# IBPS Clerk 2015 Pattern Based 

## Reasoning

## Instructions

Instructions: Study the information and answer the questions given questions:
Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1 P, Q, R, S, T and V are seated and all of them are facing South. In Row - 2: A, B, C, D, E and F are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.
S sits third to right of Q . Either S or Q sits at an extreme end of the line. The one who faces Q sits second to right of $E$. Two people sit between $B$ and $F$. Neither $B$ nor $F$ sits at an extreme end of the line. The immediate neighbor of $B$ faces the person who sits third to left of $P, R$ and $T$ are immediate neighbours of each other. $C$ sits second to the left of $A$. $T$ does not face the immediate neighbor of $D$.

## Question 1

Who amongst the following sit at extreme ends of the rows?

A S, D

B $\mathrm{Q}, \mathrm{A}$

C V, C

D P, D

E Q,F
Answer: D

## Explanation:

Since one of $S$ and $Q$ sit at the extreme, $Q$ has to sit at the right end and $S$ three places to the right of him. Now that Q is fixed, we can place E as shown in the figure. B and F can't be at extreme and 2 people are sitting between them. Also, B faces the person who sits third to left of $P$. Thus, $B, F$ and $P$ can only be placed as shown in the figure. Now $C$ sits second to the left of $A$. $\mathrm{So}, \mathrm{C}$ is at the extreme and $A$ second to the right of him. This means $D$ is at the rightmost corner. So, $R$ must sit adjacent to $Q$ and $T$ adjacent to $R$. The arrangement is as shown below-

$P$ and $D$ sit at extreme ends of the rows

## Question 2

Who amongst the following faces S ?

A A

B B

C C

D D

E F
Answer: A

## Explanation:

Since one of $S$ and $Q$ sit at the extreme, $Q$ has to sit at the right end and $S$ three places to the right of him. Now that Q is fixed, we can place E as shown in the figure. B and F can't be at extreme and 2 people are sitting between them. Also, B faces the person who sits third to left of P. Thus, B, F and P can only be placed as shown in the figure. Now $C$ sits second to the left of $A$. $S o, C$ is at the extreme and $A$ second to the right of him. This means $D$ is at the rightmost corner. So, $R$ must sit adjacent to $Q$ and $T$ adjacent to $R$. The arrangement is as shown below-


A faces S .

## Question 3

How many persons are seated between V and R ?

A One

B Two

C Three

D Four

E None
Answer: B

## Explanation:

Since one of $S$ and $Q$ sit at the extreme, $Q$ has to sit at the right end and $S$ three places to the right of him. Now that $Q$ is fixed, we can place $E$ as shown in the figure. $B$ and $F$ can't be at extreme and 2 people are sitting between them. Also, B faces the person who sits third to left of P. Thus, B, F and P can only be placed as shown in the figure. Now $C$ sits second to the left of $A$. $S o, C$ is at the extreme and $A$ second to the right of him. This means $D$ is at the rightmost corner. So, $R$ must sit adjacent to $Q$ and $T$ adjacent to $R$. The arrangement is as shown below-


Two persons - S and T - are seating between V and R .

## Question 4

$P$ is related to $A$ in the same way as $S$ is related to $B$ based on the given arrangement. To which of the following is T related to, following same pattern?

A C

B D

C E

D F

E Cannot determined
Answer: B

## Explanation:

Since one of $S$ and $Q$ sit at the extreme, Q has to sit at the right end and $S$ three places to the right of him. Now that $Q$ is fixed, we can place $E$ as shown in the figure. $B$ and $F$ can't be at extreme and 2 people are sitting between them. Also, $B$ faces the person who sits third to left of $P$. Thus, $B, F$ and $P$ can only be placed as shown in the figure. Now $C$ sits second to the left of $A$. $S o, C$ is at the extreme and $A$ second to the right of him. This means $D$ is at the rightmost corner. So, $R$ must sit adjacent to $Q$ and $T$ adjacent to $R$. The arrangement is as shown below-

$P$ faces the person who sits second to the left of $A$. S faces the person who sits second to the left of $B$. Similarly, T faces E who sits second to the left of D.

## Question 5

Which of the following is true regarding $T$ ?

A F faces T

B V is an immediate neighbour of T

C F faces the one who is second to right of T

D T sits at one of the extreme ends of the line

E Q sits second to the right of $T$
Answer: C

## Explanation:

Since one of $S$ and $Q$ sit at the extreme, Q has to sit at the right end and $S$ three places to the right of him. Now that $Q$ is fixed, we can place $E$ as shown in the figure. $B$ and $F$ can't be at extreme and 2 people are sitting between them. Also, B faces the person who sits third to left of P. Thus, B, F and P can only be placed as shown in the figure. Now $C$ sits second to the left of $A$. $\mathrm{So}, \mathrm{C}$ is at the extreme and A second to the right of him. This means $D$ is at the rightmost corner. So, $R$ must sit adjacent to $Q$ and $T$ adjacent to $R$. The arrangement is as shown below-


F faces V who sits second to the right of T .

For the following questions answer them individually

## Question 6

Karan starts from point A and travels towards north for 5 km. He then takes a right turn and travels for 7 km. He then takes a left turn and travels another 7 km. Finally he takes another left turn and travels for 2 km arriving at a point $B$.
What is the distance between point $A$ and $B$ ?

A 13 km

B $\quad 12.33 \mathrm{~km}$

C $\quad 12 \mathrm{~km}$

D 10 km

E None of these
Answer: A

## Explanation:

Based on the given information, the path travelled by karan could be derived as below


A

Therefore the distance between $A$ and $B=\sqrt{12^{2}+5^{2}}=13$
So the correct option to choose is A-13km.

## Question 7

Harsha is standing in a queue, tenth from behind. There are 40 students in the queue including Harsha. What is Harsha's position from the front?

A 28th

B 29th

C 30th

D 31st

E Can't be determined
Answer: D

## Explanation:

There are 40 students in all including Harsha. There are 9 students behind Harsha. So, there are 40-91 (Harsha) $=30$ students ahead of him. So, his position from the front is 31 st.

## Question 8

Pointing towards a senior citizen, Ravi said, "This is my niece's paternal grandmother's sister-in-law." How is Ravi related to the senior citizen?

A brother

B nephew

C grandson

D son-in-law

E None of the above
Answer: E

## Explanation:

Ravi's niece's paternal grandmother is Ravi's sister-in-law's mother. Her sister-in-law is Ravi's sister-in-law's aunt. So, Ravi is the nephew-in-law of the senior citizen.

## Instructions

Five friends $A, B, C, D, E$ have different heights and different weights. D is taller than only E. Only one person is taller than $B$ and only one person is heavier than E.If five persons are arranged in a row from heaviest to lightest, then C lies in the middle.A is taller than C. D is heavier than A who is not the lightest among five friends.

## Question 9

Who is the heaviest person the five.

A B

B D

C E

D C

E A

Answer: B

## Explanation:

We will arrange 5 persons in a row from heaviest to the lightest
Since only one person is heavier than $\mathrm{E}, \mathrm{E}$ occupies the second position. When arranged from heaviest to the lightest, $C$ occupies middle position. This implies that $C$ is at third position. Since $D$ is heavier than $A$ and $A$ is not the lightest, $D$ lies in first position, $A$ lies in fourth position and $B$ lies in 5th position.
D>E>C>A>B

## Question 10

Who is the tallest person.

A B

B D

C C

D E

E A
Answer: E

## Explanation:

We will arrange 5 persons in a row from the tallest to the shortest.
$D$ is taller than only E. This suggests that D occupies the fourth position and E occupies the last position.
Since only one person is taller than B, B occupies the second position. $A$ is taller than $C$ which implies $A$ is at first position and $C$ at third.
$A>B>C>D>E$

## Question 11

Who is the shortest among the five persons.

A A

B B

C D

D E

E C
Answer: D

## Explanation:

We will arrange 5 persons in a row from the tallest to the shortest.
$D$ is taller than only E. This suggests that D occupies the fourth position and E occupies the last position.
Since only one person is taller than B, B occupies the second position. $A$ is taller than $C$ which implies $A$ is at first position and $C$ at third.
$A>B>C>D>E$

## Question 12

If all five persons are ranked from 1 to 5 from the tallest to the shortest respectively, then which person secures the third rank.

A A

B B

C D

D E

E C
Answer: E

## Explanation:

We will arrange 5 persons in a row from the tallest to the shortest.
$D$ is taller than only $E$. This suggests that $D$ occupies the fourth position and $E$ occupies the last position.
Since only one person is taller than $B, B$ occupies the second position. $A$ is taller than $C$ which implies $A$ is at first position and $C$ at third.
$A>B>C>D>E$

## Question 13

If all five persons are ranked from 1 to 5 from the heaviest to the lightest respectively, then which person secures the fourth rank.

A A

B B

C D

D E

E C
Answer: A

## Explanation:

We will arrange 5 persons in a row from heaviest to the lightest.
Since only one person is heavier than $E, E$ occupies the second position. When arranged from heaviest to the
lightest, $C$ occupies middle position. This implies that $C$ is at third position. Since $D$ is heavier than $A$ and $A$ is not the lightest, $D$ lies in first position, A lies in fourth position and $B$ lies in 5 th position.
D $>\mathrm{E}>\mathrm{C}>\mathrm{A}>\mathrm{B}$

## Instructions

For the following questions answer them individually

## Question 14

Gautham starts from point $A$ and rides towards north for 4 kms to reach $B$, then he takes left turn and travel for 8 kms to reach point C and then he takes another left turn and travel for 12 kms to reach point D . Finally he takes another left turn and travel for another 8 kms to reach point E . What is the current position of Gautham with respect to the point A?

A 8 kms towards east

B 12 kms towards south

C $\quad 12 \mathrm{kms}$ towards west

D 8 kms towards south

E Cannot be determined
Answer: D

## Explanation:

Based on the given information, the path traveled by lakshman could be derived as below.


The final point $E$ is 8 km towards south of point $A$.
So the correct option to choose is D-8 km towards south.

## Question 15

How is Ram's mother's niece's father related to Ram?

A Son

B nephew
C Cousin

D Uncle.

E Grandson
Answer: D

## Explanation:

Ram's mother's niece is Ram's cousin. Her father is Ram's uncle.

## Instructions

For each of the following five questions, the prices of various items are shown by inequalities. The statement in each question is followed by 2 conclusions. Based on the information in the statement, which of the conclusions are implied?

## Question 16

Statement Ketchup $>$ Iodisedsalt $\geq$ Tomatoes $\geq$ Eggs and Oranges $<$ Radish $<$ Ketch up Conclusions 1) Radish < eggs 2) Oranges < Tomatoes

A Neither of the conclusion is implied.
B Conclusion 2 is implied but conclusion 1 is not

C Conclusion 1 is implied but conclusion 2 is not

D Both the conclusions are implied.
E Either conclusion 1 or conclusion 2 is implied but both are not.
Answer: A

## Explanation:

Statement Ketchup $>$ Iodisedsalt $\geq$ Tomatoes $\geq$ Eggs and Oranges $<$ Radish $<$ Ketch up
=> oranges $<$ radish $<$ ketchup $>$ iodizedsalt $\geq$ tomatoes $\geq$ eggs
As there is no direct relation between oranges and tomatoes and between radishes and eggs, we cannot conclude either of the conclusions.
So, both the conclusions are false.

## Question 17

Cat $<$ Lion $<$ Ostrich $=$ Otter $=$ Dove $\geq$ Salmon $>$ Yak
Conclusions 1) Ostrich > Yak 2) Cat < Dove

A Neither of the conclusion is implied.

B Conclusion 2 is implied but conclusion 1 is not
C Conclusion 1 is implied but conclusion 2 is not
D Both the conclusions are implied.

E Either conclusion 1 or conclusion 2 is implied but both are not.
Answer: D

## Explanation:

Cat < Lion < Ostrich = Otter = Dove $\geq$ Salmon > Yak
Hence, Ostrich > Yak and Cat < Dove.
So, both the conclusions are implied.

## Question 18

Ketchup $\geq$ Lemons $>$ Mango $\geq$ Neem
Conclusions 1) Neem $\leq$ Ketchup2) Neem < Ketchup

A Neither of the conclusion is implied.

B Conclusion 2 is implied but conclusion 1 is not

C Conclusion 1 is implied but conclusion 2 is not
D Both the conclusions are implied.

E Either conclusion 1 or conclusion 2 is implied but both are not.
Answer: B

## Explanation:

Ketchup $\geq$ Lemons $>$ Mango $\geq$ Neem
Hence, Ketchup > Neem
So, conclusion 2 is implied.

## Question 19

$z e b r a \geq y a k=w h a l e \leq x r a y$
conclusions 1) whale < zebra 2 ) whale = zebra

A Neither of the conclusion is implied.

B Conclusion 2 is implied but conclusion 1 is not
C Conclusion 1 is implied but conclusion 2 is not
D Both the conclusions are implied.
E Either conclusion 1 or conclusion 2 is implied but both are not.
Answer: E

## Explanation:

zebra $\geq$ yak $=$ whale $\leq x r a y$
Hence, whale $\leq$ zebra $=>$ whale $=$ zebra or whale < zebra
So, either of the two conclusions are implied.

## Question 20

Banana> apple> salmon, carrot > lemon >yak milk conclusions 1) banana > lemon 2) apple > yak milk

A Neither of the conclusion is implied.
B Conclusion 2 is implied but conclusion 1 is not
C Conclusion 1 is implied but conclusion 2 is not
D Both the conclusions are implied.
E Either conclusion 1 or conclusion 2 is implied but both are not.
Answer: A

## Explanation:

Banana> apple> salmon and carrot > lemon > yak milk
As there is not direct link between the two, neither of the conclusions is implied.

## Instructions

In a certain coded language, "dog" is written as "dg", "boats" is written as "bost", "shocked" is written as "edhkos", "republicans" is written as "abceinprsu"

## Question 21

What is the code for: "goldsmith"?

A dgmsthil
B dghilmot

C dghilmst
D gdhilmot
E None of the above
Answer: B

## Explanation:

From the examples, we can see that the coded word is formed by dropping the middle letter from the original word and arranging the remaining letters in alphabetical order. So, for the word "goldsmith", we have to drop the middle letter 's' and arrange the other letters in alphabetical order: dghilmot

## Question 22

What is the code for: "abolish"?

A abhiol
B abhils

C abhlos

D abhios
E solhba
Answer: D

## Explanation:

From the examples, we can see that the coded word is formed by dropping the middle letter from the original word and arranging the remaining letters in alphabetical order. So, for the word "abolish", the coded form is: "abhios"

## Question 23

What is the code for: "friends"?

A nifdsr

B dfines
C dfinrs

D srnifd

E srnfdi
Answer: C

## Explanation:

From the examples, we can see that the coded word is formed by dropping the middle letter from the original word and arranging the remaining letters in alphabetical order. So, for the word "friends", the coded form is "dfinrs".

## Instructions

The following 5 questions are based on the below sequence of alphabets.
PYCAQTJOUBGMVHNXESIWDKRFLZ
Question 24
If "DANCE" is coded as "KTSJK", what is the code for the word "PURSE"?

A KYGZK

B YZGKK

C YGKZK

D YGZKK
E None of these
Answer: D

## Explanation:

According to the given order of alphabets,
D +1 = K
$\mathrm{A}+2=\mathrm{T}$ $E+5=K$
Similarly, the code for the word "PURSE" is "YGZKK".
So the correct option to choose is D.
Question 25
If "SCREEN" is coded as "WTYFYY", what is the code for the word "SHIRT"?

A WEFAE

B WEKAE

C WEFZE

D WEAFE
E None of these
Answer: A

## Explanation:

According to the given order of alphabets,
$\mathrm{S}+2=\mathrm{W}$
$C+3=T$
$\mathrm{R}+5=\mathrm{Y}$
$\mathrm{E}+7=\mathrm{F}$
$\mathrm{E}+11=\mathrm{Y}$
$\mathrm{N}+13=\mathrm{Y}$
Similarly, the code for the word "SHIRT" is "WEFAE".
So the correct option to choose is A.

## Question 26

If "HAIR" is coded as "EJKZ", what is the code for the word "ARROW"?

A JZGZR

B JZZGR

C JZZRR

D EZZGR

E None of these
Answer: B

## Explanation:

According to the given order of alphabets,
H+3 = E
A+3 $=J$
.....R+3 = Z
Similarly, the code for the word "ARROW" is "JZZGR"
So the correct option to choose is B.
Question 27
If "TAIL" is coded as "AQEZ", what is the code for the word "OVER"?

A FNHT

B AHNZ

C THNF

D TNHF

E none of these
Answer: C

## Explanation:

Based on the given alphabetical order,
$\mathrm{T}-2=\mathrm{A}$
$\mathrm{A}+1=\mathrm{Q}$
$\mathrm{I}-2=\mathrm{E}$
L+1 = Z
Similarly, the code for the word "OVER" is "THNF"
So the correct option to choose is C.

## Question 28

If "POWER" is coded as "JVFWL", what is the code for the word "CHAIR"?

A UOIKL

B UILOK
C UIOKK

D UIOOL

E none of the these
Answer: E

## Explanation:

Based on the given alphabetical order,
P+6 = J,
$0+5=\mathrm{V}$
$\mathrm{W}+4=\mathrm{F}$
$\mathrm{E}+3=\mathrm{W}$
$\mathrm{R}+2=\mathrm{L}$
Similarly, the code for the word "CHAIR" is "UIOKL"
Since there is no such option, the correct option to choose is E.

## Instructions

For the following questions answer them individually

## Question 29

There are 25 students in a queue. Ravi is standing 12th from the back. What is his position from the front?

A 11th

B 12th

C 13th
D 14th

E Can't be determined.
Answer: D

## Explanation:

Ravi is standing 12th from the back. So, there are 13 students ahead of him. So, Ravi's position is 14th from the front.

## Instructions

Observe the following series and answer the questions that follow:
PQORTSSOSTQOQQRORSTOPPS"SQOTRP"RRSOTQ
Question 30
In the alphabets given in quotes, how many such pairs can be identified which have the same number of alphabets between them (both in the forward and backward directions) as in the alphabetical series?

A 0

B 1

C 2

D 3

E 4
Answer: A

## Explanation:

There are no such pairs that are of equal separation as the english alphabets.

## Question 31

Which is the alphabet that is seventh to the right of the seventeenth alphabet from the right?

A 0

B P

C Q

D R

E S
Answer: A

## Explanation:

The seventeenth alphabet from the right is T . Seventh to its right is 0 .

## Question 32

If the last 10 alphabets to the right are written in the reverse order, which would be the twenty fifth alphabet from the left?

A 0

B P

C Q
D R

E S
Answer: C

## Explanation:

If 10 alphabets to the right are reversed the 25 alphabets to the left are still unchanged. So, Q is the right option.

## Question 33

How many Ps are there in the series that have both a vowel and a consonant on each side?

A 0

B 1

C 2

D 3

E 4
Answer: B

Explanation:
There is only one $P$ with a vowel $(0)$ and consonant $(P)$ on each side.
Question 34
How many Qs are there in the series that have a P adjacent to it?

A 0

B 1

C 2

D 3

E 4
Answer: B

## Explanation:

There is one Q with a P adjacent to it.

Instructions
For the following questions answer them individually

## Question 35

Prajwal starts from point $P$ and travels towards the east for 5 km and then he turns right to travel for another 5 km and then he turns to his left and reaches point $B$ after travelling 7 km .
What is the distance between P and B ?

A 12 km

B 13 km

C 9 km

D 11 km

E None of these
Answer: B

## Explanation:

Based on the given information, the path travelled by Prajwal could be as below.


The distance between $P$ and $B=\sqrt{5^{2}+12^{2}}=13 \mathrm{~km}$.
So the correct option to choose is $\mathrm{B}-13 \mathrm{~km}$.

## Quant

Instructions
For the following questions answer them individually

## Question 36

Which number comes in the place of the question mark (?)
$1,27,125,343$, ?

A 512

B 1000

C 729

D 216

E 1024
Answer: C

## Explanation:

$1^{3}=1 ; 3^{3}=27 ; 5^{3}=125 ; 7^{3}=343 ; 9^{3}=729$

## Question 37

Which number comes in the place of the question mark (?)
$5,25,61,113$, ?

A 144

B 181
C 165

D 200

E 245
Answer: B

Explanation:
$1^{2}+2^{2}=5 ; 3^{2}+4^{2}=25 ; 5^{2}+6^{2}=61,7^{2}+8^{2}=113 ; 9^{2}+10^{2}=181$

## Question 38

$A$ and $B$ can complete a piece of work in 80 and 120 days respectively. They together start the work but $A$ left after $\mathbf{2 0}$ days. After another 12 days $C$ joined $B$ and now they complete the work in 28 more days. In how many days C can complete the work, working alone?

A 100 days
B 112 days

C 120 days
D 126 days
E None of these
Answer: B

## Explanation:

A did the work for 20 days, $B$ did the work for $(20+12+38)=60$ days, $C$ did the work for 28 days.
Let C alone can complete the work in x days.

Fraction of work did by A + Fraction of work did by B + Fraction of work did by C = 1
Or $20 / 80+60 / 120+28 / x=1$
Or $x=28 \times 4=112$ days
C alone can complete the work in 112 days
Question 39
$33.33 \%$ of $150+66.66 \%$ of $180=? \%$ of 1700

A 30

B 25

C 20

D 10

E 15
Answer: D

## Explanation:

As we can see that $33.33 \%$ of 150 will be $\frac{1}{3}$ of 150 i.e. 50 and $66.66 \%$ of 180 will be $\frac{2}{3}$ of 180 i.e. 120 Hence, sum will be $=170$ which will be $10 \%$ of 1700 .
So answer will be d

## Question 40

The area of a square is the same as that of a circle. What is the ratio of the side of the square to the radius of the circle?

A 1:pi
B 1: sq.root pi

C sq.root pi:1
D pi square: 1
E None of the above
Answer: C

## Explanation:

$S^{2}=p i * r^{2}$. So, $\mathrm{s} / \mathrm{r}=\sqrt{\pi}$
Question 41
$5.88 \%$ of $85+5 \%$ of $200=?$

A 13

B 15
C 16

D 17

E 18
Answer: B

Explanation:
$5+10=15(5.88 \%=1 / 17)$

## Question 42

Present age of a father is 3 times the present age of his son. 4 years later father's age is 13 more than 2 times of his son's age. What is present age of father?

A 54

B 53

C 51
D 63

E 52
Answer: C

## Explanation:

let's say present age of son is $x$, hence father's age will be $3 x$
4 years later, $(x+4) * 2+13=3 x+4 ; x=17$ and $3 x=51$

## Question 43

A person bought an article on $40 \%$ discount and sold it at $50 \%$ more than the marked price. What profit did he get?

A $250 \%$

B $150 \%$
C $350 \%$
D $200 \%$

E None of these
Answer: B

## Explanation:

Let the marked price be Rs. 100.
Then cost price $=100-40=$ Rs. 60
Selling price $=100+50=$ Rs. 150
Profit $=150-60=90$
Profit\%=90/60×100=150\%

## Question 44

$25 \%$ of $400+33.33 \%$ of $30=$ ?

A 110

B 120

C 130
D 140
E 150

Answer: A

## Explanation:

$100+10=110(33.33 \%=1 / 3)$

## Question 45

Which number comes in the place of the question mark (?)
11, 44, 99, 176, ?

A 274

B 266

C 275

D 265

E 300
Answer: C

## Explanation:

$1 \times 11=11 ; 2 \times 22=44 ; 3 \times 33=99 ; 4 \times 44=176 ; 5 \times 55=275$

## Question 46

Find SI if $\mathrm{P}=\mathrm{Rs}$. $1000, \mathrm{R}=\mathbf{2 0 \%}$ per annum and duration is 4 years

A Rs. 400

B Rs. 600

C Rs. 800

D Rs. 850

E None of these
Answer: C

Explanation:
S.I $=$ PRT $/ 100=(1000 \times 20 \times 4) / 100=$ Rs. 800

## Question 47

In a right angled triangle, two sides are of the same length. Which of the options is one of the angles of that triangle?

A 30

B 45

C 60

D 75
E None of the above
Answer: B

## Explanation:

If two sides of the right angled triangle are equal, it is a right angled isosceles triangle. So, the angles of the triangle are 45, 45 and 90.

Question 48
$7.69 \%$ of $130+6.66 \%$ of $150=$ ?

A 20

B 21

C 22

D 23

E 24
Answer: A

## Explanation:

$10+10=20(7.69 \%=1 / 13$ and $6.66 \%=1 / 15)$

## Question 49

The price of a book is first increased by $10 \%$ and then decreased by $5 \%$, then the net change in the price will be

A $4.2 \%$ increase
B $4.5 \%$ increase
C $4.2 \%$ decrease
D $4.5 \%$ decrease

## E None of these

Answer: B

## Explanation:

Let the original price be Rs. 100.
New final price $=95 \%$ of $(110 \%$ of Rs. 100$)=$ Rs. $95 / 100 \times 110 / 100 \times 100=$ Rs. 104.5
$\therefore$ Increase in price $=4.5 \%$
Question 50
$11.11 \%$ of $90+8.33 \%$ of $120=$ ?

A 20

B 30

C 40

D 50

E 60
Answer: A

## Explanation:

$10+10=20(11.11 \%=1 / 9$ and $8.33 \%=1 / 12)$

## Question 51

$20 \%$ of $200+7.14 \%$ of $140=$ ?

A 30

B 40

C 50
D 60

E 70
Answer: C

Explanation:
$40+10=50(7.14 \%=1 / 14)$

## Question 52

A boat's speed with the current is 15 kmph and the boat's speed against the current is 5 kmph . What is the speed of the current?

A 15 kmph

B 10 kmph

C 5 kmph

D 20 kmph

E None of the above
Answer: C

## Explanation:

With the current => downstream
Against the current => upstream
Let the speed of the boat be ' $s$ ' and the speed of the river be ' $r$ '.
So, $s-r=5$ and $s+r=15$
=>2s = 20 => s = 10 and $r=5 \mathrm{kmph}$
Speed of the current $=5 \mathrm{kmph}$

## Question 53

An express train travelled at an average speed of $75 \mathrm{~km} / \mathrm{h}$ stopping for 5 min every 125 km . How long did it take to reach its destination 375 km from the starting point?

A 6 h 30 min

B 4 h 45 min

C 3 h 15 min

D 5 h 10 min

E None of these
Answer: D

## Explanation:

Time taken to cover $375 \mathrm{~km}=(375 / 75) \mathrm{h}=5 \mathrm{~h}$
Number of stoppages $=375 / 125-1=2$

Total time to stoppages $=(5 \times 2) \mathrm{min}=10 \mathrm{~min}$

Hence, total time taken = 5 h 10 min

Question 54
$16.66 \%$ of $600+9.09 \%$ of $110=$ ?

A 110

B 120

C 130

D 140

E 150
Answer: A

## Explanation:

$100+10=110(16.66 \%=1 / 6$ and $9.09 \%=1 / 11)$

## Question 55

Ramesh is thrice as old as Kishore and Nirmal is half the age of Ramesh. If the sum of their ages is 99 , then what is the age of Nirmal?

A 18

B 27

C 20

D 35

E none of these
Answer: B

## Explanation:

Let the age of Kishore be $x$.
Given Ramesh is thrice as old as Kishore. Thus, the age of Ramesh $=3 x$
Also, Kishore is half the age of Ramesh. Thus, age of Kishore $=3 x / 2=1.5 x$
The sum of their ages $=99=x+3 x+1.5 x$
Thus, $x=99 / 5.5=18$
Therefore, the age of Nirmal $=1.5 x=27$

## Question 56

$3.44 \%$ of $\mathbf{2 9 0}+\mathbf{2 0 \%}$ of $580=$ ? $\%$ of 630

A 60

B 50

C 40
D 30

E 20
Answer: E

## Explanation:

As we know that $3.44 \%$ of 290 will be equivalent to $\frac{1}{29}$ of 290 that will be 10 and $20 \%$ of 580 will be 116
Hence, their sum will be $=126$ which will be $20 \%$ of 630
Hence, answer will be e

## Question 57

What is the number of words formed from the letters of the word 'JOKE' So that the vowels and consonants alternate?

A 4
B 8
C 12
D 18
E None of these
Answer: B

Explanation: Word name: 'JOKE’ Vowels: O, E
Consonants: J, K
$\therefore$ Possible arrangement beginning with consonant: JOKE, KOJE, JEKO, KEJO $=4$ Numbers
beginning with vowel: OJEK, OKEJ, EJOK, EKOJ = 4 Numbers
Required number $=4+4=8$ numbers

## Instructions

Directions for the following five questions: Study the following bar-graph and pie-chart carefully to answer the questions given below.


Number of males who participated from different regions


Total number of males who participated $=2,160$
Question 58
How many more males have participated from $E$ than from $B$ ?

A 186

B 204

C 224

D 236

E None of these
Answer: B

## Explanation:

Distribution of males and females participated from different regions.

| Region | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| A | 168 | 72 | 240 |
| B | 264 | 156 | 420 |
| C | 540 | 240 | 780 |
| D | 336 | 224 | 560 |
| E | 468 | 172 | 640 |
| F | 384 | 336 | 720 |

Required number of males $=\left(78^{\circ}-44^{\circ}\right) /\left(360^{\circ}\right) \times 2160=34 / 360 \times 2160$
$=34 \times 6=204$. Choice (b)
Question 59
How many females have participated from A and C together?

A 236

B 252

C 274

D 312

E None of these
Answer: D

## Explanation:

Distribution of males and females participated from different regions.

| Region | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| A | 168 | 72 | 240 |
| B | 264 | 156 | 420 |
| C | 540 | 240 | 780 |
| D | 336 | 224 | 560 |
| E | 468 | 172 | 640 |
| F | 384 | 336 | 720 |

Total number of females participated from A and C together $=72+240=312$. Choice d
Question 60
From which region, maximum number of females participated?

A B

B C
C D

D E

E None of these
Answer: E

## Explanation:

Distribution of males and females participated from different regions.

| Region | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| A | 168 | 72 | 240 |
| B | 264 | 156 | 420 |
| C | 540 | 240 | 780 |
| D | 336 | 224 | 560 |
| E | 468 | 172 | 640 |
| F | 384 | 336 | 720 |

From the table, F has more number of female participants. Choice e

## Question 61

From how many regions, is the number of females participated less than $60 \%$ of the respective male participants?

A 1

B 2

C 3

D 4

E None of these
Answer: D

Explanation:
Distribution of males and females participated from different regions.

| Region | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| A | 168 | 72 | 240 |
| B | 264 | 156 | 420 |
| C | 540 | 240 | 780 |
| D | 336 | 224 | 560 |
| E | 468 | 172 | 640 |
| F | 384 | 336 | 720 |

From $A, C$ and $E$ the number of female participants is less than $50 \%$ of its respective male participants.
From $D$ and $F$, the number of females participants is more than $60 \%$ of its respective male participants.
For B:
$60 \%$ of $264=132+26.4=158.4$
$\therefore 158.4>156$
$\therefore$ From A, B, C and E, the number of females participated is less than $60 \%$ of its respective male participants. Choice d

## Question 62

What is the ratio of the percentage of females among the persons who participated from $B$ to the percentage from $B$ to the percentage of females who participated from $B$ to the percentage of females among the persons who participated from $D$ ?

A $3: 4$

B 6:7

C 13: 14

D 15: 19

E None of these
Answer: C

## Explanation:

Distribution of males and females participated from different regions.

| Region | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| A | 168 | 72 | 240 |
| B | 264 | 156 | 420 |
| C | 540 | 240 | 780 |
| D | 336 | 224 | 560 |
| E | 468 | 172 | 640 |
| F | 384 | 336 | 720 |

The required ratio $=156 / 420: 224 / 560=52: 56=13: 14$.
Choice (c)

## Instructions

For the following questions answer them individually

## Question 63

3 pipes when opened for 3 hours can fill 3 buckets. How many buckets can 2 pipes open for 2 hours approximately fill?

A $2 / 3$ buckets

B 2 buckets

C 1 bucket

D $4 / 3$ buckets

E None of the above.
Answer: D

## Explanation:

2 pipes open for 2 hours will fill $\frac{2}{3} * \frac{2}{3} * 3$ buckets $=4 / 3$ buckets.

## Question 64

What is the LCM of the following fractions? $2 / 3,4 / 7,1 / 4$

A 1

B 2

C 4

D 7

E 8
Answer: C

## Explanation:

LCM of fractions = LCM of the numerators/ HCF of the denominators.
LCM of 2,4 and 1 is 4
HCF of 3,7 and 4 is 1
So, the LCM of the given fractions is $4 / 1=4$

## Question 65

Gopi started a business and invested Rs. 48000 at the start of it. Raghav joined him after 2 months and invested Rs. 42000. Two years after Gopi started the business, there was a profit of Rs. 41520 . What is Raghav's share of the profit?

A Rs. 18480

B Rs. 23040

C Rs. 14840

D Rs. 15600

E Rs. 19600
Answer: A

## Explanation:

Gopi invested for a total of 2 years $=24$ months.
Raghav invested for a total of 22 months.
Hence, the ratio of their share in the profits is $48000 * 24: 42000 * 22=8 * 12: 7 * 11=96: 77$
Hence, Raghav's share of the profit is 77/(77+96)*41520 = Rs. 18480

## Question 66

$12.5 \%$ of $64+11.11 \%$ of $90=$ ?

A 18

B 19

C 20

D 22

E 24
Answer: A

Explanation:
$8+10=18(12.5 \%=1 / 8$ and $11.11 \%=1 / 9)$

## Question 67

$5.26 \%$ of $95+5.88 \%$ of $170=$ ?

A 16

B 15
C 14

D 13

E 17
Answer: B

Explanation:
$5+10=15(5.26 \%=1 / 19$ and $5.88 \%=1 / 17)$

## Question 68

Which number comes in the place of the question mark (?)
$2,6,12,20,30$, ?

A 50

B 44
C 45

D 42

E 55
Answer: D

Explanation:
$2+4=6 ; 6+6=12 ; 12+8=20 ; 20+10=30 ; 30+12=42$
Question 69
Which number comes in the place of the question mark (?)
$16,25,36,49,64$, ?

A 121
B 100

C 81

D 144

E 196
Answer: C

Explanation:
$4^{2}=16 ; 5^{2}=25 ; 6^{2}=36 ; 7^{2}=49 ; 8^{2}=64 ; 9^{2}=81$

## Question 70

A person borrowed Rs. 2000 at $5 \%$ per annum simple interest and immediately lent it at $6 \%$ per annum simple interest. At the end of $21 / 2$ yr he collected the amount and settled his loan. What was his profit?

A Rs. 45

B Rs. 40

C Rs. 50

D Rs. 56

E None of these
Answer: C

## Explanation:

For borrowed money $\mathrm{P}=$ Rs. 2000, $\mathrm{R}=5 \%$ per annum and $\mathrm{T}=5 / 2$ year
SI = Rs. $(2000 \times 5 / 2 \times 5 \times 1 / 100)=$ Rs. 250

For lent money $\mathrm{P}=\mathrm{Rs} .2000, \mathrm{R}=6 \%$ per annum and $\mathrm{T}=5 / 2$ year

SI= Rs. $(2000 \times 5 / 2 \times 6 \times 1 / 100)=$ Rs. 300

His profit $=$ Rs. (300-250) $=$ Rs. 50

## English

## Instructions

Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.
(A) To address these issues Indian corporate are increasingly turning eco-friendly
(B) At present however there are only a dozen green buildings in the private sector.
(C) However though an eco-friendly building may cost more upfront however it is cost effective because of lower operating costs in long run.
(D) Today there is growing concern about global warming, energy and water crises.
(E) The reason is the construction cost of an eco-friendly building is $15 \%$ to $20 \%$ more than putting up a conventional building.
(F) Planting trees, using energy saving lighting systems and constructing eco-friendly green buildings are some of the measure they are taking.

## Question 71

Which of the following will be the FIRST sentence after rearrangement?

A A

B B

C C

D D

E E
Answer: D

## Explanation:

The first sentence in the paragraph is (d) because it introduces the subject and indicates the time and tense of the issue. Sentence (a) builds on it and is hence the second line. (f) is a continuation of (A) and gives some examples of how to be eco-friendly. (e) and (c) are the last two sentences as they close the discussion.

## Question 72

## Which of the following will be the SECOND sentence after rearrangement?

A A

B C

C D

D E

E F
Answer: A

## Explanation:

The first sentence in the paragraph is (d) because it introduces the subject and indicates the time and tense of the issue. Sentence (a) builds on it and is hence the second line. (f) is a continuation of (A) and gives some examples of how to be eco-friendly. (e) and (c) are the last two sentences as they close the discussion. The meaningful paragraph should be: To day there is growing concern about globle warming energy and water crises. To address these issues......

## Question 73

## Which of the following will be the THIRD sentence after rearrangement?

A B

B D

C C

D E

E F
Answer: E

## Explanation:

The first sentence in the paragraph is (d) because it introduces the subject and indicates the time and tense of the issue. Sentence (a) builds on it and is hence the second line. (f) is a continuation of (A) and gives some examples of how to be eco-friendly. (e) and (c) are the last two sentences as they close the discussion.

## Question 74

Which of the following will be the FIFTH sentence after rearrangement?

A C

B D

C E

D F

E A
Answer: C

## Explanation:

The first sentence in the paragraph is (d) because it introduces the subject and indicates the time and tense of the issue. Sentence (a) builds on it and is hence the second line. (f) is a continuation of (A) and gives some examples of how to be eco-friendly. (e) and (c) are the last two sentences as they close the discussion.

## Question 75

Which of the following will be the SIXTH (LAST) sentence after rearrangement?

A B

B C

C D

D E
E F
Answer: B

## Explanation:

The first sentence in the paragraph is (d) because it introduces the subject and indicates the time and tense of the issue. Sentence (a) builds on it and is hence the second line. (f) is a continuation of (A) and gives some examples of how to be eco-friendly. (e) and (c) are the last two sentences as they close the discussion.

## Instructions

Choose the part of the sentence that contains a grammatical error. Choose option 5 if the sentence is grammatically correct as it is. Ignore errors in punctuation.

## Question 76

While designing interfaces (1) / for apps that will be (2) / used in developing countries, (3) / it's better to use explicit controls. (4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: E

## Explanation:

The sentence is grammatically correct. Hence, option E.

## Question 77

While refereeing the match, (1) / he failed to point out the (2) / other team had (3) / an extra member on the ground. (4) / No Error (5)

A 1

B 2

C 3
D 4

E 5
Answer: B

## Explanation:

There should be a "that" after "point out". Hence, the sentence should have been "While refereeing the match, he failed to point out that the other team had an extra member on the ground".

## Question 78

When I met her (1) / at the engagement, (2) / I asked her not to (3) / dwell over her past. (4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: D

## Explanation:

The correct preposition to use is "on" after "dwell". Hence, the sentence should have been "When I met her at the engagement, I asked her not to dwell on her past".

## Question 79

In spite of the warnings (1) / given by parents, (2) / the school did not do enough (3) / to keep their students safe. (4) / No Error (5)

A 1
B 2

C 3

D 4
E 5
Answer: D

## Explanation:

The school is a singular noun and hence we should use the singular pronoun "its" instead of "their". Hence, the sentence should have been "In spite of the warnings given by parents, the school did not do enough to keep its students safe."

## Question 80

We reached at (1) / the platform just as (2) / the train was (3) / pulling into the station. (4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: A

## Explanation:

The verb "reached" should not be followed by the preposition "at". Hence, the sentence should have been "We reached the platform just as the train was pulling into the station."

## Instructions

Choose the part of the sentence that contains a grammatical error. Ignore errors in punctuation. Choose option 5 if there is no error.

## Question 81

He deserves all the (1) / praise he is receiving today (2) / because the company grew ten-fold (3) / between his tenure as the CEO. (4) / No Error (5)

A 1
B 2

C 3

D 4
E 5
Answer: D

## Explanation:

The fourth part has a preposition error. We use the preposition "during" to indicate a period of time like tenure. Hence, the sentence should have been "He deserves all the praise he is receiving today because the company grew ten-fold during his tenure as the CEO."

## Question 82

Each one of us (1) / are responsible for (2) / the mess we find (3) / ourselves in. (4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: B

## Explanation:

Each is a singular noun and hence should be accompanied by the singular verb "is" instead of "are". Hence, the sentence should be "Each one of us is responsible for the mess we find ourselves in."

## Question 83

The two politicians (1) / have the same stand (2) / with respect of (3) / gun safety laws and gay marriage.
(4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: C

## Explanation:

The phrase "with respect of" is incorrect. The correct idiom to use is either "in respect of" or "with respect to". Hence, the sentence should have been "The two politicians have the same stand with respect to gun safety laws and gay marriage".

## Question 84

Had she started (1) / from home an hour earlier, (2) / she will have reached the (3) / convention centre on time. (4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: C

## Explanation:

There is a tense consistency error in the sentence. It should have been "Had she started from home an hour earlier, she would have reached the convention centre on time."

## Question 85

She spent the afternoon (1) / cleaning the study, (2) / dusting the shelves and (3) / arranged the books. (4) / No Error (5)

A 1

B 2

C 3

D 4

E 5
Answer: D

## Explanation:

The sentence has a parallelism error. The last verb should also have been in the -ing form. Hence, the sentence should have been "She spent the afternoon cleaning the study, dusting the shelves and arranging the books."

## Instructions

Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you answer some of the questions.

At the heart of what makes India a better regime than China is a healthy respect for the civil rights and liberties of its citizens. There are checks and balances in our government. But India's new surveillance programme, the Central Monitoring system (CMS), resembles a dystopian society akin to George Orwell's 1984.

According to several news reports, the CMS gives the government, Indian security agencies and income tax (IT) officials the authority to listen to, and tape phone conversions, read emails and text messages, monitor Posts on Facebook, Twitter or Linkedin and track searches on Google of selected targets, without oversight by the courts or parliament. To call it sweeping is an understatement.

Typically, Indian Security agencies need a court order for surveillance, or depend on Internet/telephone service providers for data, provided they supply a warrant. CMS allows the government to bypass the court. Milind Deora, India's Minister of State for Information Technology says the new system will actually improve citizens' privacy because telecommunication agencies would no longer be directly involved in the surveillance; only government officials would have these details - missing the point that in a democracy, there has to be freedom from government surveillance. This is hardly comforting in a nation riddled with governmental corruption.

India does not have a privacy law. CMS will operate under the Indian Telegraph Act (ITA). The ITA is a relic of the British Raj from 1885, and gives the government the freedom to monitor private conversations. News reports quote anonymous telecommunications ministry officials as saying that CMS has been introduced for security purposes, and "this is to protect you and your country".

That is irrational. For one, there are no 'security purposes' that prevent the government from having a rational debate on this programme and getting approval from our elected representatives before authorizing such wide-reaching surveillance. If the government is worried that a public debate in a paralysed parliament would half the programme's progress, then it can convene a committee of individuals or an individual body such as CAG to oversee the programme. It can seek judicial approval from the Supreme Court, and have a judge sign off on surveillance requests without making these requests public.

As of now, the top bureaucrat in the interior ministry and his/her state level deputies will have the power to approve surveillance requests. Even the recently revealed US surveillance Programme, had 'behind the doors' bipartisan surveillance approval. Furthermore, US investigation agencies such as the CIA and NSA are not the ruling party's marionettes; in India, that the CBI is an arm of the government is a fait accompli. Even the Supreme Court recently lambasted the CBI and asked it to guarantee its independence from government influences after it was proved that it shared unreleased investigation reports with the government.

There is no guarantee that this top bureaucrat will be judicious or not use this as a tool to pursue political and personal vendettas against opposition parties or open critics of the government. Security purposes hardly justify monitoring an individual's social media usage. No terrorist announces plans to bomb a building on Facebook. Neither do Maoists espouse Twitter as their preferred form of communication.

Presumably, security purposes could be defined as the government's need to intercept terrorist plans. How does giving the IT department the same sweeping surveillance powers justify security purposes? The IT office already has expansive powers to conduct investigations, summon individuals or company executives, and raid premises to catch tax evaders. In a world where most financial details are discussed and transferred online, allowing the IT departments to snoop on these without any reasonable cause is akin to airport authorities strip searching everyone who boards a flight.

What happened on 26/11 or what happens regularly in Naxal - affected areas is extremely sad and should ideally, never take place again. But targeting terrorists means targeting people who show such inclinations, or those who arouse suspicions, either by their travels or heir associations with militant or extremist groups. And in a country where a teenager has been arrested for posting an innocent comment questioning the need for a bandh on the death of a political leader, gives us reason to believe that this law is most likely to be misused, if not abused.

## Question 86

Select the word which is MOST OPPOSITE in meaning to the word printed in bold, as used in the passage. AKIN

A unrelated
B dissimilar
C alien

D hostile

E parallel
Answer: B

## Explanation:

The word akin, in the given context, means similar. Hence dissimilar is its antonym.

## Question 87

Select the word which is MOST OPPOSITE in meaning to the word printed in bold, as used in the passage. UNDERSTATEMENT

A exaggeration
B joke
C farce
D mistake

E crime
Answer: A

## Explanation:

Exaggeration is an antonym of understatement (description or representation of something as being smaller or less important than it really is).
Choice a

## Question 88

Choose the word from the options which means opposite to the following word. IRRATIONAL

A critical

B unpleasant
C logical

D absurd

E demeaning
Answer: C

## Explanation:

Logical is an antonym of irrational (illogical).
Choice c

## Instructions

Read the following passage and answer the questions that follow. Certain words and phrases are printed in bold to help you locate them while answering some of the questions:
After a stringent regime of autarky and command and control economy, from 1956 to 1975, India started on a slow path of reintegration into the world economy, albeit in a nascent form. Empirical comparison of the period before and after liberalization demonstrates that, instead of economic stagnation, India achieved a marked acceleration in economic growth after liberalization. Indeed, India broke the barrier of stagnation that had been the lot of the country before globalization. India's rate of growth from 1975 to 2007 has been over 5.5 percent, compared to the derisively termed "Hindu" rate of growth of 3.4 percent over the period 1956 to 1975, and especially to the pathetic 2.6
Percent over the decade prior to the nascent liberalization in 1975. In the dozen years from 1995 to 2007 the growth rate has been over 6.5 percent; during the last four years India has sustained an unprecedented average growth rate of over 8 percent.
It is difficult to exaggerate this accomplishment in growth acceleration. It has provided additional resources not only for investment in human capital but also for expenditures on the social sectors and poverty alleviation. Besides, the economic dynamism associated with this growth has imparted a self-confidence for successfully building a consolidated nation-state. It has indeed transformed a country that had been mocked as "the sick man of Asia" - an inveterate supplicant for foreign aid - into a credible contender for a major role in the balance of power in Asia. Similarly, far from the specter of deindustrialization held out by critics, foreign imports have not swamped Indian industry after tariffs were lowered as part of India's reintegration into the world economy. Rather, Indian industry has grown at a higher rate than it had prior to liberalization of the economy. The growth rate of manufacturing has been around 6.5 percent since 1975 and close to 7 percent during the dozen years up to 2006.

## Question 89

Select the word that is MOST OPPOSITE to the given word, as used in the passage: Acceleration

A Deceleration
B Stimulation

C Recognition

D Progression
E Digression

Answer: A

## Explanation:

"Acceleration" means the speeding up of something. The antonym is "deceleration" or slackening. "Digression" is to move away from something and is not related to the headword. Choice a

## Question 90

Select the word that is MOST OPPOSITE to the given word, as used in the passage: EXAGGERATE

A Amplify
B Corrupt

C Complicate
D Lessen

E Foil
Answer: D

## Explanation:

To exaggerate something is to overstate or amplify something. The antonym is "lesson" or deprecate something. Choice d

## Instructions

Read the following passage and answer the questions below.
Consider your average morning routine. Most of us begin taking in the day's news as soon as the clock radio wakes us up. Then there is the morning news brief from the television while eating breakfast followed by a local radio station during our commute. Throughout the day people continue to glean important events from news sites on the internet. Now consider what your day would look like if all of these resources fell silent.

There are continual reminders that our nation's power grid is much more fragile than we would like to admit. Such threats do exist not only as foreign or domestic, but extra-worldly as well. Modern power grids are managed by computer networks and the potential exists for hacking into those networks to interrupt the power supply. Another less sinister, but just as hazardous threat comes from outside our own planet. The very sun that we rely upon every day occasionally ejects powerful solar flares known as coronal mass ejections or CMEs. These powerful electromagnetic fields can wreak havoc on sensitive electronic components and have already caused major power outages in recent history and scientists continue to predict that the sun is primed for another such event.

The technology for electromagnetic bombs, developed over the past 30 years, is now available to download from on the internet! Googling it demonstrates the ease with which a would-be enemy could devastate society, creating an enormous blackout with mass panic and havoc. Such powerful electronic pulses pose a significant threat to breakdown all traditional communication including satellites that control every aspect of transportation, commerce and ultimately life.

Other potential problems with national and regional grids are not posed by external threats, but by the continued and rapid growth of our own cities. While such power demands are on the rise, the capacity to provide power to them is not keeping pace. The battle between environmental groups and political decision makers only seems to be maintaining the status quo and not improving the reliability of our energy needs.

If any one of these events transpires and our power grid fails, where would we get our news and information? While we could certainly continue to live day-to-day without a sizable amount of the information we take in, there is some information that we simply would find hard to live without. In the case of a regional or national disaster, reliable and accurate information can be the biggest factor in safety and survival.

How fortunate we are that there are trained amateur radio operators scattered across the country who are poised to fill this important gap if ever needed. With an emergency generator and communication tools, these operators have the equipment and coding skills necessary to process and relay important information at a moment's notice. Many of these operators utilize an assortment of methods, but among them Morse code gets through when other methods fail. As we have seen in so many movies, confirmed by actual real life experiences, the effectual transmission of dahs and dits between trained operators is a very useful method of communicating both securely and accurately. Why not join this family of ham radio operators and enjoy the fun and lifelong friendships that result?

If you prepare by learning Morse code, you will be on the front lines of the vital communication network and could be responsible for bringing peace, comfort and safety information to friends and family. Some things may be better left to others, but wouldn't you feel safer knowing that you have done everything you could do in an emergency? Morse code continues to be a valuable survival skill for you, your family and for the nation.

- By Gerald Wheeler Ed.D.

Question 91
What is the author's tone in the passage?

A Analytical

B Descriptive
C Persuasive

D Cynical

E Sarcastic
Answer: C

## Explanation:

The author describes the various issues that can occur with the power and then persuades you to learn Morse code in order to keep yourself, your family and your nation safe.
Hence, the author's tone is persuasive.

## Question 92

What is the main point of the passage?

A To describe how fragile the nation's power-grid is.

B To persuade the citizens to fight against the government to address the issues faced by the power-grid.
C To help us understand how important the daily news is.
D To persuade the citizens to learn the Morse code to be ready to face probable disasters.
E To make us aware of the oncoming disaster.
Answer: D

## Explanation:

The author describes the various issues that can occur with the power and then persuades you to learn Morse code in order to keep yourself, your family and your nation safe.
This statement is best described in option D.
Hence, option D is the answer.

## Question 93

How many potential problems for the nation's power-grid has the author described in the passage?

A 1

B 2

C 3

D 4

E 5
Answer: D

## Explanation:

The potential problems that the author described are "Possibility of hacking into the power-grid software",
"Coronal Mass ejections" "Electromagnetic bombs" and "Rapid growth of the cities".
Hence, the author described 4 problems in the passage.

## Question 94

## Why are the CMEs a probable hazard to the nation's power-grid?

A They cause major power outages
B They have more current passing in them than in the power-grid
C They are less sinister than the threat of hacking into the power-grid network

D They cause a lot of damage to transportation, commerce and ultimately life
E They damage delicate electronic components
Answer: E

## Explanation:

"These powerful electromagnetic fields can wreak havoc on sensitive electronic components and have already caused major power outages in recent history."
They caused major power outages in the past. This does not imply that they do that always => Option A can be eliminated.
Option E is clearly the answer as we can deduce from the first part of the above sentence.

## Question 95

Why did the author ask to consider a world that has none of the radio resources?

A To make us aware of what a normal individual would do daily.

B To change from the daily routine for a few days.
C To make us understand the intensity of the problem he is trying to point out.

D To help us be ready to face such a situation in the near future.
E None of these
Answer: C

## Explanation:

The author describes the general situation about the radio in the current world. Then he says to consider a situation where the radio-stations are not present.
Then he describes about the problems that could create such a situation.
So, the author is trying to make us understand the important of the problem.
Hence, option C is the answer.

## Question 96

Why is the technology for electromagnetic bombs a potential hazard for the nation's power-grid?

A It takes 30 more years to develop this technology.

B It will create innumerable issues in transportation, commerce and ultimately life.

C It breaksdown all traditional communication.

D It is easily available to a would-be enemy.

E None of these

Answer: D

## Explanation:

Option A is wrong.
Options B and C are true if the technology falls into the wrong hands.
The actual reason that this technology is a potential hazard is that it is easily available to a would-be enemy. Hence, option D is the answer.

## Question 97

What is the advantage of learning Morse code, according to the passage?

A You will get very good jobs in the field of disaster management

B You can bring peace and safety to the society

C You will be able to make a difference to the society
D You can find the solutions of the problems described in the passage

E None of these
Answer: B

## Explanation:

"... could be responsible for bringing peace, comfort and safety information to friends and family." From this statement, we can say that option B is the answer.

## Question 98

Which of the following is synonymous to the word "SINISTER" in the context of the passage?

A nasty

B lucky
C corrupt

D fortunate

E bland
Answer: A

## Explanation:

"Another less sinister, but just as hazardous threat comes from outside our own planet."
The word sinister must give the same connotation as hazardous.
=> Options B, D and E can be eliminated.
"Corrupt threat" is not appropriate.
=> 'nasty' is the answer.

## Question 99

Which of the following is synonymous to the word "ASSORTMENT" in the context of the passage?

A similar
B akin

C comparable
D variety
E group
Answer: D

## Explanation:

"Many of these operators utilize an assortment of methods, but among them Morse code gets through when other methods fail."
This sentence suggests that among various method, Morse code gets through whereas others fail.
=> Assortment must mean 'various'.
=> Options A, B and C can be eliminated.
"Group of methods" appears to be a restricted list wheras "variety of methods" appears to be many methods. Hence, 'variety' is a better fit for the blank.
=> Option D is the answer.

## Question 100

Which of the following is a synonym to the word "EFFECTUAL" in the context of the passage?

A productive
B useless

C impotent
D authoritative

E conclusive
Answer: A

## Explanation:

The author is talking positively about the Morse code.
So, 'useless' and 'impotent' can be eliminated.
'Authoritative' and 'conclusive' are not the words that can be used to describe 'transmission'.
Hence, 'productive' is the correct answer.

