

Memory Based Paper
AAl Junior Executive Common Cadre

2023

Direction: In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Question No. 1

## Statements:

Only Biscuit are Chocolate.
Only few Biscuit are Snacks.
All Snacks are Beverages.

## Conclusion:

Some Beverages are Chocolates.
All Biscuits can be Beverages.
Options:

1. Only Conclusion I follows.
2. Only Conclusion II follows.
3. Either Conclusion I or II follow.
4. Neither Conclusion I nor II follow.
5. None of these

## Answer : Neither Conclusion I nor II follow.



## Direction: Read the directions carefully and answer the following question.

$A, B, C, D, E, F, G, H, K$, and $L$ are sitting in a straight row facing the north direction but not necessarily in the same order.
$C$ sits immediate right of $B$ and immediate left of $D$. Four people sit between $A$ and $L$. A sits fifth from the left end of the arrangement. E and F sit to the immediate left and right of A respectively. $G$ sits second to the right of $H$ and towards the left of $E$.

Question No. 2
Who among the sits to immediate left of $E$ ?

## Options :

1. A
2. H
3. G
4. L
5. None of these.

Answer : G
Using the provided statements in the order given below:
A sits fifth from the left end of the arrangement.
Four people sit between $A$ and $L$.
$E$ and $F$ sit to the immediate left and right of A respectively.
$G$ sits second to the right of $H$ and towards the left of $E$.
$C$ sits immediate right of $B$ and immediate left of $D$.


Question No. 3
Who among the following sits to the left end of the arrangement?
Options :

1. $A$
2. H
3. G
4. None
5. L

Answer: H
Using the provided statements in the order given below:
A sits fifth from the left end of the arrangement.
Four people sit between $A$ and $L$.
$E$ and $F$ sit to the immediate left and right of $A$ respectively.
$G$ sits second to the right of $H$ and towards the left of $E$.
$C$ sits immediate right of $B$ and immediate left of $D$.


Question No. 4
Who among the following sits immediate right of $D$ ?
Options :

1. A
2. H
3. G
4. L
5. K

Answer: L

Using the provided statements in the order given below:
A sits fifth from the left end of the arrangement.
Four people sit between A and L.
$E$ and $F$ sit to the immediate left and right of A respectively.
$G$ sits second to the right of $H$ and towards the left of $E$.
$C$ sits immediate right of $B$ and immediate left of $D$.


Question No. 5
How many person sit between $G$ and $C$ ?

## Options :

1. One
2. Two
3. Three
4. Four
5. None of these.

## Answer: Four

Using the provided statements in the order given below:
A sits fifth from the left end of the arrangement.
Four people sit between A and L.
$E$ and $F$ sit to the immediate left and right of A respectively.
$G$ sits second to the right of $H$ and towards the left of $E$.
$C$ sits immediate right of $B$ and immediate left of $D$.


Direction: In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Question No. 6
Statements:
Only Black is Red.
No Black is White.
Some White are Brown.

## Conclusion:

Some Brown can be Red.
All Black can be Brown.

## Options :

1. Only Conclusion I follows.
2. Only Conclusion II follows.
3. Either Conclusion I or II follow.
4. Neither Conclusion I nor II follow.
5. None of these.

## Answer : Neither Conclusion I nor II follow.



Question No. 7
$G$ is son of $Q, R$ is married to $G$. $L$ is mother of $R$. $L$ has only one daughter. $X$ is father of $B . X$ is married to $L$, then how $B$ is related to $G$ ?

## Options :

1. Brother
2. Brother-in-law
3. Sister
4. Cannot be determined
5. Father

Answer: Brother-in-law

$\Leftrightarrow$ define (husband wife)
$\leftrightarrow$ define (brother sister)
(+) male
(-) female
Since, $L$ has only one daughter $B$ is definitely a male.

Question No. 8

In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements: $\mathrm{Q}>\mathrm{R}=\mathrm{S} ; \mathrm{S}<\mathrm{T}<\mathrm{V} ; \mathrm{V}>\mathrm{P}$
Conclusion:
I. $V>R$
II. $Q \leq P$

## Options :

1. If only conclusion I follows.
2. If only conclusion II follows.
3. If either conclusion I or II follows.
4. If neither conclusion I nor II follows.
5. None of these.

## Answer : If only conclusion I follows.

$Q>R=S<T<V>P R<V$. Hence conclusion I is true.
$Q>R=S<T<V>P$ No relationship can be established between $Q$ and $P$. Hence conclusion II is not true.

Question No. 9
In a certain code language, 'ARISE' is coded as' 1189195 ' and 'WEIRD' is coded as ' 2359184 '. What will be the code for 'MOTH' in the same code language?

## Options :

1. 1315208
2. 1315207
3. 1321158
4. 1385201
5. 1385291

Answer: 1315208
Place value of all letter according to the English alphabetical series.
$A-1, R-18, I-9, S-18, E-5$.
$W-23, E-5, I-9, R-18, D-4$.
M-13, O-15, T-20, H-8

Direction: You are given name of a town and a date followed by options. Out of these options only one option EXACTLY matches the provided name of the town and the date, while others have some mistakes. Choose the response exactly same as the provided one.

Question No. 10

Lucknow
$18^{\text {th }}$ June, 2008

Lukhnow
$18^{\text {th }}$ June, 2008
Lucknow
$18^{\text {th }}$ July, 2008
Lucknow
$19^{\text {th }}$ June, 2008
Lucknow
$18^{\text {th }}$ June, 2006

Options :

1. Option 1
2. Option 2
3. Option 3
4. Option 4
5. None of these.

## Answer : Option 2

## The correct answer Option 2.

Direction: In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Question No. 11

## Statements:

Some Grapes are Apple.
Some Apples are Banana.
Only Banana is Kiwi.

## Conclusion:

All Grapes can be Kiwi.
All Grapes can be Banana.

## Options :

1. Only Conclusion I follows.
2. Only Conclusion II follows.
3. Either Conclusion I or II follow.
4. None of these.
5. Neither Conclusion I nor II follow.

## Answer : Only Conclusion II follows.



Question No. 12
Read the directions carefully and answer the following question.
Rakesh walks 25 m to the east from point ' A ', and then walks 25 m in South-west direction. Then walks 25 m in North-west direction and reaches at point B. Find distance between A and B?

## Options :

1. 0
2. 25
3. $25(\sqrt{ } 2-1)$
4. $25 \sqrt{ } 2$
5. 1

Answer: 25(V2-1)


$$
\begin{aligned}
& B C= \sqrt{(C D)^{2}+(B D)^{2}} \\
& B C= \sqrt{(25)^{2}+(25)^{2}} \\
&=\sqrt{1250} \\
&=25 \sqrt{2} \mathrm{~m} \\
& \text { then, } \quad \begin{aligned}
\mathrm{AB} & =\mathrm{BC}-\mathrm{AC} \\
& =25 \sqrt{2}-25 \\
& =25(\sqrt{2}-1)
\end{aligned}
\end{aligned}
$$

Question No. 13
Select the missing number from the given responses:


## Options :

1. 45
2. 54
3. 72
4. 90
5. 57

## Answer: 72

$(30+36) / 3=22$
$(15+18) / 3=11$
then,
$(60+x) / 3=44$
$60+x=132$
$x=132-60=72$

Question No. 14
Among seven students D, E, F, G, H, I and J. I is heavier than J but lighter than G. F is heavier than $E$. $D$ is the heaviest. $E$ is fourth heaviest. $H$ is heavier than only one student. How many students weigh lesser than $F$ ?

## Options :

1. Five
2. Four
3. Two
4. Cannot be determined
5. One

## Answer: Cannot be determined

$D>(F / G)>(G / F)>E>I>H>J$.

Direction: An address has been given below, which has been reproduced against (1), (2), (3), and (4) alternatives. Three of these have some mistakes or the other. Identify the one without any mistake.

Question No. 15

Gramercy Green
310 3rd Ave, New York,
NY 10010, USA

Gramercy Green
310 3rd Ave, New Yrok,
NY 10010, USA

Gramercy Green
310 3rd Avil, New York,
NY 10010, USA

Gramercy Green
$3103^{\text {rd }}$ Ave, New York,
NY 10010, USA

Gramercy Green
310 3rd Ave, New York,
NY 10010, USA
Options:

1. Option 1
2. Option 2
3. Option 3
4. Option 4
5. None of these.

## Answer : Option 4

The correct answer Option 4.
Question No. 16
Which of the following pair replaces? in series given.
Q5J, N10N, ?, H40V

## Options :

1. K20S
2. K19R
3. L20R
4. K20R
5. K17P

## Answer: K20R

Q-3 = N, N-3 = K, K-3 = H
$5 \times 2=10,10 \times 2=20,20 \times 2=40$
$J+4=N, N+4=R, R+4=V$

Question No. 17

There are nine members in three generations and three married couples in the family. There are only four male members in the family. K is son of N who is daughter-in-law of J . C is father of A . L is mother of $M$ who is father of $O$. $M$ is son-in-law of $B$. $A$ is unmarried and aunt of $O$. $C$ is not married to L.How $O$ is related to $A$ ?

## Options :

1. Nephew
2. Son
3. Niece
4. Sister
5. Brother

## Answer: Niece



Question No. 18
Which piece of paper will appear the question figure when folded and cut as shown below in answer figures? From the given answers, indicate how will it appear when opened?

(X)

(1)

(2)

(3)

(4)

Options:

1. (1)
2. (2)
3. (3)
4. (4)
5. None of these.

Answer: (3)
The correct answer is (3).

Question No. 19
In the following question, find which one word cannot be made from the letters of the given word "ENGAGEMENT".

Options :

1. GAME
2. MEANT
3. TIME
4. NEAT
5. NET

## Answer : TIME

Only 'TIME' is not possible in the word ENGAGEMENT.

Question No. 20
Select the correct mirror image of the given combination when the mirror is placed at ' AB ' as shown.


(1)

(2)

(3)

(4)

## Options :

1. 1
2. 2
3. 3
4. 4
5. None of these.

Answer: 1

## The correct mirror image is figure 1.

Question No. 21
$L$ is the brother of $Z . Z$ is mother of $Q$. $B$ is sister of $Q$, who is the son of $F$. How is $Z$ related to $B$ ? Options :

1. Grandmother
2. Sister
3. Aunt
4. Mother
5. Mother-in-law

Answer: Mother
$L(+)=Z(-) \times F(+)$

$$
B(-) \quad=\quad Q(+)
$$

Question No. 22
Read the directions carefully and answer the following question.
If a mirror is placed on the line MN then which of the answer figure is the right image of the given figure?


(1)

(2)

(3)

(4)

## Options :

1. 1
2. 2
3. 3
4. 4
5. None of these.

Answer: 4
The correct answer is Option 4.

Question No. 23
Five friends $\mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}$ and W having different height. U is taller than only one person. W is neither the tallest not shortest. There are two persons who are taller than S. T is not the tallest. Who is the tallest?

## Options:

1. V
2. $S$
3. U
4. T
5. W

Answer: V
$V>W>S>U>T$

Question No. 24
Which letter number cluster will replace the question mark (?) to complete the given series?
C12, F15, I60, L65, O390, [?]
Options :

1. R390
2. R352
3. V392
4. W422
5. Z390

## Answer: R390

$C+3=F, F+3=I, I+3=L, L+3=O, O+3=R$
For number, $12+3=15,15 \times 4=60,60+5=65,65 \times 6=390$

Question No. 25
In a certain code language if the word PUZZLE is coded as RXEGWR, then what is coded as OUTPUT?

## Options :

1. QYWXFG
2. QWYXFG
3. QYWFXG
4. QXYWFG
5. None of these.

## Answer : QXYWFG

## Solution :

Word:

Pattern:
Similarly Word:

Pattern:


Direction: In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Question No. 26

## Statements:

All Books are Pencil.
Some Pencil are Scale.
No Scale is Eraser.

## Conclusion:

All Pencil can be Eraser.
All Eraser can be Pencil.

## Options :

1. Only Conclusion I follows.
2. Only Conclusion II follows.
3. Either Conclusion I or II follow.
4. Neither Conclusion I nor II follow.
5. None of these.

## Answer : Only Conclusion II follows.



Question No. 27
letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.

## Options :

1. NPLR
2. IKGA
3. RTPV
4. HJFL
5. BCDE

Answer: IKGA
$N+2=P, P-4=L, L+6=R$
$I+2=K, K-4=G, G+6=M$
$R+2=T, T-4=P, P+6=V$
$H+2=J, J-4=F, F+6=L$

Question No. 28
In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements: $\mathrm{J}>\mathrm{K}<\mathrm{L} ; \mathrm{L}=\mathrm{M}<\mathrm{O} ; \mathrm{O}<\mathrm{N}$

Conclusion:
I. $\mathrm{J}=\mathrm{N}$
II. $\mathrm{N}>\mathrm{J}$

## Options :

1. If only conclusion I follows.
2. If only conclusion II follows.
3. If either conclusion I or II follows.
4. If neither conclusion I nor II follows.
5. None of these.

## Answer: If neither conclusion I nor II follows.

$J>K<L=M<O<N$ No relationship can be established between $J$ and $N$. Hence neither conclusion I nor II is true.

Question No. 29
The sequence of folding a piece of paper and the manner in which the folded paper has cut is shown in the following figures. How would this paper look when unfolded?


(1)

(2)

(3)

(4)

## Options :

1. 1
2. 2
3. 3
4. 4
5. Can't be determined

Answer: 2
Figure 2 is the correct answer.
Question No. 30
Which Venn diagram represents Engineer, Surgeon and Teacher?

(1)

(2)

(3)

(4)

## Options :

1. 3
2. 2
3. 1
4. 4
5. Can't be determined

## Answer: 1

Figure 1 represents the correct relation among Engineer, Surgeon and Teacher.

Question No. 31
If '-‘ means 'addition', ' + ' means 'subtraction', ‘ $\div$ ' means 'multiplication' and ' $x$ ' means 'division', then find the value of the expression given below: $30 \times 5-24+(40 \div 2)-42$

## Options :

1. -8
2. -12
3. 14
4. -10
5. 6
```
Answer:-8
\(=30 \times 5-24+(40 \div 2)-42\)
\(=30 \div 5+24-(40 \times 2)+42\)
\(=6+24-80+42\)
\(=30-80+42\)
\(=-8\)
```

Direction: An address has been given below, which has been reproduced against (1), (2), (3), and (4) alternatives. Three of these have some mistakes or the other. Identify the one without any mistake.

Question No. 32
Bobst Library
70 Washington Square South,
New York, NY 10012, United States

Bosbt Library
70 Washington Square South,
New York, NY 10012, United States

Bobst Library
70 Washignton Square South,
New York, NY 10012, United States

Bobst Library
70 Washington Squrae South,
New York, NY 10102, United States

Bobst Library
70 Washington Square South,
New York, NY 10012, United States

## Options :

1. Option 1
2. Option 2
3. Option 3
4. Option 4
5. None of these

## Answer : Option 4

The correct answer Option 4.

Question No. 33
If $E=10, \operatorname{PET}=82$, then 'FATE' will be equal to?

## Options :

1. 60
2. 55
3. 76
4. 64
5. 81

Answer: 64
$E=5 \times 2=10$
PET $=(16+5+20)=41 \times 2=82$
FATE $=(6+1+20+5)=32 \times 2=64$

Question No. 34
The sequence of folding a piece of paper and the manner in which the folded paper has cut is shown in the following figures. How would this paper look when unfolded?


Options :

1. 1
2. 2
3. 3
4. 4
5. Can't be determined

Answer: 4
The correct answer is Option 4.

Question No. 35
If the number '64893875', One is subtracted in odd digit and one is added in even digit of the number then numbers are arranged in ascending order from left to right. Then what is the sum of the digit which is third from the left end and the digit which is fourth from the right end?

## Options :

1. 18
2. 12
3. 10
4. 15
5. 11

Answer: 12

| 6 | 4 | 8 | 9 | 3 | 8 | 7 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | 5 | 9 | 8 | 2 | 9 | 6 | 4 |
| 2 | 4 | 5 | 6 | 7 | 8 | 9 | 9 |

Required sum $=5+7=12$.

Direction: In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Question No. 36

## Statements:

All Shark are Fish.
No Fish is a Whale.
Some Whale are Dolphin.

## Conclusion:

Some Whale are Sharks is a possibility.
All Dolphin can be Fish.

## Options :

1. Only Conclusion I follows.
2. Only Conclusion II follows.
3. Either Conclusion I or II follow.
4. Neither Conclusion I nor II follow.
5. None of these.

## Answer : Neither Conclusion I nor II follow.



## Direction:- Read the directions carefully and answer the following question.

Six person A, B, C, D, E and F are sitting around a circular arrangement facing inside not necessarily in the same order. They all like different colours among Red, Blue, White, Green, Grey and Black.
C and D sit immediate next to each other and like Grey and Red. E does not like Blue. B sits immediate right of the one who likes White and likes Green colour. C sits immediate left of D and C likes Red. A sits third to the right of $F$ and $F$ likes White.

Question No. 37
Who among the following sits third to the left of one who likes White?
Options:

1. A
2. F
3. D
4. E
5. None of these.

Answer: A
Using the statements in the order given below:
A sits third to the right of $F$ and $F$ likes White.
$B$ sits immediate right of the one who likes White and likes Green colour.
C and D sit immediate next to each other and like Grey and Red.
$C$ sits immediate left of $D$ and $C$ likes Red.
E does not like Blue.


Question No. 38
Who among the following likes Black colour?
Options:

1. A
2. F
3. D
4. E
5. B

Answer: E
Using the statements in the order given below:
A sits third to the right of $F$ and $F$ likes White.
$B$ sits immediate right of the one who likes White and likes Green colour.
C and D sit immediate next to each other and like Grey and Red.
C sits immediate left of D and C likes Red.
E does not like Blue.


Question No. 39
Who among the following sits immediate right of D ?

## Options :

1. A
2. F
3. D
4. E
5. B

Answer: F
Using the statements in the order given below:
A sits third to the right of $F$ and $F$ likes White.
B sits immediate right of the one who likes White and likes Green colour.
C and D sit immediate next to each other and like Grey and Red.
C sits immediate left of D and C likes Red.
E does not like Blue.


Question No. 40
Who among the following likes Grey colour?
Options:

1. A
2. F
3. D
4. E
5. B

## Answer: D

Using the statements in the order given below:
A sits third to the right of F and F likes White.
$B$ sits immediate right of the one who likes White and likes Green colour.
C and D sit immediate next to each other and like Grey and Red.
$C$ sits immediate left of D and C likes Red.
$E$ does not like Blue.


Question No. 41
Which of the following is not an international airport in India?
Options :

1. Kempegowda Airport
2. Coimbatore Airport
3. Dabolim Airport
4. Veer Savarkar Airport
5. Jolly Grant Airport

Answer: Jolly Grant Airport
Dehradun Airport also known as Jolly Grant Airport, is a domestic airport serving
Dehradun, the capital of Uttarakhand, India, located 25 km south of the city.

Question No. 42
Aditya-L1 is equipped with specialized payloads to explore the Sun's photosphere, chromosphere, and corona. How many payloads in total are dedicated to this mission?

## Options :

1. Three
2. Five
3. Seven
4. Eight
5. Nine

Answer: Seven
Aditya-L1 carried seven advanced payloads designed to delve into various layers of the Sun, including the photosphere, chromosphere and the corona (outer layer of the Sun). These payloads employ electromagnetic particle and magnetic field detectors to capture crucial data about the Sun's behaviour.

Question No. 43
Which institution provided loan assistance to the Ministry of Skill Development for the SANKALP program, aimed at improving skill training and market connectivity?

## Options :

1. World Bank (WB)
2. Asian Development Bank (ADB)
3. Reserve Bank of India (RBI)
4. International Finance Corporation (IFC)
5. International Monetary Fund (IMF)

## Answer: World Bank (WB)

Skill Acquisition and Knowledge Awareness for Livelihood Promotion ("SANKALP") is a programme of the Ministry of Skill Development with loan assistance from the World Bank. It aims to improve short term skill training qualitatively and quantitatively through strengthening institutions, bring in better market connectivity and inclusion of marginalised sections of the society. SANKALP was launched on 19th January 2018 and has a tenure till March 2023.

Question No. 44
Which company is being fined Rs. 1 Crore by the Competition Commission of India (CCI) for not reporting its acquisition of a stake in the company?

## Options :

1. Bharti Airtel
2. Vodafone Idea
3. Reliance Jio
4. Tata Sky
5. Sun Direct TV

## Answer : Bharti Airtel

Bharti Airtel is being fined Rs. 1 Crore by the Competition Commission of India (CCI) for failure to inform the CCI about its acquisition of a stake in Bharti Telemedia Limited, the Direct to Home (DTH) arm of Airtel, from Lion Meadow Investment Limited.

Question No. 45
What does 'C' stand for in FMCG?

## Options :

1. Compost
2. Consumer
3. Consumption
4. Convertible
5. Convenience

## Answer: Consumer

FMCG stands for Fast-Moving Consumer Goods, which are also known as consumer packed goods (CPD). These goods refer to the products that are sold quickly and are generally non-durable. It is also known as Consumer Packaged Goods (CPG).

Question No. 46
India is a founding member of which of the following institutions?
Options :

1. SCO
2. BRICS
3. WHO
4. A \& B
5. All

Answer: BRICS
India is the founding member of only BRICS.

Question No. 47
Who was conferred with the Lokmanya Tilak Award 2023?

## Options :

1. Uddhav Thakre
2. Nitin Gadkari
3. Narendra Modi
4. Nirmala Sitaraman
5. Asha Bhosle

## Answer : Narendra Modi

Prime Minister Narendra Modi accepted the prestigious Lokmanya Tilak National Award at a power-packed event in Pune

Question No. 48
In which year was the National Hydrogen Mission launched by India to promote green hydrogen and meet climate targets?
Options :

1. 2015
2. 2018
3. 2019
4. 2020
5. 2021

Answer: 2021

Prime Minister launched the National Hydrogen Mission on India's 75th Independence Day i.e. 15th August 2021. The Mission aims to aid the government in meeting its climate targets and making India a green hydrogen hub.

Question No. 49
On which date was the Indian National Congress founded, with Womesh Chunder Bonnerjee as its president and Allan Octavian Hume as the General Secretary?

## Options :

1. 18th November 1885
2. 28th November 1885
3. 23th December 1885
4. 28th December 1885
5. 31th December 1885

## Answer : 28th December 1885

On 28 December 1885, the Indian National Congress was founded at Gokuldas Tejpal Sanskrit College in Bombay, with 72 delegates in attendance. Hume assumed office as the General Secretary, and Womesh Chunder Bonnerjee of Calcutta was elected president.

Question No. 50
Who has been appointed as the new Chairperson of the International Financial Services Centres Authority (IFSCA) in July 2023 by the Indian government?

## Options :

1. Raghuram Rajan
2. K. Rajaraman
3. Arvind Subramanian
4. Urjit Patel
5. Montek Singh Ahluwalia

Answer : K. Rajaraman
K Rajaraman has been appointed as the new Chairperson of the International Financial Services Centres Authority (IFSCA) by the Indian government.

Question No. 51
By what year does the government aim to achieve an EV sales penetration of 30 percent for private cars as part of its effort to decarbonize the transport sector?

## Options :

1. 2025
2. 2030
3. 2035
4. 2040
5. 2050

Answer : 2030
The government intends to have EV sales penetration of 30 per cent for private cars, 70 per cent for commercial vehicles and 80 per cent for two and threewheelers by 2030 as there is an immediate need to decarbonize the transport sector.

Question No. 52
What is the new minimum capital requirement set by the Insurance Regulatory and Development Authority of India (IRDAI) for foreign reinsurance branches (FRBs)?

## Options :

1. Rs 25 crore
2. Rs 45 crore
3. Rs 50 crore
4. Rs 70 crore
5. Rs 75 crore

## Answer : Rs 50 crore

The Insurance Regulatory and Development Authority of India (IRDAI) has slashed the minimum capital requirement for foreign reinsurance branches (FRBs) from Rs 100 crore to Rs 50 crore with the provision to repatriate any excess assigned capital.

Question No. 53
Who was the Chairman of ISRO at the launch of Chandrayaan-1 in 2008?
Options:

1. Dr. Krishnaswamy Kasturirangan
2. Dr. K. Radhakrishnan
3. Dr. Muthayya Vanitha
4. Dr Mylswamy Annadurai
5. Dr. G Madhavan Nair

Answer: Dr. G Madhavan Nair
Chandrayaan-1 was India's first lunar mission launched under the chairmanship of Shri G.Madhavan Nair.

Question No. 54
In which Indian state is the Mundeshwari Devi Temple, considered the 'oldest functional' temple, situated?

Options:

1. Uttar Pradesh
2. Rajasthan
3. Bihar
4. Madhya Pradesh
5. Gujarat

Answer: Bihar
The Mundeshwari Devi Temple (also spelled as Mundesvari) is located at Kaura in Kaimur district in the state of Bihar, India on the Mundeshwari Hills. It is an ancient temple dedicated to the worship of Lord Shiva and Shakti and is considered one of the oldest Hindu temples in Bihar. It is also considered as the 'oldest functional' temple in the world.

Question No. 55
U 20 wrestling championship 2023 held in which country?
Options:

1. UAE
2. Jordan
3. Saudi Arabia
4. Egypt
5. Kuwait

Answer: Jordan
Indian wrestlers finished their campaign at the World Under-20 Wrestling Championships 2023 with with 14 medals - four gold, three silver and seven bronze. The event was held in Amman, Jordan, from August 14 to 20.

Question No. 56
Who has been recognized as the National Icon by the Election Commission of India (ECI)?
Options:

1. Yuvraj Singh
2. Shahrukh Khan
3. M S Dhoni
4. Amitabh Bachchan
5. Sachin Tendulkar

Answer: Sachin Tendulkar
SachinTendulkar recognised as National Icon for ECI in presence of Commission on 23rd August, 2023 at New Delhi.

Question No. 57
Who was the founder of IndiGo airline founded in 2006?

## Options :

1. Rahul Bhatia
2. Rakesh Gangwal
3. Manish Mundra
4. $a \& b$ both
5. All

Answer : a \& b both
IndiGo was founded in 2006 as a private company by Rahul Bhatia of InterGlobe Enterprises and Rakesh Gangwal. InterGlobe had a $51.12 \%$ stake in IndiGo and $47.88 \%$ was held by Gangwal's Virginia-based company, Caelum Investments.

Question No. 58
Which state in India has the highest micro-irrigation area?

## Options :

1. Maharashtra
2. Haryana
3. Punjab
4. Karnataka
5. Rajasthan

## Answer: Rajasthan

Rajasthan has the highest area covered by micro-irrigation (21.67\%), followed by Maharashtra (16.35\%), Andhra Pradesh (14.96\%), Karnataka (10.89\%), Gujarat (10.67\%), Haryana (7.37\%), Madhya Pradesh (4.53\%), Tamil Nadu (4.12\%), Chhattisgarh (3.3\%), Bihar (1.31\%), and Odisha (1.29\%).

Question No. 59
In which article of the Indian Constitution is the appointment and removal process of the Comptroller and Auditor-General of India defined?

## Options :

1. Article 143
2. Article 145
3. Article 148
4. Article 150
5. Article 151

Answer : Article 148
Article 148 states that there shall be a Comptroller and Auditor-General of India who shall be appointed by the President by warrant under his hand and seal and shall only be removed from office in like manner and on like grounds as a Judge of the Supreme Court.

Question No. 60
Which part of the Indian Constitution contains focus on the directive principles of state policy?
Options:

1. Part II
2. Part III
3. Part IV
4. Part V
5. Part VI

Answer : Part IV
Part IV (Articles 36-51) of our constitution deals with directive principles of state policy. It includes implementation of the uniform civil code, abolition of untouchability and prohibition of its practice in any form and removal of legal disabilities on the women etc.

Question No. 61
Match the Following:
A) Jupiter
i) Smallest planet
B) Mars
ii) Pluto
C) Mercury
iii) Largest planet
D) Dwarf planet
iv) Red Planet

## Options :

1. I-b, II-a, III-d, IV-c
2. I-c, II-b, III-a, IV-d
3. I-b, II-d, III-a, IV-c
4. I-c, II-d, III-a, IV-b
5. I-c, II-b, III-d, IV-a

Answer : I-c, II-d, III-a, IV-b
A) Jupiter
i) largest planet
B) Mars
ii) Red Planet
C) Mercury
iii) Smallest planet
D) Dwarf planet
iv) Pluto

Question No. 62
Who currently holds the position of Chief of the Army?

## Options :

1. General Sandeep Pandey
2. General Manoj Mukund Naravane
3. General Akash Chaudhary
4. General Manoj Pande
5. General Rajendra Murkute
[^0]Question No. 63

Who has been elected as the new Prime Minister of Thailand following a decisive win in a parliamentary vote in August 2023?

## Options:

1. Prayuth Chan-o-cha
2. Yingluck Shinawatra
3. Srettha Thavisin
4. Anutin Charnvirakul
5. Thaksin Shinawatra

## Answer : Srettha Thavisin

Srettha Thavisin has been elected as the new prime minister of Thailand following a decisive win in a parliamentary vote.

Question No. 64
Who is the Indian origin author novel, "Western Lane," has been shortlisted for the 2023 Booker Prize?

Options :

1. Chetna Maroo
2. Arundhati Roy
3. Salman Rushdie
4. Jhumpa Lahiri
5. Vikram Seth

## Answer : Chetna Maroo

Chetna Maroo is an British Indian author. Her debut novel, Western Lane, has been shortlisted for the 2023 Booker Prize.

Question No. 65
In the "State of Governance India 2047" theme, which state mission received the SKOCH Award in the Gold category for its exceptional work in creating marketing avenues for Self-Help Groups (SHGs)?

## Options :

## 1. Kerala

2. Jammu and Kashmir
3. Maharashtra
4. Tamil Nadu
5. West Bengal

## Answer : Jammu and Kashmir

Jammu and Kashmir Rural Livelihoods Mission (JKRLM) has bagged the SKOCH Award under the theme "State of Governance India 2047" in Gold category for its outstanding efforts in creating marketing avenues for Self-Help Groups (SHGs) in the UT of Jammu \& Kashmir.

Question No. 66
Where is the Charminar officially incorporated into the emblem of that state?
Options :

1. Kochi
2. Nagpur
3. Jaipur
4. Hyderabad
5. Chennai

Answer: Hyderabad
The Charminar is a monument located in Hyderabad, Telangana, India. Constructed in 1591, the landmark is a symbol of Hyderabad and officially incorporated in the emblem of Telangana.

Question No. 67
What is the current FIFA Ranking of the Indian football team, as of [current year]?
Options:

1. 91
2. 99
3. 101
4. 105
5. 106

Answer : 99
The Indian football team's current FIFA Ranking is 99. They were 106 in March but have gained points on the back of recent wins and clean sheets in May-June 2023 games.

Question No. 68
Which company was awarded the 'Golden Peacock Environment Management Award 2023' in the Power Transmission Sector?

Options:

1. Tata Power
2. Adani Transmission Limited
3. Reliance Power
4. NHPC Limited
5. BSES Rajdhani Power Limited

Answer: Adani Transmission Limited
Adani Transmission Limited (ATL) has won the 'Golden Peacock Environment Management Award 2023' in the Power Transmission Sector from 'Institute of Directors. ' In 2023, an assessment group comprising Environment, Health and safety, Energy and Climate Change experts assesses over 520 applications.

Question No. 69

Which Satellite-Based Augmentation System (SBAS) holds the distinction of being the world's first to be certified for approach with vertical guidance and operates in the equatorial ionospheric region?

## Options :

1. EGNOS
2. WAAS
3. GAGAN
4. MSAS
5. QZSS

Answer : GAGAN
GAGAN is the first Satellite-Based Augmentation System in the world which has been certified for approach with vertical guidance operating in the equatorial ionospheric region.

Question No. 70
Which Indian state has been awarded the Arogya Manthan award in 2023 for providing free medical care to the maximum number of people?

Options:

1. Tamil Nadu
2. Kerala
3. Karnataka
4. Maharashtra
5. Gujarat

Answer: Kerala
Kerala has once again won the Arogya Manthan award 2023, for providing free medical care to the maximum number of people.

Question No. 71

Under which article was the Right of Children to Free and Compulsory Education (RTE) Act, 2009, introduced to provide every child with the right to full-time elementary education of satisfactory and equitable quality?

## Options :

1. Article 23
2. Article 21
3. Article 28
4. Article 22
5. Article 21-A

Answer : Article 21-A
The 86th Amendment Act, 2002 inserted Article 21-A in the Constitution of India to provide free and compulsory education of all children in the age group of six to fourteen years as a Fundamental Right in such a manner as the State may, by law, determine.

Question No. 72
Match the following:
A) Himalaya
B) Aravalli
i) Western Ghats
ii) Block Mountains
C) Satpura
D) Anamudi
iii) Precambrian
iv) Young Fold Mountains

## Options:

1. I-b, II-a, III-d, IV-c
2. I-d, II-c, III-b, IV-a
3. I-b, II-d, III-a, IV-c
4. I-c, II-d, III-a, IV-b
5. I-a, II-d, III-c, IV-b

Answer: I-d, II-c, III-b, IV-a

## Solution :

A) Himalaya
i) Young Fold Mountains
B) Aravalli
ii) Precambrian
C) Satpura
iii) Block Mountains
D) Anamudi
iv) Western Ghats

Question No. 73
Who has been appointed as the brand ambassador for Xiaomi's smartphone category I India, focusing on innovation and user-centric design?

## Options :

1. Pankaj Tripathi
2. Ayushmann Khurrana
3. Manoj Bajpai
4. Nawazuddin Siddique
5. Amitabh Bachchan

## Answer : Pankaj Tripathi

Xiaomi India welcomed acclaimed actor Pankaj Tripathi as the brand ambassador for its smartphone category in India. With focus on innovation, and user-centric design, Xiaomi has gained immense popularity among Indian consumers.

Question No. 74
Who is the writer of the book Dogalapan: The Hard Truth about Life and Start-Ups?

## Options:

1. Aman Gupta
2. Anupam Mittal
3. Ghazal Alagh
4. Namita Thapar
5. Ashneer Grover

Answer : Ashneer Grover
Ashneer Grover, co-founder of Bharatpe and icon of Shark Tank India is the writer of the book Dogalapan: The Hard Truth about Life and Start-Ups.

Question No. 75

Who was awarded the Best Actor Award at the 69th National Film Awards?
Options :

1. Ranvir Singh
2. Ranbir Kapoor
3. Allu Arjun
4. Aamir Khan
5. Rajkummar Rao

Answer : Allu Arjun
Allu Arjun won the National Award as Best Actor for his film Pushpa: The Rise.
Allu Arjun also became the first Telugu star to win the award in 68 years.

Question No. 76
Given below are sentences with an error in each. The error is in one part of the sentence. Below each sentence are given the options containing the parts of the sentences. Choose the option which contains the error.

India has selected American company Cummins for supply of engines for indigenous light tanks, urgently needed in counter Chinese deployments in high altitudes.

## Options :

1. India has selected American company Cummins
2. for supply of engines for indigenous light tanks
3. urgently needed in counter Chinese
4. deployments in high altitudes
5. No error

Answer: urgently needed in counter Chinese
'in counter' should be replaced with 'to counter'. The preposition 'in' is incorrect and should be replaced with 'to'. Usually if the verb 'need' is followed by another verb, 'to' is used after 'need'.

Question No. 77
Given below are sentences with an error in each. The error is in one part of the sentence. Below each sentence are given the options containing the parts of the sentences. Choose the option which contains the error.

Saudi Arabia has suspended talks in potentially normalising ties with Israel, a source told AFP on Saturday, amid the war raging between Israel and the Palestinian militant group Hamas.

Options:

1. Saudi Arabia has suspended talks in potentially
2. normalising ties with Israel, a source told AFP on Saturday
3. amid the war raging between Israel and
4. the Palestinian militant group Hamas
5. No error

Answer: Saudi Arabia has suspended talks in potentially
'talks in' should be replaced with 'talks on'. Usually 'talks' is followed by 'on' when used as a noun.

Question No. 78
Given below are sentences with an error in each. The error is in one part of the sentence. Below each sentence are given the options containing the parts of the sentences. Choose the option which contains the error.

Earlier Israeli Prime Minister Benjamin Netanyahu declared that Israel's intense bombardment of Gaza marked only the initial phase of the country's response to a Hamas offense that had claimed the lives of 1,300 individuals.

Options :

1. Earlier Israeli Prime Minister Benjamin Netanyahu declared that
2. Israel's intense bombardment of Gaza marked
3. only the initial phase of the country's response to a
4. Hamas offense that had claimed the lives of 1,300 individuals
5. No error

Answer: Hamas offense that had claimed the lives of 1,300 individuals 'offense' should be replaced with 'offensive'. Offense is described as annoyance or resentment brought about by a perceived insult to or disregard for oneself.

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There is no requirement of 'offense'. 'Offensive' when used a noun means 'an attacking military campaign'. Hence 'offensive' is correct.

Question No. 79
Given below are sentences with an error in each. The error is in one part of the sentence. Below each sentence are given the options containing the parts of the sentences. Choose the option which contains the error.

Netanyahu's remarks came short after the Israeli military revealed that their troops had conducted limited operations within the besieged Palestinian territory over the previous 24 hours, in preparation for an expected ground invasion.

Options:

1. Netanyahu's remarks came short after the Israeli military revealed that
2. their troops had conducted limited operations within the besieged Palestinian territory
3. over the previous 24 hours
4. in preparation for an expected ground invasion
5. No error

## Answer : Netanyahu's remarks came short after the Israeli military revealed that

'Short' needs to be replaced with 'shortly'. 'Shortly' is a adverb that defines the action 'came' in the sentence while 'short' is an adjective that is not needed.

Question No. 80
Given below are sentences with an error in each. The error is in one part of the sentence. Below each sentence are given the options containing the parts of the sentences. Choose the option which contains the error.

India's travel, tourism and hospitality industry is set in to create thousands of jobs in the upcoming months, driven by a spike in leisure travel for the festive season as well as a big increase in business trips.

Options:

1. India's travel, tourism and hospitality industry is set in to create
2. thousands of jobs in the upcoming months,
3. driven by a spike in leisure travel for the
4. festive season as well as a big increase in business trips


#### Abstract

5. No error

Answer : India's travel, tourism and hospitality industry is set in to create 'Set in to' is inappropriate. It can be corrected by removing 'in' out of the phrasal verb 'set to' that means 'ready' or 'prepared'.


## Direction:- Read the following passage and answer the questions that follow it. One word is highlighted to help you answer few questions.

Cascading effects in five areas of welfare, including nutrition, environment, behaviour, physical health, and mental health, will result from the effects of climate change on animals, according to a recent study. The study emphasises the need for researchers to carefully consider which areas are of immediate and long-term importance in order to protect the welfare and longevity of animals used for food production, as domestic pets, and for conservation in zoos and nature reserves.

Bats, zebrafish, stony creek frogs, koalas, African elephants, chickens, and dairy cows are among the animals at risk from the effects of climate change that are mentioned in the review.

Although there are variations in how different animals react biologically to stress, it is argued in the review that the five domains model offers a reliable tool for research use and to assess the immediate effects of climatic variability on animals. The study provides a broad overview of the impacts of climate change on animal welfare, drawing on examples from various animal groups across terrestrial and aquatic habitats, encompassing both wildlife and domesticated species.

Dr Edward Narayan, lead author and Senior Lecturer of Animal Science in the School of Agriculture and Food Science at The University of Queensland, Australia, said, "While researchers have extensively examined the effects of climate change on animals, the direct correlation between climate change and animal welfare, particularly in the context of wild animals, remains relatively scarce in existing studies. In this review, our research group - The Stress Lab presents a series of wildlife and domesticated animals examples from various countries, across both aquatic and terrestrial systems and provides an overview of the impacts of climate change on each of the five domains of animal welfare. We hope that future researchers will apply the animal welfare domains to evaluate how climate change impacts on animals, and further research will pave the way to protecting animals from the catastrophic impacts of climate change."

The review highlights research that shows how heat stress, for example, in dairy cows has resulted in a $35 \%$ reduction in milk production. Heat stress significantly impacts lactation performance, immune function, and calf health. However, monitoring cows' activity and rumination time helps detect heat stress, and appropriate heat dissipation strategies such as sunshades and sprinklers can mitigate its effects, the researchers suggest.

It also argues that broiler chickens kept under hot conditions for four days showed higher cases of necrosis - reducing the quality of their life and meat. The welfare of birds, especially mature
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broilers, under warmer conditions, is of great concern. Birds have a limited capacity for heat regulation as they lack sweat glands, and regulate temperature by panting, limiting their activity and drinking more. Accordingly, air conditioning units may be required to maintain an optimal production temperature.

Question No. 81
What are the five areas of welfare mentioned in the passage that may be affected by climate change in animals?

## Options :

1. Nutrition, environment, psychology, physical health, and agriculture
2. Food production, environmental conservation, climate, behavior, and mental health
3. Nutrition, climate, mental health, physical health, and behavior
4. Nutrition, environment, behavior, physical health, and mental health
5. Wildlife, aquatic systems, terrestrial systems, agriculture, and climate

## Answer : Nutrition, environment, behavior, physical health, and mental health

The passage mentions the five areas of welfare as nutrition, environment, behavior, physical health, and mental health. These areas are discussed in the context of the effects of climate change on animals,

Question No. 82
According to the passage, how does heat stress impact dairy cows, and what measures are suggested to mitigate its effects?

## Options :

1. Heat stress enhances milk production and overall health; sunshades and sprinklers are recommended
2. Heat stress significantly reduces calf health; no measures are suggested
3. Heat stress reduces milk production and immune function; monitoring cow activity and using sunshades and sprinklers can help
4. Heat stress has no impact on dairy cows; no measures are necessary
5. Heat stress leads to weight gain in dairy cows; increased water consumption is suggested

Answer: Heat stress reduces milk production and immune function; monitoring cow activity and using sunshades and sprinklers can help
The passage discusses how heat stress negatively impacts dairy cows, leading to areduction in milk production and immune function. To mitigate the effects of heat stress, the researchers suggest monitoring cow activity and using measures like sunshades and sprinklers. These measures can help maintain the well-being and productivity of the cows under hot conditions.

Question No. 83
Which of the following statements is/are true in reference to the passage?
(i) Hot conditions have subtle effects on broiler chickens still making it suitable for consumption.
(ii) Animals are greatly affected like birds as birds have strong adaptability to heat in the environment.
(iii) The temperature isn't so scourging that air conditioning units are required.
(iv) Birds abound in sweat glands helping them adapt to heat to a large extent.
(v) The effects of the higher temperature don't have any impact on broilers

## Options :

1. Only I, ii \& iii
2. Only i \& ii
3. Only iii
4. Only v
5. None of the above

## Answer : None of the above

i. "Hot conditions have subtle effects on broiler chickens still making it suitable for consumption."
ii. This statement is false. The passage mentions that broiler chickens kept under hot conditions for four days showed higher cases of necrosis, which reduces the quality of their life and meat. So, hot conditions have negative effects on broiler chickens.
iii. "Animals are greatly affected like birds as bird's have strong adaptability to heat in the environment."
iv. This statement is false. The passage states that birds, especially mature broilers, have limited capacity for heat regulation, as they lack sweat glands. This indicates that bird's are not well adapted to handling heat.
v. "The temperature isn't so scourging that air conditioning units are required."
vi. This statement is false. The passage suggests that air conditioning units may be required to maintain an optimal production temperature, particularly for broiler chickens kept under hot conditions.
vii. "Birds abound in sweat glands helping them adapt to heat to a large extent." This statement is false. The passage mentions that birds lack sweat glands, and they regulate temperature by panting. They have limited capacity for heat regulation.
viii. "The effects of the higher temperature don't have any impact on broilers." This statement is false. The passage clearly indicates that higher temperatures have a negative impact on broiler chickens, leading to issues like necrosis and reduced quality of life and meat.

Question No. 84
What is the primary goal of the review presented in the passage, as highlighted by Dr. Edward Narayan?
(i) To emphasize the lack of research on climate change and animal welfare.
(ii) To propose heat dissipation strategies for dairy cows.
(iii) To introduce a new five-domain model for animal welfare.
(iv) To discuss the impact of climate change on human health.
(v) To encourage future research on the correlation between climate change and animal welfare.

## Options :

1. Only I, ii \& iii
2. Only i \& ii
3. Only iii
4. Only v
5. None of the above

Answer: Only v
Dr. Edward Narayan, the lead author of the review, emphasizes that the primary goal of the review is to encourage future researchers to apply the five domains of animal welfare to evaluate how climate change impacts animals. The review serves as a foundation for further research on the correlation between climate change and animal welfare, paving the way to protect animals from the catastrophic impacts of climate change.

Question No. 85
Which of the following options is opposite in meaning to the word 'cascading'?

## Options:

1. Waterfall
2. Torrent
3. Trickle
4. Cataract
5. Falls

## Answer: Trickle

Waterfall: Often used interchangeably with cascade, especially when describing a natural flowing water feature.

Torrent: Refers to a fast and turbulent stream of water, akin to a cascade.
Trickle: This word signifies a very slow, gentle flow or a small amount of liquid moving gradually, contrasting with the forceful descent of a cascade.

Cataract: Typically used to describe a large, powerful waterfall or cascade.
Falls: A common synonym for cascade when talking about waterfalls.

## Direction: In the following passage, there are five blanks. Fill in the blanks with the correct words from the given options.

Democracy has its dangers, the greatest of which is that it may be the rule of ignorance. Citizens who are not $\qquad$ 86 $\qquad$ intelligent and educated are $\qquad$ 87 $\qquad$ to commit errors of judgment in the casting of votes. The best man may thus $\qquad$ 88 $\qquad$ to get elected. Elections are usually a $\qquad$ 89 $\qquad$ of propaganda. Another criticism of democracy is that it is wanting in efficiency. For prompt and effective action, unity of action is
$\qquad$ 90 $\qquad$ .

Question No. 86
What will come in blank 86 ?

## Options :

1. barely
2. sufficiently
3. highly
4. perfectly
5. slowly

## Answer : sufficiently

Options a and c will be rejected for incorrect meanings. From options b, c and d, option b is best suitable to the context of the sentence.

Question No. 87
What will come in blank 87 ?

## Options :

1. sure
2. deliberately
3. unlikely
4. likely
5. probably

Answer: likely
We can see that options a and $c$ are unfit for the blank as they don't add meaning to the sentence. From b, d and e, b and e cannot be used as they are grammatically incorrect in the sentence. Thus, we will choose option d.

Question No. 88
What will come in blank 88 ?

## Options :

1. fail
2. succeed
3. try
4. desire
5. practice

Answer : fail
As per the context of the sentence, we will select option a. All other options do not add meaning to the sentence or convey its true meaning.

Question No. 89
What will come in blank 89?

## Options:

1. kind
2. process
3. matter
4. result
5. consequence

Answer : matter
Options $a$ and $b$ are rejected at first instance as they do not match the meaning of the sentence. Both options $d$ and e have the same meaning but are unsuitable to the context of the sentence. Thus, we will choose option c as our answer.

Question No. 90
What will come in blank 90 ?
Options :

1. enough
2. dispensable
3. essential
4. superfluous
5. artificial

## Answer: essential

Options b, d and e have similar meanings and cannot be used to fill this blank and will be rejected. As for option a, it does not match the context of the sentence.

Thus, we will choose option $c$ as our answer.

Question No. 91

## Given below is a sentence in direct speech. From the options below, choose the best option for the indirect speech of this sentence.

The girl said, "Hurrah! We have won the match."

## Options :

1. The girl exclaimed with joy that they have won the match.
2. The girl exclaimed with disgust that they had won the match.
3. The girl exclaimed that they were winning the match.
4. The girl exclaimed with joy that they had won the match.
5. The girl jumped with joy as they were winning the match.

## Answer : The girl exclaimed with joy that they had won the match.

The match has already been won, so the sentence has to be in past tense. Only band dare in the past tense. However, in b, the word 'disgust' is untrue and changes the meaning of the sentence. Thus, we will choose option d.

Question No. 92
Given below is a sentence in direct speech. From the options below, choose the best option for the indirect speech of this sentence.

Her mother ordered her to go to her room and study.
Options:

1. Her mother said, "Go to your room and study."
2. Her mother said to her, "Go in your room and study."
3. Her mother shouted, "Go right now to your study room."
4. Her mother said firmly, "Go and study in your room."
5. Her mother requested, "Please go to your room to study."

Answer: Her mother said, "Go to your room and study."
Only options $a$ and $b$ are conveying the exact meaning of the sentence while others have slight changes in the order of the verbs. We will reject b as it says 'in your room', while a says 'to your room.' Thus, a is the correct option.

Question No. 93
Given below are sentences in active/passive voice. From the options given below, choose the one that best expresses the same sentence in passive/active voice.

Rohini was moved to tears at the sight of the miserable beggar.

## Options:

1. The sight of the miserable beggar has been moving Rohini to tears.
2. The sight of the miserable beggar will move Rohini to tears.
3. The sight of the miserable beggar is moving Rohini to tears.
4. The sight of the miserable beggar has moved Rohini to tears.
5. The sight of the miserable beggar moved Rohini to tears.

## Answer : The sight of the miserable beggar moved Rohini to tears.

Only this option e accurately depicts the change in voice of the sentence while other options have incorrect tenses.

Question No. 94
Given below are sentences in active/passive voice. From the options given below, choose the one that best expresses the same sentence in passive/active voice.

We had to stop all other work to complete our assignment.
Options:

1. All other work has to be stopped by us to complete our assignment.
2. All other work had to be stopped by us to complete our assignment.
3. All other work has stopped to complete our assignment.
4. All other work has been done by us to complete our assignment.
5. All other work will be stopped by us to complete our assignment.

Answer : All other work had to be stopped by us to complete our assignment.
Only option b correctly depicts the change in voice of the sentence while other options have errors of tenses in them.

Question No. 95
Given below are sentences in active/passive voice. From the options given below, choose the one that best expresses the same sentence in passive/active voice.

I will wash the car every Sunday.

## Options:

1. The car is being washed by me on every Sunday.
2. Every Sunday the car is washed by me.
3. The car was washed every Sunday by me.
4. The car will be washed by me every Sunday.
5. Every Sunday by myself the car is to be washed.

## Answer : The car will be washed by me every Sunday.

The correct option should be a sentence that uses a Future Continuous tense as the sentence depicts a repeat of an action at regular intervals. Only option d correctly depicts the change in voice with correct usage of tense.

## Direction: Read the following sentences and rearrange them to form a coherent paragraph.

A. Hence, the term commonly used for land acquisition by the villagers is "loss of land."
B. Not surprisingly then, the acquisition of land is an important event in a farmer's life and in the history of a village.
C. Losing one's land implies losing an entire way of life. No wonder there is a tone of wretchedness when the term is used.
D. Farmers have a layered and complex relationship with their land.
E. More often than not, it means either partial or complete annihilation of the village-the village simply ceases to exist as land acquisition proceeds.

Question No. 96
Which is the second sentence after rearrangement?

## Options :

1. E

## 2. C

3. D
4. A
5. B

Answer: B
To be able to correctly determine the order of the sentence in the paragraph, we must first locate the qualifier. In the options, $A, B$ and $E$ follow a sentence and thus cannot be the first sentence. From C and D, D seems to be the most appropriate to begin the paragraph. Since sentence D introduces the idea of a farmer's relationship with land, B continues with the same idea and can follow $D$.

Thus, we have D, then B until now. In B the idea of 'land acquisition' is introduced and $E$ seems to explain the meaning of this term. Thus, we have $D, B$ and
E. From the options left A and C, A will come first as C has a conclusive and sad tone to it. Thus, the correct sequence is $D, B, E, A$ and $C$. As per this sequence,
$B$ is the second sentence.
Question No. 97
Which is the fifth sentence after rearrangement?

## Options :

1. C
2. $A$
3. D
4. B
5. E

Answer: C
To be able to correctly determine the order of the sentence in the paragraph, we must first locate the qualifier. In the options, $A, B$ and $E$ follow a sentence and thus cannot be the first sentence. From C and $D, D$ seems to be the most appropriate to begin the paragraph. Since sentence D introduces the idea of a farmer's relationship with land, B continues with the same idea and can follow $D$.

Thus, we have $D$, then $B$ until now. In B the idea of ‘land acquisition' is introduced and $E$ seems to explain the meaning of this term. Thus, we have D, B and
E. From the options left A and C, A will come first as C has a conclusive and sad tone to it. Thus, the correct sequence is $D, B, E, A$ and $C$. As per this sequence, $C$ is the fifth sentence.

Question No. 98
Which is the first sentence after rearrangement?

## Options :

## 1. E

2. D
3. C
4. B

## 5. A

Answer: D
To be able to correctly determine the order of the sentence in the paragraph, we must first locate the qualifier. In the options, $A, B$ and $E$ follow a sentence and thus cannot be the first sentence. From C and D, D seems to be the most appropriate to begin the paragraph. Since sentence D introduces the idea of a farmer's relationship with land, B continues with the same idea and can follow $D$.

Thus, we have D, then B until now. In B the idea of 'land acquisition' is introduced and E seems to explain the meaning of this term. Thus, we have D, B and E. From the options left $A$ and $C, A$ will come first as $C$ has a conclusive and sad tone to it. Thus, the correct sequence is $D, B, E, A$ and $C$. As per this sequence, $D$ is the first sentence.

Question No. 99
Which is the fourth sentence after rearrangement?

## Options :

1. E
2. $B$

## 3. A

4. C
5. D

Answer: A
To be able to correctly determine the order of the sentence in the paragraph, we must first locate the qualifier. In the options, $A, B$ and $E$ follow a sentence and thus cannot be the first sentence. From C and D, D seems to be the most appropriate to begin the paragraph. Since sentence D introduces the idea of a farmer's relationship with land, B continues with the same idea and can follow $D$.

Thus, we have D, then B until now. In B the idea of 'land acquisition' is introduced and $E$ seems to explain the meaning of this term. Thus, we have D, B and
E. From the options left A and C, A will come first as C has a conclusive and sad tone to it. Thus, the correct sequence is $D, B, E, A$ and $C$. As per this sequence, A is the fourth sentence.

Question No. 100
Which is the third sentence after rearrangement?

## Options :

1. D
2. C
3. E
4. B
5. A

Answer: E
To be able to correctly determine the order of the sentence in the paragraph, we must first locate the qualifier. In the options, $A, B$ and $E$ follow a sentence and thus cannot be the first sentence. From C and D, D seems to be the most appropriate to begin the paragraph. Since sentence D introduces the idea of a farmer's relationship with land, B continues with the same idea and can follow $D$.

Thus, we have $D$, then $B$ until now. In $B$ the idea of 'land acquisition' is introduced and $E$ seems to explain the meaning of this term. Thus, we have D, B and E. From the options left $A$ and $C$, $A$ will come first as $C$ has a conclusive and sad tone to it. Thus, the correct sequence is $D, B, E, A$ and $C$. As per this sequence, $E$ is the third sentence.

Question No. 101

## Choose the most suitable option to fill in the blanks in the sentences below.

The project became so expensive that we had $\qquad$ .

## Options :

1. pull through
2. walk through
3. pull in
4. pull out
5. pull apart

Answer : pull out
d is correct. 'Pull out' here means to withdraw, disengage or retreat.
'Pull in' is unsuitable as it means to keep in check or park at a location. 'Pull through' refers to getting through a dangerous or difficult situation, and is unsuitable for use here. 'Walk through' means to guide someone through a process and cannot be used in this sentence. 'Pull apart' means to separate by force and is out of context in this sentence.

Question No. 102
Choose the most suitable option to fill in the blanks in the sentences below.
I was born and $\qquad$ in the highlands.

## Options :

1. bred
2. bread
3. bored
4. board
5. braid

## Answer : bred

Let us study the meanings of all options. Bred means to be brought up in a specific environment. Bread is a staple food made of flour. Bored means to feel weary and impatient due to a lack of interest. A board is a thin, flat piece of wood. Thus, 'bred' seems to be the most suitable option in the sentence. 'Braid' refers to a type of hair styling usually done by interweaving two or more strands of hair. All options except for 'a' will be rejected.

Question No. 103
Choose the most suitable option to fill in the blanks in the sentences below.
The restaurant I had dinner at $\qquad$ expensive, but the food and staff were great.

## Options :

1. had been
2. were

3 . is
4. was
5. will be

Answer: was
d is correct. Let's try to examine all options first. Options bis ruled out as 'the restaurant' is singular whereas 'were'denoted plurality. Option c is in the present tense whereas we already know that the sentence is in past tense. 'Had been' denotes a past continuous tense where the dinner is already over. Option 'e' is also unsuitable as the sentence is in past tense and 'will be' denotes future tense. Thus, we will reject options $a, b$ and $c$.

Question No. 104
In the given questions, choose one correct option that describes the sentence in the most suitable manner.

A person appointed by two parties to solve a dispute -

## Options :

1. arbitrator
2. architect
3. amateur
4. atheist
5. archer

Answer : arbitrator

> Answer. a is correct. An architect is a person who plans and designs construction of buildings. An amateur is a person who does not have much skill in doing something. An atheist is a person who does not believe in the existence of God. An archer is another name for a bowman, or a person who uses a bow and arrow. Thus, only option 'a' is suitable for this question.

Question No. 105
In the given questions, choose one correct option that describes the sentence in the most suitable manner.

The study of inscriptions is called -
Options:

1. geography
2. calligraphy
3. epigraphy
4. geology
5. sonography

## Answer : epigraphy

Geography is the study of people and their environments. Calligraphy refers to the creation of visual art and design with a pen. Geology refers to the study of Earth. Sonography is a type of diagnostic medical test that creates images of tissues and glands. Thus, we can conclude that option 'c' epigraphy is the correct answer.

## Direction: Read the following passage and answer the questions that follow it. One word is highlighted to help you answer few questions.

Once upon a time, in a small village nestled in the heart of a lush forest, there was a legend about a magical well. The well was hidden deep within the woods, its location known to only a few. The water from this well was said to have mystical properties, granting anyone who drank it a single, heartfelt wish.

A young girl named Eliza grew up listening to the tales of the magical well. As a child, she would often play near the edge of the forest, dreaming of the day she would find the well and make her dearest wish. Years passed, and Eliza's longing for the magical water never waned. She had
seen it bring happiness and healing to countless others in her village. Some wished for good health, while others wished for the well-being of their loved ones. The stories of these wishes coming true filled her heart with hope.

One day, as the sun cast dappled shadows through the trees, Eliza ventured into the forest, guided by an ancient map passed down through generations. Her journey was filled with trials, but her determination led her to the hidden well at last.

As she approached, the well's waters sparkled like liquid emeralds, reflecting the pure heart of the one who sought its magic. Eliza cupped her hands and took a sip of the cool, refreshing water. She closed her eyes and made her wish with all her heart.

Eliza wished for the well to remain a secret, forever protected from those who might exploit its power. She knew that such a gift was too precious to be exploited for personal gain. When she opened her eyes, she saw the well's waters shimmer with approval. Her wish had been granted.

Eliza returned to her village with a heart full of joy, knowing that the magical water would continue to bring hope and happiness to those who needed it most. And she kept the secret of the well, for some gifts were meant to be shared with the world, but others, like the magical water, were meant to be protected for all time.

Question No. 106
What does the passage suggest about the nature of Eliza's wish?
i. Her wish is entirely self-centered and greedy.
ii. Her wish reflects her desire for personal gain and power.
iii. Her wish is altruistic, considering the well's protection and purpose.
iv. Her wish is to reveal the well's location to the world.
v. Her wish is to sell the well's water for profit.

## Options :

1. Only I, ii \& iii
2. Only i \& ii
3. Only iii
4. Only v
5. None of these

Answer: Only iii
Explanation: The passage suggests that Eliza's wish is selfless and altruistic, as she wishes to protect the well and ensure its purpose is preserved for the benefit of all.

Question No. 107
What is the legend about the well hidden in the forest in the passage?

## Options :

1. The well grants wishes to anyone who finds it.
2. The well holds a treasure chest of gold coins.
3. The well is a source of ordinary drinking water.
4. The well is guarded by a fearsome dragon.
5. The well is known to everyone in the village.

Answer : The well grants wishes to anyone who finds it.
Explanation: The passage mentions the legend of a magical well hidden in the forest that grants anyone who drinks from it a single, heartfelt wish.

Question No. 108
Why did Eliza venture into the forest to find the well?

## Options :

1. She wanted to find gold coins hidden in the forest.
2. She was tasked with guarding the well's location.
3. She was determined to make a heartfelt wish come true.
4. She hoped to meet a fearsome dragon in the forest.
5. She wanted to sell the well's water to the highest bidder.

Answer: She was determined to make a heartfelt wish come true.
Explanation: Eliza ventured into the forest because she was determined to find the well and make her heartfelt wish come true, as she had grown up hearing the legends about it.

Question No. 109
What is the theme of the passage?

## Options:

1. Selflessness and welfare of others
2. Defense of self
3. Need to fulfill one's wishes
4. Guarding expensive assets
5. Greed knows no bonds

## Answer : Selflessness and welfare of others

The theme of the passage is the idea of selflessness and the protection of something precious for the benefit of all. The passage revolves around the legend of a hidden well with magical properties and the story of Eliza, who ventures into the forest to find it. Her wish, which is to keep the well a secret and protect it from exploitation, exemplifies the theme of selflessness and the preservation of something valuable. The passage underscores the notion that certain gifts or resources are meant to be safeguarded and shared for the greater good, rather than exploited for personal gain.

Question No. 110
Which word is similar in meaning to the word 'nestled'?

## Options :

1. Exposed
2. Perched
3. Ejected
4. Protruded
5. Snuggled

## Answer: Snuggled

Exposed: The opposite of nestled, indicating being in an open, unprotected position.
Perched: Suggesting a precarious or elevated position, which contrasts with nestled's idea of being securely and comfortably situated.
Ejected: Signifying being forcefully removed or expelled, in contrast to the coziness associated with nestled. Protruded: extend beyond or above a surface. Snuggled: This term is synonymous with nestled and implies a comfortable and secure resting or positioning, often in a small, warm space.

Direction: The provided table illustrates the sales data for "Rasan" taken from the stockyard, including ratio of the number of Rasan sold to Shops (private Shop + government Shop) and the number of Rasan sold to individuals (males + females), respectively, in four different Months.

Question No. 111
What percentage of the total number of Rasans sold in February is the number of Rasans sold to male individuals if the number of Rasans sold to female individuals in February is 174 ?

| Months | Total number of Rasan Sold | Number of Rasans sold to (Shops:Individuals) |
| :--- | :--- | :--- |
| January | 840 | $7: 5$ |
| February | 1320 | $9: 2$ |
| March | 560 | $9: 5$ |
| April | 1440 | $11: 1$ |

## Options :

1. $12 \%$
2. $5 \%$
3. $10 \%$
4. $18 \%$
5. none of these

Answer:5\%
ATQ,

| Months | Total number of Rasan <br> Sold | Number of Rasan sold to <br> Shops | Number of Rasan Sold to <br> individuals |
| :--- | :--- | :--- | :--- |
| January | 840 | $840 \times(7 / 12)=490$ | $840-490=350$ |
| February 1320 | $1320 \times(9 / 11)=1080$ | $1320-1080=240$ |  |
| March | 560 | $560 \times(9 / 14)=360$ | $560-360=200$ |
| April | 1440 | $1440 \times(11 / 12)=1320$ | $1440-1320=120$ |

Number of Rasan sold to male individuals in February is $=240-174=66$
Hence Required percentage $=(66 / 1320) \times 100=5 \%$.

Direction: The provided table illustrates the sales data for "Rasan" taken from the stockyard, including ratio of the number of Rasan sold to Shops (private Shop + government Shop) and the number of Rasan sold to individuals (males + females), respectively, in four different Months.

Question No. 112
If $25 \%$ of the total number of Rasans sold in January were bought by government shops, then how many Rasans were sold to private shops in January?

| Months | Total number of Rasan Sold | Number of Rasans sold to (Shops:Individuals) |
| :--- | :--- | :--- |
| January | 840 | $7: 5$ |
| February | 1320 | $9: 2$ |
| March | 560 | $9: 5$ |
| April | 1440 | $11: 1$ |

## Options:

1. 352
2. 400
3. 280
4. 225
5. none of these

Answer : 280
ATQ,

| Months | Total number of Rasan <br> Sold | Number of Rasan sold to <br> Shops | Number of Rasan Sold to <br> individuals |
| :--- | :--- | :--- | :--- |
| January | 840 | $840 \times(7 / 12)=490$ | $840-490=350$ |
| February 1320 | $1320 \times(9 / 11)=1080$ | $1320-1080=240$ |  |
| March | 560 | $560 \times(9 / 14)=360$ | $560-360=200$ |
| April | 1440 | $1440 \times(11 / 12)=1320$ | $1440-1320=120$ |

Required number of Rasan were sold to private shops in January $=490-0.25 \times 840=280$

Direction: The provided table illustrates the sales data for "Rasan" taken from the stockyard, including ratio of the number of Rasan sold to Shops (private Shop + government Shop) and the number of Rasan sold to individuals (males + females), respectively, in four different Months.

Question No. 113
Determine the difference in the quantity of Rasans sold to individuals between January and April.

| Months | Total number of Rasan Sold | Number of Rasans sold to (Shops:Individuals) |
| :--- | :--- | :--- |
| January | 840 | $7: 5$ |
| February | 1320 | $9: 2$ |
| March | 560 | $9: 5$ |
| April | 1440 | $11: 1$ |

## Options :

1. 352
2. 400
3. 280
4. 230
5. none of these

Answer: 230
ATQ,

| Months | Total number of Rasan <br> Sold | Number of Rasan sold to <br> Shops | Number of Rasan Sold to <br> individuals |
| :--- | :--- | :--- | :--- |
| January | 840 | $840 \times(7 / 12)=490$ | $840-490=350$ |
| February 1320 | $1320 \times(9 / 11)=1080$ | $1320-1080=240$ |  |
| March | 560 | $560 \times(9 / 14)=360$ | $560-360=200$ |
| April | 1440 | $1440 \times(11 / 12)=1320$ | $1440-1320=120$ |

Required difference $=350-120=230$

Direction: The provided table illustrates the sales data for "Rasan" taken from the stockyard, including ratio of the number of Rasan sold to Shops (private Shop + government Shop) and the number of Rasan sold to individuals (males + females), respectively, in four different Months.

| Months | Total number of Rasan Sold | Number of Rasans sold to (Shops:Individuals) |
| :--- | :--- | :--- |
| January | 840 | $7: 5$ |
| February | 1320 | $9: 2$ |
| March | 560 | $9: 5$ |
| April | 1440 | $11: 1$ |

Question No. 114
Calculate the ratio of the total number of Rasans sold to individuals in February and March combined to the total number of Rasans sold in February.

## Options :

1. 1:3
2. 2:3
3. 3:2
4. 1:1
5. none of these

Answer: 1:3- ATQ,

| Months | Total number of Rasan <br> Sold | Number of Rasan sold to <br> Shops | Number of Rasan Sold to <br> individuals |
| :--- | :--- | :--- | :--- |
| January | 840 | $840 \times(7 / 12)=490$ | $840-490=350$ |
| February 1320 | $1320 \times(9 / 11)=1080$ | $1320-1080=240$ |  |
| March | 560 | $560 \times(9 / 14)=360$ | $560-360=200$ |
| April | 1440 | $1440 \times(11 / 12)=1320$ | $1440-1320=120$ |

Required ratio $=(240+200): 1320=1: 3$

Question No. 115
Determine the total number of Rasans sold to shops in the combined months of February and April.

## Options :

1. 1500
2. 2500
3. 2400
4. 1800
5. none of these

Answer: 2400
ATQ,

| Months | Total number of Rasan <br> Sold | Number of Rasan sold to <br> Shops | Number of Rasan Sold to <br> individuals |
| :--- | :--- | :--- | :--- |
| January | 840 | $840 \times(7 / 12)=490$ | $840-490=350$ |
| February 1320 | $1320 \times(9 / 11)=1080$ | $1320-1080=240$ |  |
| March | 560 | $560 \times(9 / 14)=360$ | $560-360=200$ |
| April | 1440 | $1440 \times(11 / 12)=1320$ | $1440-1320=120$ |

Required total $=1080+1320=2400$

Direction: The pie chart provided illustrates the allocation (in either percentage or absolute figures) of customer inquiries received by a customer service center on four different months, in relation to the total number of inquiries received by the center over the course of those four months collectively.


Question No. 116
Calculate the total number of customer inquiries received by the Service Center in the month of February.

## Options :

1. 1650
2. 1200
3. 1250
4. 1300
5. none of these

Answer: 1200
ATQ,
Percentage of number of customer inquires received on March out of total number of
customer inquires received on given four months $=100 \%-(25+20+15) \%=40 \%$
So, total number of customer inquires received $=2400 \div 0.4=6000$
So, number of customer inquires received on January $=6000 \times 0.25=1500$
Number of customer inquires received on February $=6000 \times 0.2=1200$
And number of customer inquires received on April $=6000 \times 0.15=900$
Number of customer inquires received by the Service center on February $=1200$

Question No. 117
Calculate the quantity of international customer inquiries received in April out of the total number of customer inquiries for that month.

## Options :

1. 125
2. 400
3. 360
4. 350
5. none of these

Answer: 360
ATQ,
Percentage of number of customer inquires received on March out of total number of customer inquires received on given four months $=100 \%-(25+20+15) \%=40 \%$
So, total number of customer inquires received $=2400 \div 0.4=6000$
So, number of customer inquires received on January $=6000 \times 0.25=1500$

Number of customer inquires received on February $=6000 \times 0.2=1200$
And number of customer inquires received on April $=6000 \times 0.15=900$
Number of Interntional customer inquires received on April is $=900 \times 0.4=360$

Question No. 118
Determine the value of ' $m$ ' if the total number of customer inquiries received over all four months is equal to ' 12 m '.

Options:

1. 550
2. 500
3. 650
4. 450
5. none of these

Answer : 500
ATQ,
Percentage of number of customer inquires received on March out of total number of customer inquires received on given four months $=100 \%-(25+20+15) \%=40 \%$

So, total number of customer inquires received $=2400 \div 0.4=6000$
So, number of customer inquires received on January $=6000 \times 0.25=1500$
Number of customer inquires received on February $=6000 \times 0.2=1200$
And number of customer inquires received on April $=6000 \times 0.15=900$
ATQ;
$12 m=6000$
Or, $m=500$

Question No. 119
Find the number of customer inquiries received in December if they were $20 \%$ less than those received in January.

## Options :

1. 1320
2. 1500
3. 1400
4. 1200
5. none of these

Answer : 1200
ATQ,
Percentage of number of customer inquires received on March out of total number of customer inquires received on given four months $=100 \%-(25+20+15) \%=40 \%$
So, total number of customer inquires received $=2400 \div 0.4=6000$
So, number of customer inquires received on January $=6000 \times 0.25=1500$
Number of customer inquires received on February $=6000 \times 0.2=1200$
And number of customer inquires received on April $=6000 \times 0.15=900$
Number of customer inquires received on December month $=1500 \times 0.8=1200$

## Direction: Find out the wrong number in the given number series.

Question No. 120
25, 169, 241, 267, 295, 304
Options :

1. 169
2. 304
3. 267
4. 241
5. 25

Answer: 267
Solution :
25 + 144 = 169
$169+72=241$
$241+36=277$

$$
277+18=295
$$

$$
295+9=304
$$

Therefore, 277 should come in the place of 267.

Question No. 121
$200,400,80,140,32,64$
Options:

1. 80
2. 200
3. 140
4. 32
5. 64

Answer : 140
Solution:
$200 \times 2=400$
$400 \div 5=80$
$80 \times 2=160$
$160 \div 5=32$
$32 \times 2=64$
Therefore, 160 should come in the place of 140.

Question No. 122
$20,30,50,90,160,330$

## Options :

1. 50
2. 30
3. 160
4. 330
5. 20

Answer: 160
$20+10=30$
$30+20=50$
$50+40=90$
$90+80=170$
$170+160=330$
Therefore, 170 should come in the place of 160.

Question No. 123
$6,13,21,41,81,161$.
Options:

1. 13
2. 6
3. 161
4. 81
5. 41

Answer: 13

## Solution :

ATQ,
$6 \times 2-1=11$
$11 \times 2-1=21$
$21 \times 2-1=41$
$41 \times 2-1=81$
$81 \times 2-1=161$
11 will come in the place of 13.

Direction: In the following number series one term given is wrong. Find the wrong term.

Question No. 124
856.511 .752665

Options:
1.5
2. 6.5
3. 26
4. 65
5. 11.75

Answer: 65
$8 \times 0.5+1=5$
$5 \times 1+1.5=6.5$
$6.5 \times 1.5+2=11.75$
$11.75 \times 2+2.5=26$
$26 \times 2.5+3=68$

Direction: In the questions, two equations I and II are given. You have to solve both the equations to establish the correct relation between $x$ and $y$ and choose the correct option.

Question No. 125
I. $2 x^{2}-19 x+45=0$
II. $y^{2}-6 y+8=0$

Options :

1. $x \geq y$
2. $x \leq y$
3. $x=y$ or the relationship cannot be established
4. $x>y$
5. $x<y$

Answer: $x$ > $y$
From I.
$\Rightarrow 2 x^{2}-19 x+45=0$
$=>2 x^{2}-9 x-10 x+45$
$\Rightarrow>x(2 x-9)-5(2 x-9)=0$
$\Rightarrow(x-5)(2 x-9)=0$
$\Rightarrow x=5,9 / 2$
From II.
$\Rightarrow y^{2}-6 y+8=0$
$\Rightarrow y^{2}-4 y-2 y+8=0$
$\Rightarrow>y(y-4)-2(y-4)=0$
$\Rightarrow(y-2)(y-4)=0$
$\Rightarrow y=2,4$
After comparison, we can say that $x>y$.
Direction: In the questions, two equations I and II are given. You have to solve both the equations to establish the correct relation between $x$ and $y$ and choose the correct option.

Question No. 126
I. $2 x^{2}+7 x-4=0$
II. $2 y^{2}-9 y+4=0$

Options :

1. $x \geq y$
2. $x \leq y$
3. $x=y$ or the relationship cannot be established
4. $x>y$
5. $x<y$

Answer: $x \leq y$
From I:
$\Rightarrow 2 x^{2}+7 x-4=0$
$=>2 x^{2}+8 x-x-4=0$
$\Rightarrow 2 x(x+4)-1(x+4)=0$
$=>(2 x-1)(x+4)=0$
$\Rightarrow>=1 / 2,-4$

## From II:

$2 y^{2}-9 y+4=0$
$=2 y^{2}-8 y-y+4=0$
$\Rightarrow 2 y(y-4)-1(y-4)=0$
$\Rightarrow(2 y-1)(y-4)=0$
$\Rightarrow y=1 / 2,4$
After comparing, we can say that $x \geq y$.
Direction: In each of these questions, two equation I and II are given. You have to solve both the equations and give answer:

Question No. 127
I. $x^{2}-11 x+28=0$
II. $y^{2}+y-56=0$

Options:

1. if $x>y$
2. if $x<y$
3. if $x \geq y$
4. if $x \leq y$
5. if $\mathrm{x}=\mathrm{y}$ or no relation can be established between x and y .

Answer : if $x=y$ or no relation can be established between $x$ and $y$.

## Solution :

1. $x^{2}-11 x+28=0$
$x^{2}-7 x-4 x+28=0$
$x(x-7)-4(x-7)=0$
$(x-7)(x-4)=0$
$x=7,4$
II. $y^{2}+y-56=0$
$y^{2}=8 y+7 y-56=0$
$y(y-8)+7(y-8)=0$
$(y-8)(y+7)=0$
$y=-8,7$
Hence, no relation can be established between $x$ and $y$.
Direction: In each of these questions, two equation I and II are given. You have to solve both the equations and give answer:

Question No. 128
I. $x^{2}-2 x-35=0$
II. $y^{2}-15 y+56=0$

Options :

1. if $x>y$
2. if $x<y$
3. if $x \geq y$
4. if $x \leq y$
5. if $\mathrm{x}=\mathrm{y}$ or no relation can be established between x and y .

Answer: if $x \leq y$
I. $x^{2}-2 x-35=0$
$x^{2}-7 x+5 x-35=0$
$x(x-7)+5(x-7)=0$
$(x-7)(x+5)=0$
$x=7,-5$
III. $y^{2}-15 y+56=0$
$y^{2}-8 y-7 y+56=0$
$y(y-8)-7(y-8)=0$
$(y-8)(y-7)=0$
$y=8,7$
Hence, $x \leq y$

Direction: In each of these questions, two equation I and II are given. You have to solve both the equations and give answer:

Question No. 129
I. $5 x^{2}-7 x-12=0$
II. $7 y^{2}-29 y-30=0$

## Options:

1. if $x>y$
2. if $x<y$
3. if $x \geq y$
4. if $x \leq y$
5. if $\mathrm{x}=\mathrm{y}$ or no relation can be established between x and y .

Answer : if $x=y$ or no relation can be established between $x$ and $y$.
I. $5 x^{2}-7 x-12=0$
$x^{2}-12 x+5 x-12=0$
$x(x-12)+5(x-12)=0$
$(x-12)(x+5)=0$
$x=12,-5$
III. $7 y^{2}-29 y-30=0$
$7 y^{2}-35 y+6 y-30=0$
$7 y(y-5)+6(y-5)=0$
$(y-5)(7 y+6)=0$
$y=5,-6 / 7$
Hence, no relation can be established between $x$ and $y$.

Question No. 130
Calculate the value of 'a' if 'P' initially had Rs. 'a' and invested $45 \%$ of this amount in a PF A with a simple interest rate of $35 \%$ per annum and the rest in a PFB with a compound interest rate of $30 \%$ per annum (compounded annually). After 2 years, 'P' received a total interest of Rs. 3333.6 from both PFs.

Options:

1. 4500
2. 4800
3. 5252
4. 5000
5. none of these

Answer : 4800
According to question;
$(0.45 \times 0.35 \times a \times 2)+(0.55 \times 0.69 \times a)=3333.6$
$0.315 a+0.3795 a=3333.6$
$0.6945 a=3333.6$
$a=4800$

Question No. 131
Determine the distance covered by the dog in 2 hours and 30 minutes if the dog's speed is 15 $\mathrm{km} / \mathrm{h}$ faster than the cow's. The time it takes for the cow to cover 210 km is 3 hours less than the time it takes for the dog to cover 450 km .

Options:

1. 150 km
2. 665 km
3. 250 km
4. 320 km
5. can't be determinded

## Answer : can't be determinded

We can say that the speed of cow is 'a' km/h
Speed of $d o g=(a+15) k m / h$
According to question;
$450 /(a+15)-210 / a=3$
$150 /(a+15)-70 / a=1$
$150 x-70(a+15)=a(a+15)$
$150 a-70 a-1050=a 2+15 a$
$a 2-65 a+1050=0$
Solving above equation we get $a=35,30$
So, speed of bus will be either 50 km/h or $45 \mathrm{~km} / \mathrm{h}$
So distance cannot be determined.

Question No. 132
Three cubes of equal volume are joined end to end. Find the surface area of the resulting cuboid if the diagonal of the cube is $7 \sqrt{ } 3 \mathrm{~cm}$.

## Options :

1. $574 \mathrm{~cm}^{2}$
2. $686 \mathrm{~cm}^{2}$
3. $540 \mathrm{~cm}^{2}$
4. $504 \mathrm{~cm}^{2}$
5. none of these

Answer: 686 cm²
Given - diagonal $=a \sqrt{ } 3 \mathrm{~cm}=7 \sqrt{ } 3 \mathrm{~cm}$
$a=7 \mathrm{~cm}$
Visible faces $=14$
Surface area of visible faces: $-14 a^{2}$
$=14 \times 49=686 \mathrm{~cm}^{2}$

Question No. 133
' B ' is $20 \%$ more efficient than 'A.' 'A' began working on a task alone and continued for 8 days, after which 'B' took over and completed the remaining work alone in 5 days. Now, In how many days 'A' would require to complete the entire task if they worked alone.

## Options :

1. 12 days
2. 14 days
3. 24 days
4. 11 days
5. none of these

Answer : 14 days

## Solution :

ATQ,
Let the efficiency of ' $A$ ' = '10y' units/day
Then, efficiency of ' $B$ ' $=10 y \times 1.2=$ ' 12 y ' units/day
So, total work $=(10 y \times 8)+(12 y \times 5)=$ ' $140 y$ ' units
So, time taken by 'A' to complete the whole work alone $=(140 y / 10 y)=14$ days.

Question No. 134
Find the value of given Expression $\sqrt{42-\sqrt{42-\sqrt{42-\sqrt{42 \ldots . \infty}}} \text { ? }}$

## Options :

1. 6
2. 7
3. 3
4. 14
5. none of these

Answer: 6
We know the factor of $42=6 \times 7$
In this type of question, two factors of the given number are done in such a way that the difference between them is one. And when there is a negative sign, the answer is the smallest factor.

So, the answer is 6...

Question No. 135
Anita invested Rs. 5400 in scheme 'P,' which offers a $15 \%$ per annum simple interest rate, and she invested Rs. 3800 in scheme 'Q,' offering a $25 \%$ per annum simple interest rate. After 2 years, calculate the difference between the interest earned by Anita from these two schemes.

## Options :

1. Rs. 28
2. Rs. 20
3. Rs. 30
4. Rs. 24
5. none of these

## Answer : Rs. 28

ATQ,

## Difference of the interest received by both schemes =

$(3800 \times 0.25 \times 2)-(5400 \times 0.15 \times 2)=$ Rs. 28

Question No. 136
If $x+y+z=20, x^{2}+Y^{2}+z^{2}=160$ and $x z=y^{2}$, then find the value of $x z$ ?

## Options :

1. 25
2. 36
3. 49
4. 16
5. none of these

## Answer: 36

Given,
$x+y+z=20, x^{2}+Y^{2}+z^{2}=160$ and $x z=y^{2}$
We know, $(x+y+z)^{2}=\left(x^{2}+Y^{2}+z^{2}\right)+2 x(x y+y z+x z)$
or (20) ${ }^{2}=160+2 x(x y+y z+x z)$
or $(x y++z x)=(400-160)=240 / 2$

Or $(x y+y z+z x)=120$
$\operatorname{Or}\left(x y+y z+y^{2}\right)=120$
Or $y(x+y+z)=120$
Or y $\times 20=120$
or $y=(120 / 20)=6$
Therefore, $x z=6^{2}=36$

Question No. 137
A prism and a pyramid have the same base and the same height. Find the ratio of the volumes of the prism and the pyramid.

## Options :

1. 9:1
2. 1:3
3. 3:1
4. 1:9
5. none of these

Answer : 3:1
volume of pyramid $=1 / 3 \times$ area of base $\times h$ the volume of prism $=$ area of base $\times h$
then
ratio $=($ area of base $\times h$ )/ 1/3 $\times$ area of base $\times h$
$=3: 1$
Question No. 138
Gaurav borrowed Rs. 40000 from a bank at the simple interest of $10 \%$ p.a for 2 years. He lent some of this borrowed amount to his friend Shubham at the compound interest of $20 \%$ p.a for same period of time. If Gaurav earned Rs. 3000 from whole of this transaction, then find the amount lent to Shubham.

## Options :

1. 25000
2. 20000
3. 30000
4. 15000
5. None of the above

Answer : 25000
Interest to be paid to bank in 2 years: $10 \% \times 2 \times 40000=>8000$
Let the amount lent by Gaurav to Shubham be "A"
Compound interest received by Gaurav in 2 years: $A(1+20 / 100) 2-A \Rightarrow 11 A / 25$
Net amount earned by Gaurav: 11A/25-8000 = 3000 => $A=25000$

Question No. 139
If $a=901, b=903$, and $c=906$, then find the value of $a^{3}+b^{3}+c^{3}-3 a b c$ ?

## Options :

1. 47960
2. 56263
3. 51490
4. 51236
5. none of these

Answer: 51490

Given - $a=901, b=903, c=906$
Then as we know that

$$
\begin{aligned}
& a^{3}+b^{3}+c^{3}-3 a b c=(a+b+c) / 2\left[(a-b)^{2}+(b-c)^{2}+(c-a)^{2}\right] \\
& =(901+903+906) / 2[4+9+25]
\end{aligned}
$$

=2710 / 2 [38]
$=2710 \times 19=51490$

Question No. 140
$P, Q \& R$ can finish a work in 10 days, 15 days, and 20 days, respectively, working alone. $P$ and $Q$ work on the first day, $P$ and $R$ work on the second day, $P$ and $Q$ work on the third day, and so on till the work is completed. In how many days the work will be completed?

## Options :

1. $16 / 7$
2. $48 / 7$
3. $32 / 7$
4. $64 / 7$

Answer : 48/7
Then ATQ,
First day - $P+Q=6+4=10$ unit
second day-P + R=6+3 =7unit
third day $P+Q=6+4=1$ Ounit
total work of three days $=10+7+10=27$ unit
so 54units completed of total work $=3 \times 2=6$ days
remaining work $=60-54=6$ unit
so, the temaining work will be completed by $P+R=6 / 7 d a y s$
Total days $=6+6 / 7=48 / 7$ days.
Question No. 141
Some amount out of Rs. 12000 was lent out at $10 \%$ per annum and the rest amount @ $16 \%$ per annum and thus in 5 years the total interest from both the amount collected was Rs.7200. What is the amount which was lent out at $10 \%$ per annum?

Options:

1. 4000
2. 9000
3. 8000
4. 5000
5. none of these

Answer : 8000
Overall rate of interest $=(12000 \times R \times 5) / 100=7200$
$R=12 \%$
Using allegation method,
Money lent @ 10\% = 2/3 × 12000 = Rs. 8000

Question No. 142
Find the length of the diagonal of a cube with volume $81 \sqrt{ } 3 \mathrm{~cm}^{3}$ ?

## Options :

1. 27 cm
2. $3 \sqrt{ } 3 \mathrm{~cm}$
3. $9 \sqrt{ } 3 \mathrm{~cm}$
4. 9 cm
5. none of these

Answer: 9 cm
Let side of the cube be a cm then Volume of Cube $=$ a3 So a3 $=81 \sqrt{ } 3$ a3 $=27 \times 3 \sqrt{ } 3$ a3 $=33 \times$ $(\sqrt{ } 3) 3 a 3=33 \times(\sqrt{ } 3) 3 a=3 \sqrt{ } 3$ Diagonal of cube $=a \sqrt{ } 3=3 \sqrt{ } 3(\sqrt{ } 3)=9 \mathrm{~cm}$.

Question No. 143 what will be the remainder when $27^{27}+27$ is divided by $28 ?$

## Options :

1. 22
2. 24
3. 13
4. 26
5. none of these

Answer : 26

## Solution :

$\frac{27^{27}+27}{28}$
$=\frac{-1^{27}+(-1)}{28}=\frac{-1-1}{28}=-2 / 28$
when 27 divide by 28 then remainder is ( -1 )

Remainder is 26

Question No. 144
If average of first 11 numbers is $(n-23)$ and the sum of remaining number is 925 . Find the value of ' $n$ ', if the average of 25 numbers is ' $n$ '.

## Options :

1. 97.5
2. 48
3. 139
4. 64.9
5. 108

## Answer:48

According to the question,
$=>25 n=11 \times(n-23)+925$
=> $25 n-11 n=925-253$
=> $n=48$.

Question No. 145
Sum of diameter and circumference of a circle is 232 cm , the find area of circle.
Options:

1. 2496 sq.cm
2. 2448 sq.cm
3. 2424 sq.cm
4. 2464 sq.cm
5. 2484 sq.cm

Answer: 2464 sq.cm
Let radius of circle be 'r' cm.
According to question,
=> $2 r+2 \pi r=232$
$=>r(1+22 / 7)=116$
=> $r=28 \mathrm{~cm}$
Area of circle $=(22 / 7) \times 28 \times 28=2464 \mathrm{~cm}^{2}$

Question No. 146
Rahul invested Rs. 2450 at a 40\% per annum simple interest rate for 'y' years, and this investment yielded a total amount of Rs. 4410. Find the interest earned when Rahul invests Rs. 3500 in a compound interest account with an annual interest rate of $30 \%$, compounded annually for 'y' years.

Options:

1. Rs. 2415
2. Rs. 2400
3. Rs. 2500
4. Rs. 2000
5. none of these

Answer : Rs. 2415
ATQ,
$(2450 \times 40 \times y) / 100=4410-2450$
Or, $y=(1960 / 980)=2$ years
Therefore, interest received $=3500(1+(30 / 100)) 2-3500=$ Rs. 2415

Question No. 147
What is the difference between the amount that friend $Q$ received and the amount he was supposed to receive if Aman intended to distribute Rs. 2400 among his three friends ( $\mathrm{P}, \mathrm{Q}$, and R ) in the ratio of 7:4:5 but accidentally distributed it in the ratio of 8:9:7?

## Options :

1. Rs. 350
2. Rs. 300
3. Rs. 320
4. Rs. 305
5. none of these

Answer: Rs. 300
ATQ,
Amount of money received by $Q=[9 /(8+9+7)] \times 2400$
= Rs. 900
Amount of money $Q$ was supposed to receive $=$
$[4 /(7+4+5)] \times 2400$
$=$ Rs. 600

## Therefore, required difference

= 900-600 = Rs. 300
Question No. 148
A leopard is Chasing a deer that is positioned 12 km ahead. The leopard has a speed of $96 \mathrm{~km} / \mathrm{hr}$, while the deer's speed is $60 \mathrm{~km} / \mathrm{hr}$. If the leopard catches the deer in 't' minutes, determine the distance the leopard travels in ( $t-16$ ) hours.

## Options :

1. 300 km
2. 350 km
3. 380 km
4. 384 km
5. none of these

Answer : 384 km
ATQ,
Relative speed of the Leopard and the Deer $=(96-60)=36 \mathrm{~km} / \mathrm{hr}$
Therefore, time in which the Leopard will catch the Deer $=(12 / 36) \times 60=20$ minutes

Therefore,
$t=20$
Distance covered by Leopard in (t-16) hours $=96 \times 4=384 \mathrm{~km}$

Question No. 149
Determine the initial investment made by 'Adam' if both 'Adam' and 'Zampa' jointly invested Rs. 7000 in a startup business. After 7 months, 'Adam' added 20\% more to his initial investment, and 'Zampa' withdrew $40 \%$ of his initial investment. At the end of one year, 'Zampa's profit share out of the total profit of Rs. 4712 is Rs. 3100.

## Options :

1. 2000
2. 2500
3. 3000
4. 3200
5. none of these

Answer: 2000
We can say that initial investment made by Adam is Rs. 'a'
Initial investment made by Zampa is Rs. (7000-a)
Ratio of profit share of Adam to Zampa $=(a \times 7+1.2 a \times 5):[(7000-a) \times 7+0.6 \times(7000-a) \times$ 5]
= 13a:(70000-10a)

## According to question; <br> $[13 a /(70000-10 a)]=(1612 / 3100)=13 / 25$ <br> $325 a=910000-130 a$ <br> $455 a=910000$ <br> $a=2000$ <br> Initial investment made by Adam = Rs.2000.

Question No. 150
Determine Rohit's monthly salary if he allocated $40 \%$ of it to house rent, then $32 \%$ of the remaining amount on traveling. After accounting for his food expenses, which amount to Rs. 2742, he used 70\% of the remaining balance on taxi fares. After all these expenditures, he had Rs. 1350 left. Find his monthly salary.

## Options :

1. Rs. 17700
2. Rs. 17750
3. Rs. 17000
4. Rs. 16521
5. none of these

Answer: Rs. 17750
We can say that monthly salary of Rohit be Rs. 100a
Amount spent on House rent = Rs. 40a
Amount spent on Traveling $=0.32 \times 60 \mathrm{a}=$ Rs. 19.2a
According to question;
$0.30 \times(40.8 a-2742)=1350$
$40.8 a-2742=4500$
$40.8 a=7242$
$a=177.5$
So, monthly income of Anil $=177.5 \times 100=$ Rs. 17750 .


[^0]:    Answer: General Manoj Pande
    General Manoj Pande from the Engineering Corps currently holds the esteemed position of Chief of Army Staff. Taking over the reins on 30th April 2022, he succeeded Gen. Manoj
    Mukund Naravane.

