge or information about a particular subject or topic. It suggests a lack of awareness or understanding.
- Novice: Refers to a person who is new to or inexperienced in a particular field, activity, or skill. It implies a beginner or someone at an early stage of learning.
- Dabbler: Refers to someone who engages in an activity or pursues a particular interest in a superficial or casual manner, without serious commitment or expertise. It suggests a person who dabbles or experiments without fully immersing themselves.
- Riotous: Can have different meanings depending on the context. It can refer to something or someone that is unruly, disorderly, or characterized by violent or disruptive behavior.
- Thus, the most appropriate filler for the given blank is uninformed.

Therefore, the completed sentence is:
We ensure that you will get a uninformed chauffeur with the right car for your day.

## Question 72 :

Select the INCORRECTLY spelt word.

## Options:

1. Compact
2. Compell
3. Currently
4. Savage

## Solution :

The correct answer is Option 2 i.e. Compell.

## The correct spellings and meanings of the given words are:

- Compel: Refers to the act of forcing or compelling someone to do something, often against their will.
- Compact: Can have multiple meanings. It can refer to a small and efficient arrangement or design, or it can also refer to a formal agreement or contract.
- Currently: Refers to the present time or the period of time that is happening now.
- Savage: Can have different meanings depending on the context. It can refer to something or someone that is wild, untamed, or fierce. It can also be used to describe something that is extremely brutal, violent, or ruthless.


## Question 73 :

Select the most appropriate synonym of the word 'consensus' from the following sentence. The landowner and the tenant mutually came to an agreement for decisive acceptance of its clause.

Difficulty : Moderate

## Options :

1. Decisive
2. Acceptance
3. Mutually
4. Agreement

## Solution :

The correct answer is Option 4 i.e. Agreement.

## The meaning of the given words is:

- Consensus: Refers to a general agreement or harmony among a group of people regarding a particular matter or decision.
- Agreement: Refers to a state of harmony or conformity in opinions, views, or decisions between two or more parties.
- Decisive: Refers to something that has a clear and definite outcome or result, often characterized by making a firm and conclusive decision.
- Acceptance: Refers to the act of willingly embracing or agreeing to something, often without resistance or objection.
- Mutually: Refers to something that is done or experienced by two or more parties in a reciprocal or shared manner. It implies a mutual or joint involvement or understanding.

Thus, the most appropriate synonym for the given word isagreement.

## Question 74 :

A sentence has been given with a blank to be filled with an appropriate word. Choose the correct alternative. She rubbed her hands over her arms, and then $\qquad$ her purse, headed inside the convenience store.

## Options :

1. snapping
2. slaying
3. pinching
4. grabbing

## Solution :

The correct answer is Option 4 i.e. grabbing.
The meaning of the given words is:

- Grabbing: Refers to taking hold of something quickly and firmly.
- Snapping: Refers to closing or fastening something with a quick, sharp motion.
- Slaying: Refers to killing or defeating someone or something.
- Pinching: Refers to gripping or squeezing something with the fingers, typically using thumb and forefinger. It can also refer to causing pain or discomfort by pressing or squeezing.

Thus, the completed sentence is:
She rubbed her hands over her arms, and then grabbing her purse, headed inside the convenience store.

## Question 75 :

Select the most appropriate idiom that can substitute the italicised words in the given sentence. Some people still feel that they have very little freedom to be innovative in their work.

## Options :

1. elbow room
2. an old lady
an old head on young shoulders
3. to make a pile

## Solution :

The correct answer is Option 1 i.e. elbow room.
The meaning of the given idioms is:

- Elbow room: Refers to having enough space or freedom to move or work comfortably without feeling restricted or crowded.
- An old lady: Refers to a woman who is advanced in age, typically considered to be elderly.
- An old head on young shoulders: Describes a young person who displays wisdom, maturity, or sensible behavior beyond their years.
- To make a pile: Refers to making a significant amount of money or accumulating a large sum of wealth.

Thus, the most appropriate idiom for the italicized segment of the sentence is elbow room.

## Question 76 :

Select the most appropriate option to replace the underlined segment in the given sentence. Old people acquire experience through age.

## Average Time : 70 Seconds

## Options

1. got experience
2. developed experience
3. experienced
4. gain experience

## Solution :

The correct answer is Option 4 i.e. gain experience.

- Experience is not something we acquire, it is something that we gain over the course of years.
- Moreover, gain experience maintains the original meaning of the sentence, keeping the context intact.
- Based on the meaning and context of the sentence, the most appropriate option to replace the underlined segment in the given sentence is "gain experience."

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Thus, the corrected sentence is:
Old people gain experience through age.

## Question 77 :

Select the correct active form of the given sentence. AIDS will have been cured by the year 2070 by scientists.

Difficulty : Moderate

## Average Time : 57 Seconds

## Options:

1. Scientists will have cured AIDS by the year 2070.
2. Scientists cured AIDS by the year 2070.
3. Scientists will cure AIDS by the year 2070.
4. Scientists must have cured AIDS by the year 2070.

## Solution :

The correct answer is Option 1 i.e. Scientists will have cured AIDS by the year 2070.
Following steps should be followed to change the passive form of the given sentence into its active form:

- Identify the subject: Look for the doer of the action in the sentence. In this case, the subject is "scientists."
- Identify the auxiliary verbs: In the given sentence, the auxiliary verbs are "will have been."
- Determine the main verb: The main verb in the sentence is "cured."
- Determine the object: Identify the recipient of the action in the sentence. In this case, the object is "AIDS."
- Place the subject as the doer of the action: In the active voice, the subject performs the action. Therefore, place the subject "scientists" at the beginning of the sentence.
- Choose an appropriate active verb: Select a verb that conveys the intended meaning and matches the tense and form of the passive verb. In this case, the verb "will cure" is used as it corresponds to the future tense of the passive verb "will have been cured."
- Place the object after the verb: Place the object "AIDS" after the verb "will cure" in the active voice.
- Adjust the tense and auxiliary verbs: Modify the tense and auxiliary verbs according to the active voice. In this case, the future perfect tense "will have been" is changed to the future perfect tense "wil have" in the active voice.

Thus, the active form of the given sentence is:

Scientists will have cured AIDS by the year 2070.

## Question 78 :

Select the option that expresses the given sentence in active voice. Honest and polite people are admired by everyone.

## Options:

1. Everyone has been admiring honest and polite people.
2. Everyone admired honest and polite people.
3. Everyone will admire honest and polite people.
4. Everyone admires honest and polite people.

## Solution :

The correct answer is Option 4 i.e. Everyone admires honest and polite people.
Following steps should be followed to change the passive form of the given sentence into its active form:

- Identify the subject: Look for the doer of the action in the sentence. In this case, the subject is "everyone."
- Identify the verb: Identify the main verb in the sentence. In this case, the verb is "are admired."
- Determine the object: Identify the recipient of the action in the sentence. In this case, the object is "honest and polite people."
- Place the subject as the doer of the action: In the active voice, the subject performs the action. Therefore, place the subject "everyone" at the beginning of the sentence.
- Choose an appropriate active verb: Select a verb that conveys the intended meaning and matches the tense and form of the passive verb. In this case, the verb "admires" is used as it corresponds to the present tense of the passive verb "are admired."
- Place the object after the verb: Place the object "honest and polite people" after the verb "admires" in the active voice.

Thus, the active form of the given sentence is:
Everyone admires honest and polite people.
Question 79 :
Choose the incorrectly spelt word.

## Options :

1. Assidous
2. Disapproval
3. Devastation
4. Conjoined

## Solution :

The correct answer is Option 1 i.e. Assidous.
The correct spellings and meanings of the given words are:

- Assiduous: diligent, hardworking, persistent.
- Disapproval: dissent, objection, criticism.
- Devastation: destruction, ruin, devastation.
- Conjoined: joined, linked, connected.


## Question 80

Select the appropriate option to replace the underlined word with the adverb of frequency. He did not admit that his team played badly.

## Options :

1. never admitted
2. yesterday admitted
3. happily admitted
4. willingly admitted

## Solution :

The correct answer is Option 1 i.e. never admitted.

In the original sentence, the verb "did not admit" indicates a negation or absence of admission.

- By using the adverb of frequency "never," we convey the meaning that there was no instance in which he admitted that his team played badly.
- This choice aligns with the intended meaning and maintains grammatical correctness in the sentence.

Thus, the required sentence would be:
He never admitted that his team played badly.

## Question 81 :

The question below consists of a set of labeled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph. P. There once was a little boy who had a very bad temper. Q. The boy gradually began to control his temper over the next few weeks, and the number of nails he was hammering into the fence slowly decreased. R. His father decided to hand him a bag of nails and said that every time the boy lost his temper, he had to hammer a nail into the fence. S. On the first day, the boy hammered 37 nails into that fence .

Difficulty : Moderate

## Options :

1. QRSP
2. PRSQ
3. RPSQ
4. QPRS

## Solution :

The correct answer is Option 2 i.e. PRSQ.

- The paragraph begins by introducing the little boy with a bad temper in sentence $\mathbf{P}$.
- It is then explained how his father devised a method to help him control his temper by assigning him the task of hammering nails into the fence in sentence $\mathbf{R}$.
- The next sentence provides specific information about the boy's behavior on the first day, where he hammered 37 nails into the fence sentence $\mathbf{S}$.
- Finally, the paragraph concludes by mentioning the positive change in the boy's behavior as his temper gradually improves sentence Q.

Thus, the appropriate paragraph would be:
There once was a little boy who had a very bad temper. His father decided to hand him a bag of nails and said that every time the boy lost his temper, he had to hammer a nail into the fence. On the first day, the boy hammered 37 nails into that fence. The boy gradually began to control his temper over the next few weeks, and the number of nails he was hammering

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into the fence slowly decreased.

## Question 82 :

Select the option that expresses the given sentence in indirect speech. He said to him, "Is your name not Ahmed?"

Average Time : 86 Seconds

## Options :

1. He enquired is your name not Ahmed.
2. He enquired whether his name was not Ahmed
3. He said whether his name was not Ahmed.
4. He said is your name not Ahmed.

## Solution :

The correct answer is Option 2 i.e. He enquired whether his name was not Ahmed.

Following steps should be followed to convert the given direct speech sentence into its indirect form:

- Identify the reporting verb and reporting clause: In this case, the reporting verb is "said" and the reporting clause is "to him."
- Introduce a reporting verb clause: Begin the indirect form of the sentence with a reporting verb clause such as "He asked him" or "He enquired of him."
- Introduce a conjunction: Include a conjunction such as "if" or "whether" to introduce the indirect question. In this case, "whether" can be used.
- Change the pronouns: Adjust the pronouns in the indirect question to reflect the perspective of the reported speech.
- In this case, "your" changes to "his" to match the perspective of the reported speech.

Thus, the indirect form of the sentence would be:
He enquired him whether his name was not Ahmed.

## Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. I will tell you what I will do and what I will not do. I will not (1) $\qquad$ that in which I no longer believe, (2) $\qquad$ it calls itself my home, my fatherland, or my church: and I will try to (3) myself in some mode of life or art as (4) $\qquad$ as I can and as wholly as I can, using for my
defense the only arms I (5) $\qquad$ myself to use: silence, exile and cunning.

## Question 83

Select the most appropriate option to fill in blank number 1.

Difficulty : Moderate
Average Time : 116 Seconds

## Options :

1. serve
2. drain
3. lag
4. debit

## Solution :

The correct answer is Option 1 i.e. serve.
The meaning of the given words is:

- Serve: Assist, help, attend to
- Drain: Empty, deplete, remove liquid
- Lag: Delay, fall behind, trail
- Debit: Deduct, withdraw, charge
- Thus, the most appropriate filler for the given blank is serve.


## Therefore, the completed sentence is:

I will not serve that in which I no longer believe, whether it calls itself my home, my fatherland, or my church

## Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. I will tell you what I will do and what I will not do. I will not (1) $\qquad$ that in which I no longer believe, (2) $\qquad$ it calls itself my home, my fatherland, or my church: and I will try to (3)
$\qquad$ myself in some mode of life or art as (4) $\qquad$ as I can and as wholly as I can, using for my defense the only arms I (5) $\qquad$ myself to use: silence, exile and cunning.

## Question 84 :

Select the most appropriate option to fill in blank number 2.

## Options :

sometimes
2. nevertheless
3. whether
4. presumably

## Solution :

The correct answer is Option 3 i.e. whether.
The meaning of the given words is:

- Whether: If, regardless of whether, in case
- Sometimes: Occasionally, at times, now and then
- Nevertheless: However, nonetheless, despite that
- Presumably: Supposedly, presumably, likely
- Thus, the most appropriate filler for the given blank is whether.

Therefore, the completed sentence is:
I will not serve that in which I no longer believe, whether it calls itself my home, my fatherland, or my church.

## Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. I will tell you what I will do and what I will not do. I will not (1) $\qquad$ that in which I no longer believe, (2) $\qquad$ it calls itself my home, my fatherland, or my church: and I will try to (3) myself in some mode of life or art as (4) $\qquad$ as I can and as wholly as I can, using for my
defense the only arms I (5) $\qquad$ myself to use: silence, exile and cunning.

## Question 85 :

Select the most appropriate option to fill in blank number 3.

## Options:

1. express
2. disappear
3. collect
4. sterilise

## Solution :

The correct answer isOption 1 i.e. express.
The meaning of the given words is:

- Express: Articulate, convey, communicate
- Disappear: Vanish, fade, evaporate
- Collect: Gather, accumulate, amass
- Sterilise: Sanitize, disinfect, decontaminate
- Thus, the most appropriate filler for the given blank is express.

Therefore, the completed sentence is:
I will try to express myself in some mode of life or art as freely as I can and as wholly as I can, using for my defense the only arms I allow myself to use: silence, exile and cunning.

## Comprehension :

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. I will tell you what I will do and what I will not do. I will not (1) $\qquad$ that in which I no longer believe, (2) $\qquad$ it calls itself my home, my fatherland, or my church: and I will try to (3) myself in some mode of life or art as (4) $\qquad$ as I can and as wholly as I can, using for my defense the only arms I (5) $\qquad$ myself to use: silence, exile and cunning.

## Question 86 :

Select the most appropriate option to fill in blank number 4.

## Options :

1. morbidly
2. bleakly
3. pithily
4. freely

## Solution :

The correct answer is Option 4 i.e. freely.

## The meaning of the given words is:

- Freely: Without restriction, openly, unrestrictedly
- Morbidly: Unhealthy, gruesomely, excessively

Bleakly: Desolately, grimly, gloomily

- Pithily: Concisely, tersely, succinctly
- Thus, the most appropriate filler for the given blank is freely.

Therefore, the completed sentence is:
'...art as freely as I can and as wholly as I can, using for my defense the only arms I allow myself to use: silence, exile and cunning.'

## Question 87 :

The simple interest received on a sum is $25 / 36$ of the sum. The number of years is equal to the annual rate of interest. What is the annual rate of interest?

Difficulty : Moderate

## Options :

1. 9.25 percent
2. 10.25 percent
3. 6.62 percent
4. 8.33 percent

## Solution :

The correct answer is Option 4 i.e. 8.33 percent.

## Given:

Interest $=\backslash(\{25$ \over 36$\} \backslash$ times Principle $\backslash)$
R = T

## Concept Used:

$\backslash(S I=\{\{P \backslash$ times $T \backslash$ times $R\} \backslash o v e r$ 100\} $\backslash)$

## Explanation:

According to the given question,
$\backslash\left(\{25\right.$ lover 36$\} P=\left\{P\right.$ \times $R^{\wedge} 2$ lover 100 $\left.\} \backslash\right)$
<br>(\{25 \times 100 \over 36$\left.\}=R^{\wedge} 2 \backslash\right)$

Taking square root on both sides, we get
$R=50 / 6$
$R=8.33$
Hence the rate of interest is $8.33 \%$.

## Question 88 :

Two candidates P and Q contested in an election. $70 \%$ of the registered voters are P supporters. If $60 \%$ of the P supporters and $30 \%$ of the $Q$ supporters are expected to vote for candidate $P$, then what percentage of the registered voters are expected to vote for candidate P?

## Options :

1. $30 \%$
2. $51 \%$
3. $26 \%$
4. $47 \%$

## Solution :

The correct answer is Option 2 i.e. $51 \%$.

## Explanation:

Let the total number of registered voters be 100 .
Now, supporters of $P=70 \%$ of $100=70$
So, supporters of $Q=100-70=30$
Expected voters for $P=60 \%$ of $70+30 \%$ of $30=42+9=51$
The percentage of registered voters which are expected to vote for candidate $P=\backslash(\{51$ lover 100$\}$ \times $100 \backslash)=51 \%$ Hence the percentage of the registered voters are expected to vote for candidate $P$ is $51 \%$.

## Question 89 :

If the length of certain rectangle is decreased by 4 cm and breadth is increased by 2 cm , it would result in a square of the same area. What is the perimeter of the original rectangle?

## Options :

1. 15 cm
2. 24 cm
3. 20 cm
4. 10 cm

## Solution :

The correct answer is Option 3 i.e 20 cm .

## Concept Used:

Area of rectangle $=\mathrm{l} \times \mathrm{b}$
Area of square $=a^{2}$
Perimeter of rectangle $=2(1+b)$

## Explanation:

Let the length and breadth of the given rectangle be Icm and b cm respectively.
According to the given question, side of square $=1-4=b+2$
Now, l = b + 6
Also, Area of square = area of rectangle

$$
\begin{aligned}
& (l-4)(b+2)=l b \\
& \mid b+2 l-4 b-8=l b
\end{aligned}
$$

$2(I-2 b)=8$
$1-2 b=4$
Using the values in equation (i) in equation (ii), we get
$(b+6)-2 b=4$
$6-b=4$
$\mathrm{b}=2 \mathrm{~cm}$
Now, from equation (i), $\mathrm{I}=2+6=8 \mathrm{~cm}$
So, the perimeter of rectangle $=2(8+2)=20 \mathrm{~cm}$.

## Question 90 :

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Find the greatest number that will divide 49, 147 and 322 to leave the same remainder in each case.

Difficulty : Moderate
Average Time : 75 Seconds

## Options:

1. 9
2. 5
3. 7
4. 8

## Solution :

The correct answer is Option 3 i.e. 7.

## Concept Used:

When two numbers are divided by another number and leaves same remainder their difference must produce a remainder that is equal to zero.

## Explanation:

Difference between the numbers
$147-49=98$
322-147=175
$322-49=273$
Now, HCF of (98, 175, 273),
$98=7 \times 7 \times 2$
$175=7 \times 5 \times 5$
$273=13 \times 7 \times 3$
The HCF of $(98,175,273)$ is 7
Hence the greatest number that will divide 49,147 and 322 to leave the same remainder in each case is 7 .

## Question 91 :

The mean proportional of a and b is c . What is the mean proportional of a 2 c and b 2 c ?

## Options :

1. C
2. 3 c
3. $C^{3}$
4. $C^{2}$

## Solution :

The correct answer is Option 3 i.e. $\mathbf{C}^{3}$.

## Given:

Mean proportional of a and b is c .

## Concept Used:

Mean proportional of a and $\mathrm{b}, \mathrm{c}=\(\backslash$ sqrt\{ab\} $\})$

## Explanation:

From equation (i), we get $c^{2}=a b$
$a^{2} b^{2}=c^{4}$
So mean proportional of $\mathrm{a}^{2} \mathrm{c}$ and $\mathrm{b}^{2} \mathrm{c}=\backslash\left(\backslash\right.$ sqrt $\left\{\mathrm{a}^{\wedge} 2 \mathrm{c} \backslash\right.$ times $\left.\left.\left.\mathrm{b}^{\wedge} 2 \mathrm{c}\right\}\right\rangle\right)$
<br>(\sqrt\{a^2 \times b^2 \times $\left.\left.c^{\wedge} 2\right\} \backslash\right)$
<br>( sqrt $\left\{\wedge^{\wedge} 4\right.$ \times $\left.c^{\wedge} 2\right\}$ )
$\backslash\left(\right.$ sqrt $\left.\left.\left\{c^{\wedge} 6\right\}\right)\right)=c^{3}$
Hence the mean proportional of $\mathrm{a}^{2} \mathrm{c}$ and $\mathrm{b}^{2} \mathrm{c}$ is $\mathrm{c}^{3 .}$

## Question 92 :

Find the area of the sector of a circle with radius 4 cm and angle $30^{\circ}$.

## Options :

1. $7.186 \mathrm{~cm}^{2}$
2. $6.186 \mathrm{~cm}^{2}$
$4.186 \mathrm{~cm}^{2}$
3. $5.186 \mathrm{~cm}^{2}$

## Solution :

The correct answer is Option 3 i.e. $4.186 \mathrm{~cm}^{2}$

## Given:

Radius of sector $=4 \mathrm{~cm}$
Central angle $=30^{\circ}$

## Concept Used:

Area of sector $=\backslash\left(\{\right.$ Itheta $\backslash$ over 360$\}$ \times $\left.\backslash p i r^{\wedge} 2 \backslash\right)$

## Explanation:

According to the given question,
Area of sector = <br>(\{30 \over 360\} \times \{22 lover 7\} \times (4)^2<br>)
Area of sector $=\backslash(\{1$ lover 3$\} \backslash$ times $\{22$ lover 7$\} \backslash)$
Area of sector $=4.186$
HEnce the area of sector is $4.186 \mathrm{~cm}^{2}$.
Question 93 :
( $\left\{\left\{\cos 20 \hat{A}^{\circ}\right\}\right.$ over $\left.\sin 70 \hat{A}^{\circ}\right\}+\left\{\{\cos\right.$ heta $\}$ over $\sin \left(90 \hat{A}^{\circ}-\right.$ heta $\left.\left.)\right\}=\right)$ $\qquad$ .

## Options :

1. -2
2. $\backslash(\{\{1\}$ lover 2$\} \backslash)$
3. $\backslash(-\{\{1\}$ \over 2$\} \backslash)$
4. 2

## Solution :

The correct answer is Option 4 i.e. 2.

## Concept Used:

<br>( $\mid \cos (90-\mid$ theta $)=$ \sin|thetal $)$

## Explanation:

according to the given question,
$\backslash\left(\left\{\left\{\cos 20 \hat{\mathrm{~A}}^{\circ}\right\}\right.\right.$ lover $\left.\sin 70 \hat{\mathrm{~A}}^{\circ}\right\}+\left\{\{\cos \backslash\right.$ theta $\}$ lover $\sin \left(90 \hat{\mathrm{~A}}^{\circ}-\right.$-theta $\left.\left.)\right\} \backslash\right)$
$\backslash\left(\left\{\left\{\backslash \cos (90-70) \hat{\mathrm{A}}^{\circ}\right\}\right.\right.$ lover $\left.\backslash \sin 70 \hat{\mathrm{~A}}^{\circ}\right\}+\{\{\backslash \cos \backslash$ theta $\}$ lover $\backslash \cos \backslash$ theta $\left.\} \backslash\right)$
$\backslash(\{\backslash \sin 70 \backslash$ over $\backslash \sin 70\}+1 \backslash)=1+1=2$
Hence the value of $\backslash\left(\left\{\left\{\cos 20 \hat{\mathrm{~A}}^{\circ}\right\}\right.\right.$ lover $\left.\sin 70 \hat{\mathrm{~A}}^{\circ}\right\}+\left\{\{\cos \backslash\right.$ theta $\}$ lover $\sin \left(90 \hat{\mathrm{~A}}^{\circ}-\backslash\right.$ theta $\left.\left.)\right\} \backslash\right)$ is 2 .

## Question 94 :

The number of mobiles sim - card owners in 4 states/UT are given in the bar diagram. Study the diagram and answer the question. The average of sim-card sold in the 4 states/ UT in lakhs is:

Difficulty : Moderate

## Average Time : 78 Seconds

## Options :

1. 51.5
2. 51.25
3. 50
4. 55.25

## Solution :

The correct answer is Option 2 i.e. 51.25.

## Explanation:

The total of sim-card sold in the 4 states/ UT in lakhs $=(20+15+25)+(25+20+15)+(15+10+20)+(10+25+5)=$ $60+60+45+40=205$ lakhs

Now, The average of sim-card sold in the 4 states/ UT $=\backslash(205$ lover 4 $\backslash$ ) $=51.25$
Hence the average of sim-card sold in the 4 states/ UT is 51.25 lakhs.

## Question 95 :

What will be the value of $\sin 10^{\circ}-4 / 3 \sin 310^{\circ}$ ?

## Options :

1. <br>(\{\{1\} \over 3\sqrt3\}<br>)
2. $1 / 6$
3. <br>(\{\{1\} \over 2\sqrt3\}<br>)
4. <br>(\{\{\sqrt3\} \over6\}<br>)

## Solution :

The correct answer is Option 2 i.e. <br>(1\over6<br>).

## Concept Used:

$\backslash(\backslash \sin 3 \backslash$ theta $=3 \backslash \sin \backslash t h e t a-4 \backslash \sin \wedge 3 \backslash t h e t a \backslash)$

## Explanation:

Accoding to the given question,
$\backslash\left(\sin 10 A^{\circ} \hat{a} €^{\prime \prime}\{4 \backslash\right.$ over 3$\left.\} \sin ^{\wedge} 310 \hat{A}^{\circ} \backslash\right)=\\left(\left\{3 \sin 10 A^{\circ} \hat{a} €^{\prime \prime} 4 \sin ^{\wedge} 310 \hat{A}^{\circ}\right\} \backslash\right.$ over $\left.3 \backslash\right)$
$\\left(\backslash \sin 3\left(10 \hat{A}^{\circ}\right)\right.$ lover $\left.3 \backslash\right)$
$\backslash\left(\{1\right.$ lover 3$\} \backslash$ times $\left.\backslash \sin 30 \hat{A}^{\circ} \backslash\right)=\backslash(\{1$ lover 3$\} \backslash$ times $\{1$ lover 2$\} \backslash)=\backslash(1 \backslash$ over6 $\backslash)$
Hence the value of $\backslash\left(\sin 10 \hat{A}^{\circ} \hat{a ̂} €^{\prime \prime}\{4 \backslash o v e r 3\} \sin ^{\wedge} 310 \hat{A}^{\circ} \backslash\right)$ is $\backslash(1 \backslash o v e r 6 \backslash)$.

## Question 96 :

A man lost $15 \%$ by selling a mobile for Rs.4,675. What will be his gain percentage by selling it for Rs.6,050?

## Options :

1. $10.5 \%$
2. $9.5 \%$
3. $9 \%$
4. $10 \%$

## Solution :

The correct answer isOption 4 i.e. 10\%.
Given:
SP = Rs.4,675
Loss = 15\%
Concept Used:
$\backslash(S P=C P \backslash t i m e s ~\{(100-\operatorname{loss} \backslash \%) \backslash$ over 100\}$\backslash)$
Profit = SP - CP

## Explanation:

Using equation (i) and the given values, we get
$\backslash(4675=C P$ \times $\{(100-15) \backslash$ over 100\}<br>)
$\backslash(C P=\{4675$ \times 100 \over 85$\} \backslash)$
$C P=5500$
Now, new SP = Rs.6,050
So, Profit $=6050-5500=550$
Hence profit $\%=\backslash(\{550 \backslash$ over 5500$\} \backslash$ times $100 \backslash)=10 \%$.

## Question 97 :

A wire is in the form of square with side 11 cm . It is bent to form a circle. What is the radius of the circle?

## Options :

1. 11 cm
2. 5 cm
3. 9 cm
4. 7 cm

## Solution :

The correct answer is Option 4 i.e. 7 cm .
Given:

Side of square $=11 \mathrm{~cm}$

## Concept Used:

Perimeter of square $=4 \mathrm{a}$
Circumference of circle $=\backslash(2 \backslash$ pi rl)
If a wire is bent to change the shape, then their perimeter is same.

## Explanation:

ccording to the given question,
$4 \mathrm{a}=\(2 \mid \mathrm{pi} \mathrm{r} \backslash)$
$\backslash(\{4$ \times 11$\}=2$ times $\{22$ lover 7$\} \backslash$ times $r \backslash$
$r=7$
Hence the radius of the circle thus formed is 7 cm .

## Question 98 :

If $b \sin =a$, then $\sec +\tan =$ ?

## Options

1. <br>(\sqrt\{\{b+a\} \over b-a\}<br>)
2. <br>(\sqrt\{\{1\} \over b+a\}<br>)
3. <br>(\sqrt\{\{1\} \over b-a\}<br>)
4. <br>(\sqrt\{\{b-a\} \over b+a\}<br>)

## Solution :

The correct answer is Option 1 i.e. $\backslash(\backslash s q r t\{\{b+a\} \backslash o v e r b-a\} \backslash)$

## Given:

$b \sin =a$
$\sin =a / b$

## Concept Used:

$\sin =\backslash($ P\over $H \backslash)$
sec $=\backslash(H$ lover $B \backslash)$
$\tan =\backslash(\mathrm{P}$ lover $\mathrm{B} \backslash)$

## Explanation:

According to the given question,
$\mathrm{P}=\mathrm{a}, \mathrm{H}=\mathrm{b}$

So, $\mathrm{B}=\backslash\left(\backslash \operatorname{sqrt}\left\{\mathrm{H}^{\wedge} 2-\mathrm{P}^{\wedge} 2\right\} \backslash\right)=\backslash\left(\backslash \mathrm{sqrt}\left\{\mathrm{b}^{\wedge} 2-\mathrm{a}^{\wedge} 2\right\} \backslash\right)$
Now, sec $+\tan =\backslash\left(\left\{b\right.\right.$ lover $\backslash$ sqrt $\left.\left\{b^{\wedge} 2-a^{\wedge} 2\right\}\right\}+\left\{a\right.$ \over $\backslash$ sqrt $\left.\left.\left\{b^{\wedge} 2-a^{\wedge} 2\right\}\right\} \backslash\right)$
$\backslash\left(\{b+a\} \backslash \operatorname{over} \backslash \operatorname{sqrt}\left\{b^{\wedge} 2-a^{\wedge} 2\right\} \backslash\right)=\backslash(\{\backslash \operatorname{sqrt}\{b+a\} \backslash \operatorname{sqrt}\{b+a\}\} \backslash \operatorname{lover}\{\backslash \operatorname{sqrt}\{b-a\} \backslash \operatorname{sqrt}\{b+a\}\} \backslash)=\backslash(\backslash s q r t\{\{b+a\} \backslash o v e r b-$ $a\} \backslash)$

Hence the value of sec $+\tan$ is $\backslash(\backslash s q r t\{\{b+a\}$ lover $b-a\} \backslash)$

## Question 99 :

A boat racer can row ( $21\{\{3\}$ over 2$\}$ ) $\mathrm{km} / \mathrm{h}$ in still water. If the speed of river is $12.5 \mathrm{~km} / \mathrm{hr}$, it takes him 40 minutes to row to a place and back, how far off is the place (consider up to two decimals)?

## Options :

1. $\backslash(5\{\{5\}$ \over 27$\} \mathrm{km} \backslash)$
2. <br>(5\{\{2\} lover 5$\} \mathrm{km} \backslash)$
3. $\backslash(4\{\{5\}$ \over 27$\} \mathrm{km} \backslash)$
4. <br>(3\{\{5\} \over 27\}km<br>)

## Solution :

The correct answer is Option 1 i.e. <br>(5\{\{5\} \over 27\}km<br>)

## Given:

Speed of boat in still water $=\backslash(21\{\{3\}$ lover 2$\}) \mathrm{km} / \mathrm{hr}=22.5 \mathrm{~km} / \mathrm{hr}$
Speed of stream $=12.5 \mathrm{~km} / \mathrm{hr}$

Time $=40$ minutes
Concept Used:
Downstream speed $=$ Speed of boat in still water + Speed of stream
Upstream speed = Speed of boat in still water - Speed of stream
Disatance $=$ speed $\times$ time

## Explanation:

Let the distance of the place be D km.
Now, according to the given question,
$\backslash(\{D$ lover downstream\speed $\}+\{D$ lover upstream $\backslash$ speed $\}=\{40$ lover 60\} $)$
$\backslash(\{D$ lover $(22.5+12.5)\}+\{D$ lover (22.5-12.5)\} = \{2 lover 3\}<br>)
$\backslash(\{D$ lover 35$\}+\{D$ lover 10\} $=\{2$ lover 3$\} \backslash)$
$\backslash(\{9 \mathrm{D}$ lover 70\} $=\{2$ lover 3\}<br>)
$\backslash(D=\{140$ lover 27$\} \backslash)=\backslash(5 \backslash f r a c\{5\}\{27\} \backslash) \mathrm{km}$.
Hence the distance is $\backslash(5 \backslash$ frac\{5\}\{27\}<br>) km.

## Ssc CgI Tier I Previous Year Question Paper Analysis

The analysis of Ssc CgI Tier I Previous Year Question Paper held on 2022-12-06 in the Morning exam is as follows:

1. 99 questions were moderate.
2. The safe score is 140 marks.
3. 24 questions were asked from English Language, 25 questions were asked from General Awareness, 25 questions were asked from Logical Reasoning and 25 questions were asked from Quantitative Aptitude
4. 28 questions should have been skipped if you were short of time.

## Ssc Cgl Tier I Previous Year Question Paper Topic Wise Weightage

English Language

Cloze Test - 5
2. Parajumbles -2
3. Idioms -2
4. Fillers - 2
5. Narration-2
6. Voice-2
7. Sentence Improvement - 3
8. Synonym - 2
9. Antonym-2
10. Incorrectly Spelt - 2
11. Incorrectly Spelt - 2

## General Awareness

1. History - 3
2. Polity - 1
3. Science-1
4. GK Misc - 17
5. Current Affairs - 3

## Logical Reasoning

1. Coding Decoding - 2
2. Analogy - 5
3. Classification-2
4. Blood Relations - 2
5. Syllogism - 2
6. Dictionary Based - 1
7. Figure Based - 4
8. Series - 3
9. Mathematical Reasoning - 3
10. Cubes And Dice - 1

## Quantitative Aptitude

1. Arithmetic - 25

## Ssc Cgl Tier I Previous Year Question Paper Tips

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## and Tricks



1. Try to solve Ssc Cgl Tier I Previous Year Question Paper without taking any help from the solutions.
2. Ssc Cgl Tier I Previous Year Question Paper require proper usage of concept so firstly read the question thoroughly and then use the right concept.
3. In case you're not able to solve the question in less than 30 seconds in the exam then you should skip the question and move to the next question.

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Daily Vocabulary
Daily Editorial
Latest Notifications
Exam Dates
Admit Card
Exam Results
Exam Cutoff
Exam Eligibility
Exam Pattern

## Further Guidance on Ssc CgI Tier I Previous Year Question Paper

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## About Neetu Mam

Neetu Mam is primarily passionate for the English language and teaching from the last 20 years however for the Ssc Cgl Tier I Previous Year Question Paper. She has guided her team to provide the best explanation for the question.

