SSC CPO 16th-March-2019-Shift-1
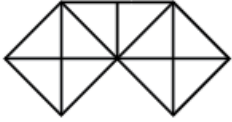
Reasoning

Instructions

For the following questions answer them individually

Question 1

How many triangles are there in the following figure?

A 20

B 21

C 19

D 24

Answer: B

Explanation:

Each square shape has total of 8 triangles.

2 square's contain total of 16 triangles.

Other part than Square has 3 triangles and that part joined to 2 squares has 2 large triangles.

So, total number of triangles $= 16 + 3 + 2 = 21.$

B is correct choice.

Question 2

Three of the following four words are alike in a certain way and one is different. Find the odd one out.

A Stationery

B Eraser

C Pen

D Paper

Answer: A

Explanation:

Eraser,Pen and Paper uses for purpose of study.

Stationery is not in same category.

So, A is correct choice.

Question 3

Select the option that is related to the third term in the same way as the second term is related to the first term.
FLOWER : UOLDVI :: JASMINE : ....

A QZGNRMV

B QZHMRNV

C QAHNRMV

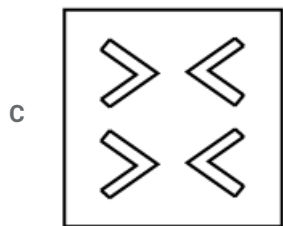**D** QZHNRMV

Answer: D

Explanation:
Using conversion table,
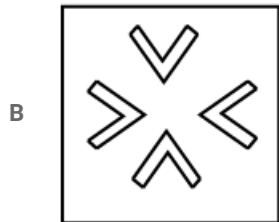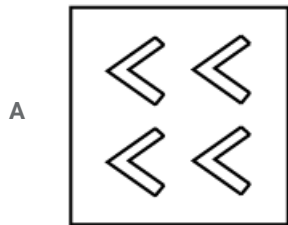
$FLOWER : UOLDVI \longrightarrow F + U = L + O = O + L = W + D = E + V = R + I = 27.$

Similarly, $JASMINE : QZHNRMV \longrightarrow J + Q = A + Z = S + H = M + N = I + R = N + M = E + V = 27.$

So, D is correct choice.

Question 4

The sequence of folding a piece of square paper and the manner in which the folded paper has been cut is shown. How would this paper look when unfolded?

A

B

C

D
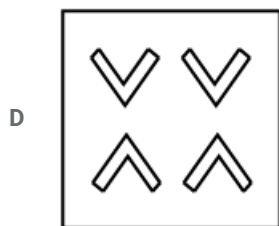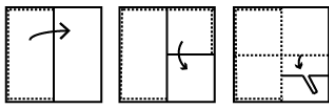
Answer: C

Explanation:
After cut two reverse arrow will appear on the paper.

C is correct choice.

Question 5

Kunal's house is located to the south of a coffee shop. There is a park to the east of the coflee shop. The local market is to the north of the park. If the distance of the market from the park is equal to the distance of the cofi'ee shop from Kunal's house, in which direction is the market with respect to the coffee shop?

A   West

B   South-East

C   North-East

D   South-West

Answer: C

Explanation:

Question 6

Two statements are given, followed by two conclusions I and II. Assuming these statements to be true, even if they seem to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
All executives are humble people.
All humble people are rich.
Conclusions:
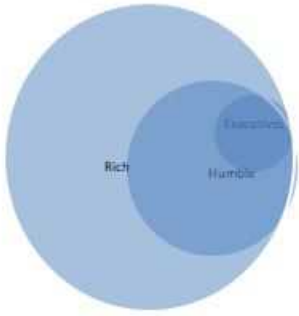I. All executives are rich.
II. All humble people are executives.

A   Only conclusion I follows.

B   Only conclusion II follows.

C   Neither conclusion I nor II follows.

D   Both conclusions I and II follow.

Answer: A

Explanation:

So, it is clear that all Executives are Rich but all Humble People are not Executives.
So, option A is correct.

Question 7

Select the number-pair in which the two numbers are related in the same way as are the two numbers of the given number pair.
11 : 242

A   15 : 375

B   5 : 52

C   8 : 128

D   9 : 729

Answer: C

Explanation:

$11 : 242 \longrightarrow 2 \times 11^2 = 242.$

Similarly, $8 : 128 \longrightarrow 2 \times 8^2 = 128.$

So, option C is correct.

Question 8

Select the word-pair in which the two words are related in the same way as are the two words in the given word-pair.
Surgeon : Scalpel

A   Tailor : Shirt

B   Doctor : Hospital

C   Navy : Lieutenant

D   Sculptor : Chisel

Answer: D

Explanation:
A scalpel is a small blade that is used by a surgeon.

Similarly, Sculptor uses chisel to cut stones.

D is correct.

Question 9

Three of the following four numbers are alike in a certain way and one is different. Identify the different one.

A 8

B 34

C 64

D 16

   Answer: B

Explanation:
$8 = 2^3, 16 = 2^4, 64 = 2^6 \ but \ 34 = 2 \times 17.$

So, B is correct choice.

Question 10

Which letter-cluster will replace the question mark (?) in the following series?
CFZ, EGX, HIU, JLS, MPP, ?

A NTO

B OTN

C MSN

D OUN

   Answer: D

Explanation:
Using conversion table,

$CFZ = 3 + 6 + 26 = 35$, $EGX = 5 + 7 + 24 = 36$, $HIU = 8 + 9 + 21 = 38$, $JLS = 10 + 12 + 19 = 41$, $MPP = 13 + 16 + 16 = 45$

So, 35,36,38,41,45 is in a series.Next number should be 50.

So,$OUN = 15 + 21 + 14 = 50.$

D is correct choice.

Question 11

Select the option that will come next in the given series.

A

B

C

D
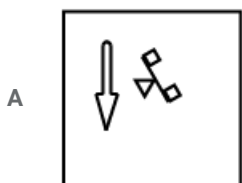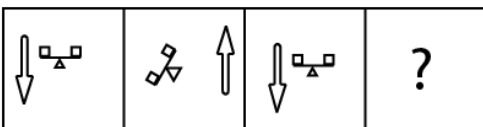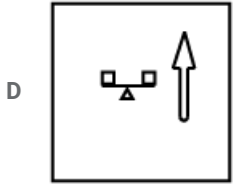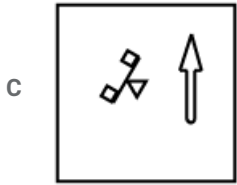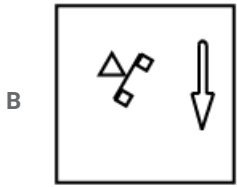
Answer: C

Explanation:

In the given series ,1st image is appear on 3rd section ,

similarly, 2nd image will appear on 4th section.

C is correct choice.

Question 12

Select the correct mirror image of the given figure, when the mirror is placed at the right side.

A

B

C

D
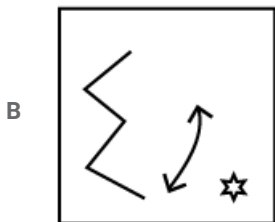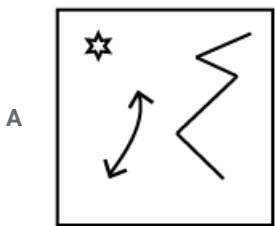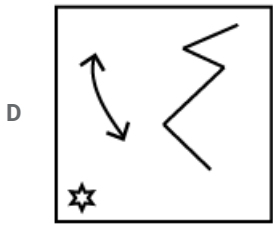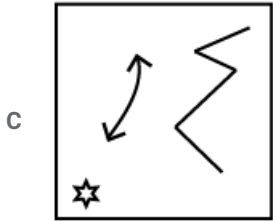
Answer: C

Explanation:

Image will appear reverse on mirror.

Arrow will move to the left side,star will appear on left bottom side of the image

and zic-zac curve will appear on the right side.

So, option C is correct choice.

Question 13

Select the number-pair in which the two numbers are related in the same way as are the two numbers of the given number pair.
343 : 512

A 1009:1331

B 27 : 125

C 216 : 729

D 8 : 27

Answer: D

Explanation:

343:512 is a perfect cube set of 7 and 8.

Similarly, 8:27 is a perfect cube set of 2 and 3.

Option D is correct.

Question 14

Among the following four words, three are similar in one specific way and one is odd. Select the odd word.

A Habitat

B Stable

C Den

D Barn

Answer: A

Explanation:

Stable , Den and Barn is used for animals or corps.

But a Habitat is a place to stay for humans.

So, option A is correct.

Question 15

Select the Venn diagram that represents the correct relationship between the following classes.
Cat, Mammal, Parrot

A

B

C

D
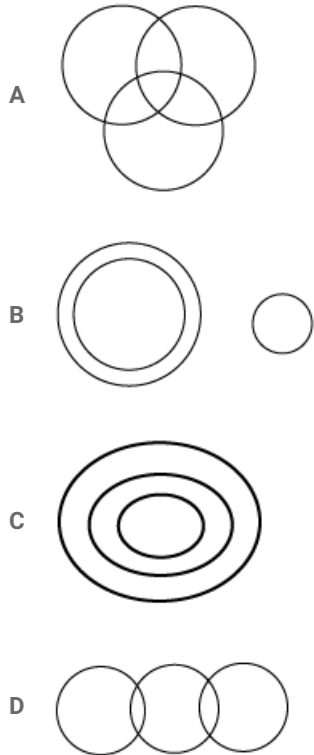
Answer: B

Explanation:

Cats are Mammals . But Parrots are not mammals, they are Aves.

So, Option B is in correct order.

Question 16

Three of the following four numbers are alike in a certain way and one is different. Identify the different one.

A   396

B   792

C   571

D   451

Answer: C

Explanation:

rather than 571 , other numbers are composite numbers.

C is correct choice.

Question 17

If A = 2 and C = 4, then PARTICLE = ...

A 172172094136

B 1621820104136

C 1721921104136

D 172192094126

Answer: C

Explanation:

In conversion table $A = 1 \ and \ C = 3$.

By logic ,$A = 1 + 1 = 2 \ and \ C = 3 + 1 = 4$.

So,$P = 17, \ A = 2, \ R = 19, \ T = 21, \ I = 10, C = 4, L = 13, E = 6$.

So, option C is correct choice.

Question 18

Three of the following four number-pairs are alike in a certain way and one is different. Identify the different one.

A   14 : 3

B   7 : 6

C   12 : 4

D   21 : 2

Answer: C

Explanation:

Every number pair is a pair of one prime number and one composite number.

But 12:4 is a pair of composite number.

C is correct choice.

Question 19

Select the option that will come next in the given series.

A

B

C

D
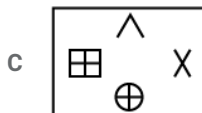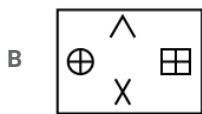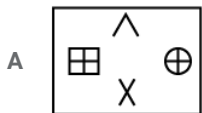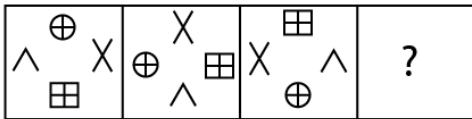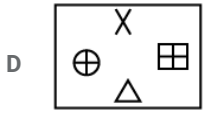
Answer: A

Explanation:

Given image is rotated anti-clockwise starting from squared shape.

So,image in Option A will be the resultant image.

A is correct choice.

Question 20

Which number will replace the question mark (?) in the following series?
3, ?, 101, 10202

A 95

B 10

C 100

D 99

Answer: B

Explanation:

$3^2 + 1 = 10, \ 10^2 + 1 = 101, 101^2 + 1 = 10202.$

So, option B is correct.

Question 21

'Month' is related to 'March' in the same way as 'Season' is related to ' ....

A Year

B Festival

C Spring

D Week

Answer: C

Explanation:

March is a month and Spring is a season.

So, option C is correct.

Question 22

Find out the two signs to be interchanged for making following equation correct.

$\frac{1}{4} \div \frac{1}{64} - 5 + 45 \times 120 = 5$

A $+$ and $\times$

B $\times$ and $-$

C $+$ and $-$

D $-$ and $\div$

   Answer: B

Explanation:

If we interchange $\times\ and\ -$ sign,

$\frac{1}{4} \div \frac{1}{64} \times 5 + 45 - 120$

$= \frac{1}{4} \times \frac{64}{1} \times 5 + 45 - 120$

$= 16 \times 5 + 45 - 120$

$= 80 + 45 - 120$

$= 125 - 120$

$= 5.$

So, Option B is correct.

Question 23

Select the option that is related to the fourth term in the same way as the first term is related to the second term.
FHK : KMP :: .... :UWZ

A PRV

B PRU

C PSU

D ORU

   Answer: B

Explanation:
Using conversion table,

$FHK : KMP \longrightarrow F + 5 = K,\ H + 5 = M,\ K + 5 = P.$

Similarly, $P + 5 = U,\ R + 5 = W,\ U + 5 = Z.$

So,PRU is correct answer.

Question 24

Two statements are given, followed by two conclusions I and II. Assuming these statements to be true, even if they seem to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
Some bed sheets are towels.
Some towels are pillows.
Conclusions:
I. Some pillows are bed sheets.
II. No pillow is a bed sheet.

A Only conclusion I follows.

B Only conclusion II follows.

C Neither conclusion I nor II follows.

D Either conclusion I or II follows.

Answer: D

Explanation:

Figure 1   Figure 2

So, both the figure is possible by the given conditions.
So, either conclusion 1 is true or conclusion 2.
So, Option D is correct.

Question 25

Select the option that will come next in the given series.

A

B

C

D
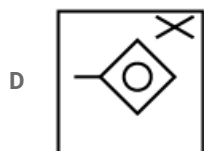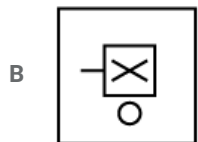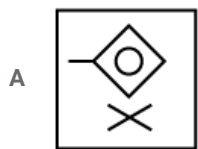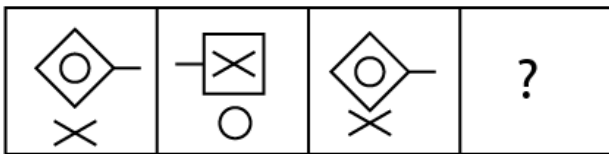
Answer: B

Explanation:
First image repeated in 3rd section ,then second image should be repeated

in 4th section.

So,Option B is correct choice.

Question 26

Select the Venn diagram that represents the correct relationship between the following classes.
World, Asia, Nepal

A

B

C

D
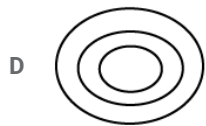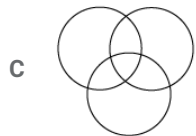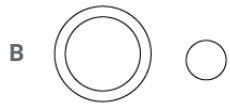
Answer: D

Explanation:
Nepal is in Asia and Asia is in the World .

So, inner circle represent Nepal, then outer Circle over it should be indicate Asia and outer most

circle is for World.

So, Option D is right choice .

Question 27

Which letter will replace the question mark ('2) in the following series?
C, F, K, R, A, ?

A J

B I

C M

D L

Answer: D

Explanation:
Every letter is a distance by 3,5,7,9 correspondingly.

So, next letter should be a distance of 11.

next letter should be "L".

Option D is correct.

Question 28

Which two signs should be interchanged to make the following equation correct?
$7 \times 2 + 5 - 16 \div 4 = 13$

A $\times$ and $+$

B $\div$ and $\times$

C $\div$ and $+$

D $\times$ and $-$

   Answer: A

Explanation:

If you interchange $\times$ and $+$, the equation will become,

$7 + 2 \times 5 - 16 \div 4$

$= 7 + 2 \times 5 - 4$

$= 7 + 10 - 4$

$= 17 - 4$

$= 13.$

Option A is correct.

Question 29

In a certain code language, CADET is written as 31457. How will DEFER be written as in the same language?

A 45769

B 45678

C 45659

D 35658

   Answer: C

Explanation:

$C = 3, A = 1, D = 4, E = 5, F = 6.$ (by using conversion table)

So, CADET is coded as 31457 ,in same way DEFER will coded as 45659.

So, option C is correct.

Question 30

Select the correct alternative to indicate the arrangement of the following words in a logical and meaningful order.
1. Classes
2. Entrance Exam
3. Result
4. Admission
5. Graduation
6. Job

A 6, 2, 5, 4, 3, 1

B 5, 2, 6, 4, 3, 1

C 2, 3, 4, 1, 5, 6

D 2, 3, 4, 1, 6, 5

   Answer: C

Explanation:
Right order should be,

$Entrance\ Exam \longrightarrow Result \longrightarrow Admission \longrightarrow Classes \longrightarrow Graduation \longrightarrow Job.$

Option C is correct.

Question 31

Select the option that is embedded in the following figure.

A

B

C

D
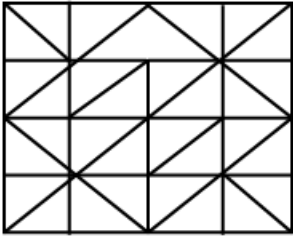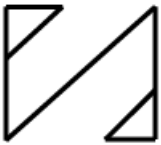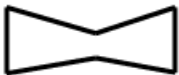
Answer: C

Explanation:
Image in Option C can be extract from the middle of the given image.

So, Option C is correct choice.

Question 32

Select the pair which has the same relation between the words as the relation between the words of given pair.
Horse : gallop

A   Mouse : pit

B   Bird : fly

C   Elephant : gigantic

D   Lion : roar

Answer: B

Explanation:

Horse run at the pace of gallop.

Similarly, Bird fly under the sky.

So, option B is correct.

Question 33

Select the option in which the given figure is embedded.

A

B

C

D
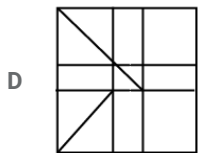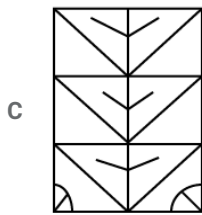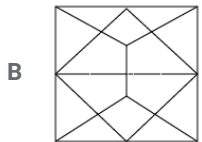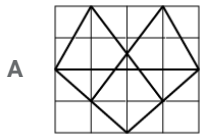
Answer: A

Explanation:
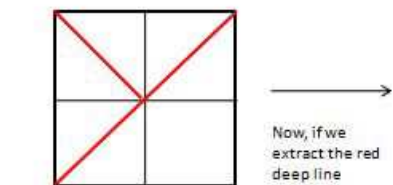
If we cut right lower section from the image of Option A we will get above section.

Now, if we extract the red deep line

Option A is correct choice.

Question 34

Three of the following four number-pairs are alike in a certain way and one is different. Identify the diiferent one.

A   54 : 64

B   28 : 32

C   119 : 136

D 91 : 104

Answer: A

Explanation:
$28 : 32 \longrightarrow 4 \times 7 : 4 \times 8, 119 : 136 \longrightarrow 17 \times 7 : 17 \times 8, 91 : 104 \longrightarrow 13 \times 7 : 13 \times 8.$

but, 54:64 is not in the same pattern.

A is correct choice.

Question 35

Which number will replace the question mark (?) in the following series?
0.15, 0.20, 0.30, 0.45, 0.65, ?

A 0.90

B 0.80

C 0.95

D 0.85

Answer: A

Explanation:
$0.15 + 0.05 = 0.20 \longrightarrow 0.20 + 0.05 \times 2 = 0.30 \longrightarrow 0.30 + 0.05 \times 3 = 0.45 \longrightarrow 0.45 + 0.05 \times 4 = 0.65 \longrightarrow 0.65 + 0.05 \times 5 = 0.90$

So, Option A is correct .

Question 36

Identify the number that does NOT belong in the given series.
2, 6, 6, 10, 8, 12, 12, 15, 14, 18

A 18

B 12

C 15

D 8

Answer: C

Explanation:
It is an alternative series.

(2,6,8,12,14) and (6,10,12,15,18).

every series is added by (+4,+2,+4,+2).

So, it should be (6,10,12,16,18).

So, 15 is not belong to series.

Option C is correct.

Question 37

'Temperature' is related to 'Degree' in the same way as 'Time' is related to '.....'

A Litre

B Metre

C Newton

D Seconds

   Answer: D

Explanation:

Degree is unit of Temperature and Second is unit of Time.

So, Option D is correct.

Question 38

Arjun starts walking towards the east. After walking 50 m, he turns to his left and walks 15 m. From there, he again turns to his left and walks 30 m. Finally, he turns to his lefi one last time and walks 15 m. How far is he from the starting point?

A 40 m

B 10 m

C 30 m

D 20 m

   Answer: D

Explanation:
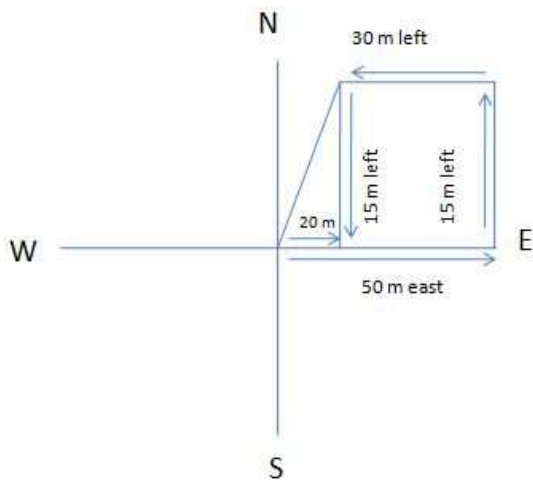
So, he is (50-20)m= 30 m far from starting
point. So, Option D is correct.

Question 39

If '+' means '×', '×' means '+', '+' means '−' and '−' means '÷', then what will be the value of the following expression?

$16 \times 3 + 5 - 2 \div 4$

A 7

B 9

C 10

D 19

Answer: B

Explanation:
By rearranging the equation we get,

$16 + 3 - 5 \div 2 \times 4.$

$= 16 + 3 - 2.5 \times 4$

$= 16 + 3 - 10$

$= 19 - 10$

$= 9.$

So, option B is correct.

Question 40

In a code language, CERTAIN is written as DFSUBJO. How will SUMMER be written as in that language?

A RVNNFS

B TUNMFS

C TVNNFT

D TVNNFS

  Answer: D

Explanation:
$CERTAIN \longrightarrow C + 1 = D, E + 1 = F, R + 1 = S, T + 1 = U, A + 1 = B, I + 1 = J, N + 1 = O \longrightarrow$
$DFSUBJO.$ (using conversion table)

$SUMMER \longrightarrow S + 1 = T, U + 1 = V, M + 1 = N, M + 1 = N, E + 1 = F, R + 1 = S \longrightarrow TVNNFS.$

So, option D is correct.

Question 41

Select the set of numbers that is similar to the following set of numbers.
(25, 144, 47)

A (16, 82, 23)

B (9, 72, 8)

C (15, 96, 340)

D (19, 78, 20)

  Answer: D

Explanation:
$(25, 144, 47) \longrightarrow 25 \times 2 + 47 \times 2 = 144.$

$(16, 82, 23) \longrightarrow 16 \times 2 + 23 \times 2 \neq 82.$

$(9, 72, 8) \longrightarrow 9 \times 2 + 8 \times 2 \neq 72.$

$(15, 96, 340) \longrightarrow 15 \times 2 + 340 \times 2 \neq 96.$

$(19, 78, 20) \longrightarrow 19 \times 2 + 20 \times 2 = 78.$

So, Set in option D only match the pattern.

So, Option D is correct.

Question 42

Select the option that is related to the third number in the same way as the second number is related to the first number.
16 : 68 :: 28 : ....

A 119

B 49

C 346

D 77

Answer: A

Explanation:

16:68 ⟶ (4*4)* 4+4=68

28:119 ⟶ (4*7)* 4+7=119

So, Option A is correct choice.

Question 43

Select the correct alternative to indicate the arrangement of the following words in a logical and meaningful order.
1. Hour
2. Month
3. Second
4. Days
5. Minute
6. Week

A 6, 2, 5, 4, 3, 1

B 3, 5, 1, 4, 6, 2

C 2, 3, 4, 1, 5, 6

D 2, 3, 4, 1, 6, 5

Answer: B

Explanation:
Following should be the proper way,

$Second \longrightarrow Minute \longrightarrow Hour \longrightarrow Days \longrightarrow Week \longrightarrow Month.$

So, option B is correct.

Question 44

Three of the following four letter-clusters are alike in a certain way and one is different. Find the odd one out.

A KMPT

B OQSV

C QSVZ

D EGJN

Answer: B

Explanation:

$KMPT \longrightarrow K + 2 = M, M + 3 = P, P + 4 = T.$ (by using conversion table)

$OQSV \longrightarrow O + 2 = Q, Q + 2 = S, S + 3 = V.$

$QSVZ \longrightarrow Q + 2 = S, S + 3 = V, V + 4 = Z.$

$EGJN \longrightarrow E + 2 = G, G + 3 = J, J + 4 = N.$

So, option B is correct choice.

Question 45

Two positions of the same dice are shown. What will be the number opposite '3'?
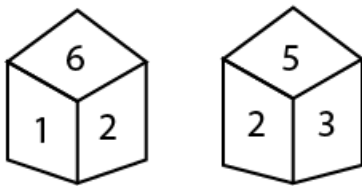
A 4

B 6

C 2

D 1

Answer: B

Explanation:

From both the image ,it is clear that 1,2 & 3 are in conjugate side of the dice.But 5 and 6 are conjugate to each other.

So, 6 must appear opposite of 3 as 1 appearing left side of 2.

Option B is correct choice.

Question 46

Select the set of numbers that is similar to the following set of numbers.
(4, 24, 214)

A (8, 81, 721)

B (3, 27, 81)

C (2, 26, 125)

D (5, 35, 341)

Answer: D

Explanation:

$(4, 24, 214) \longrightarrow 214 = (2 + 1 + 4) - 1 = 6, 6 \times 4 = 24.$

Similarly,

$(8, 81, 721) \longrightarrow 721 = (7 + 2 + 1) - 1 = 9, 9 \times 8 \neq 81.$

$(3, 27, 81) \longrightarrow 81 = (8 + 1) - 1 = 8, 8 \times 3 \neq 27.$

$(2, 26, 125) \longrightarrow 125 = (1 + 2 + 5) - 1 = 7, 7 \times 2 \neq 26.$

$(5, 35, 341) \longrightarrow 341 = (3 + 4 + 1) - 1 = 7, 7 \times 5 = 35.$

So, option D is correct.

Question 47

If in a certain code, WATER is written as XZUDS, then which word will be coded as BMHKF?

A   CLING

B   ALIEN

C   EARTH

D   ANGLE

Answer: D

Explanation:
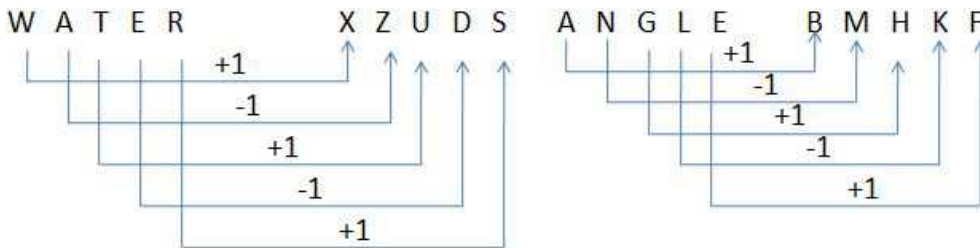
So, option D is correct choice.

Question 48

Three of the following four letter-clusters are alike in a certain way and one is different. Find the odd one out.

A   SWYBE

B   HKNQT

C   CFILO

D   QTWZC

Answer: A

Explanation:

$SWYBE \longrightarrow S + 4$=W, W $+2$=Y, Y+3=B, $B + 3 = E.$ (using conversion table)

But, $HKNQT \longrightarrow H + 3 = K, K + 3 = N, N + 3 = Q, Q + 3 = T.$

$CFILO \longrightarrow C + 3 = F, F + 3 = I, I + 3 = L, L + 3 = O.$

$QTWZC \longrightarrow Q + 3 = T, T + 3 = W, W + 3 = Z, Z + 3 = C.$

Last three are in a pattern of three letter gap ,but letter in option does not follow it.

So, option A is correct choice.

Question 49

Select the Venn diagram that represents the correct relationship between the following classes.
Females, Mothers, Fathers

A

B

C

D
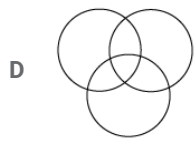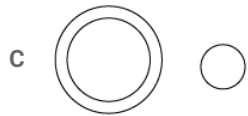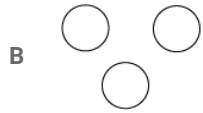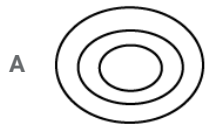
Answer: C

Explanation:

All females are mother but father don't have such direct relation

with either female or mother. So, Diagram in C is right answer.

Question 50

Select the correct mirror image of the given image, when the mirror is placed at the right side.

EFRI95uh

A ꓩu59IЯꟻƎ

B ꓩu25IЯꟻƎ

C ꓩu5ƎIЯꟻƎ

D ƎꟻЯIƎ5uꓩ

Answer: C

Explanation:
Each & every letter and number will move upside down and Side by side.

So, Object in option C is the correct answer.

General knowledge

For the following questions answer them individually

Question 51

Name the 'Father of Indian Economic Reforms'.

A   Narendra Modi

B   PV Narasimha Rao

C   Yashwant Sinha

D   Manmohan Singh

   Answer: B

Question 52

Iron boils at about .... degree Celsius.

A   3861

B   2861

C   2181

D   3182

   Answer: B

Question 53

The Chipko movement is associated with:

A   Sustainable development

B   Transparency in public life

C   Afforestation

D   Preventing the felling of trees

   Answer: D

Question 54

Adults with an annual income between .... can avail of a housing loan under the Pradhan Mantri Awas Yojana.

A   6 and 15 1akhs

B   6 and 18 lakhs

C   6 and 25 lakhs

D   6 and 21 lakhs

   Answer: B

Question 55

'Capra aegagrus hircus' ls commonly known as ....

A   Dog

B   Cow

C   Goat

D   Hen

Answer: C

Question 56

As head of a reputed advertising agency, ... created iconic advertisements for Surf detergent, Liril bath soap, Bajaj scooters and Cherry Blossom shoe polish.

A   Gerson da Cunha

B   Prahlad Kakkar

C   Alyque Padamsee

D   Prasoon Joshi

Answer: C

Question 57

Navakalevara is a ritual that takes place in a temple in ....

A   Tirupati

B   Shirdi

C   Jagannath Puri

D   Sabrimala

Answer: C

Question 58

Guru .... is known as the cobbler saint.

A   Ayya Vaikundar

B   Jiva Goswami

C   Ravidas

D   Narahari

Answer: C

Question 59

Which is the seventh largest country in the world by land area?

A Australia

B Argentina

C Brazil

D India

   Answer: D

Question 60

Who started the temple entry movement in 1927?

A Vinobha Bhave

B Medha Patkar

C Mahatma Gandhi

D Bhimrao Ambedkar

   Answer: D

Question 61

As per the Guinness World Records, which of the following was the world's richest temple in 2011?

A Jagannath Temple

B Tirumala Tirupati Venkateswara Temple

C Sree Padmanabha Swami Temple

D Siddhi Vinayak Temple

   Answer: C

Question 62

Name the long-haired mammals found throughout the Himalayan region.

A Heifer

B Bison

C Ox

D Yak

   Answer: D

Question 63

.... is known as the 'Father of Indian Ornithology".

A   John James Audubon

B   Konrad Lorenz

C   Salim Ali

D   Allan Octavian Hume

   Answer: D

Question 64

Sunita Williams, renowned astronaut of Indian origin, spent a record of .... days in space.

A   150

B   195

C   175

D   200

   Answer: B

Question 65

The inaugural session of the Supreme Court of India took place on ....

A 26th January 1950

B 28th January 1950

C 29th January 1950

D 31st January 1950

   Answer: B

Question 66

At what temperature does iron melt?

A $1638°C$

B $1538°C$

C $1583°C$

D $1683°C$

   Answer: B

Question 67

Sound cannot travel through ....

A   fire

B   soil

C   water

D   vacuum

   Answer: D

Question 68

Which of the following creatures use ultrasonic sound to catch their prey?

A   Hawks

B   Bats

C   Cats

D   Dogs

   Answer: B

Question 69

Who hoists the national flag at the Red Fort on Independence Day?

A   Chief Justice

B   Prime Minister

C   Governor

D   President

   Answer: B

Question 70

Which cricketer made his Test debut in Karachi at the age of 16?

A   Hardik Pandya

B   Rahul Dravid

C   Sachin Tendulkar

D   Shanthakumaran Sreesanth

   Answer: C

Question 71

.... was the Chief Justice of India from January 1950 to November 1951.

A   Bijan Kumar Mukherjea

B   Mehr Chand Mahajan

C   Harilal Jekisundas Kania

D   Bhuvaneshwar Prasad Sinha

Answer: C

Question 72

The world's largest cricket stadium is being built in which state of India?

A   Gujarat

B   Chandigarh

C   West Bengal

D   Maharashtra

Answer: A

Question 73

Currency printing press of India is NOT located in ....

A   Kochi

B   Mysore

C   Salboni

D   Dewas

Answer: A

Question 74

The pH of pure water (H_2O) is .... at 25 degree Celsius.

A   8

B   7

C   9

D   6

Answer: B

Question 75

'Megaptera novaeangliae' is commonly known as ....

A   Bumblebee

B   Tree frog

C   African wild cat

D   Humpback whale

Answer: D

Question 76

Who said the following words?
"A flag is a necessity for all nations. Millions have died for it."

A   Sarojini Naidu

B   Jawaharlal Nehru

C   Bhikaiji Cama

D   Mahatma Gandhi

   Answer: D

Question 77

Which of the following is NOT a popular Gharana (styles) of Hindustani classical music?

A   Patiala Gharana

B   Gwalior Gharana

C   Mewati Gharana

D   Rajwadi Gharana

   Answer: D

Question 78

NASA launched the world's smallest and lightest satellite, Kalamsat on 22 June 2017 devised by 18-year-old .... and his team from Tamil Nadu.

A   Sharook Rashid

B   Khursheed Rifath

C   Rifath Sharook

D   Salman Rashid

   Answer: C

Question 79

.... of Kenya won the Mumbai Marathon, 2019

A   Akalnew Shurnet

B   Aychew Bantie

C   Cosmas Lagat

D   Birke Debele

Answer: C

Question 80

'Canis lupus' is commonly knovm as ....

A   Gray wolf

B   Goat

C   Hen

D   Cow

   Answer: A

Question 81

The first Invasion of Muhammad Ghori was in .... when he attacked Multan.

A   1287 AD

B   1475 AD

C   1089 AD

D   1175 AD

   Answer: D

Question 82

India holds the .... position in the production of cows' milk as of January 2018.

A   Second

B   Fourth

C   First

D   Third

   Answer: A

Question 83

The minimum age criteria for appointment as the Vice President of India is ....

A   21

B   30

C   35

D   25

   Answer: C

Question 84

The dance form Dand1a 1s synonymous with ....

A   Navratri

B   Onam

C   Bihu

D   Ganesh Chaturthi

   Answer: A

Question 85

Apart from the first edition, New Delhi also hosted the .... edition of the Asian Games.

A 7th

B 9th

C 8th

D 11th

   Answer: B

Question 86

After 1994, how many sessions of the Rajya Sabha are usually held in a year?

A   four

B   three

C   two

D   six

   Answer: B

Question 87

As of AY 2019-20, what is the rate of income tax payable by an Indian national over the age of 80 years, earning an annual income up to ₹ 5,00,000?

A   20%

B   5%

C   0%

D   30%

   Answer: C

Question 88

India's ace shuttler and Rio Olympics silver medallist .... was ranked seventh on Forbes' list 2018 of highest-earning women sportspersons in the world.

A   Sania Mirza

B   Saina Nehwal

C   Santosh Yadav

D   PV Sindhu

   Answer: D

Question 89

Who was the economist who wrote the book 'Small is beautiful'?

A   David Ricardo

B   Amartya Sen

C   Karl Marx

D   E. F. Schumacher

   Answer: D

Question 90

Who wrote the book 'The Audacity of Hope'?

A   Bill Clinton

B   Bill Gates

C   George Bush

D   Barack Obama

   Answer: D

Question 91

In January 2019, NASA's Transiting Exoplanet Survey Satellite (TESS) discovered its third small exoplanet, named HD 21749b in the constellation

A   Lupus

B   Lacerta

C   Reticulum

D   Antlia

   Answer: C

Question 92

Who is known as the 'Father of Indian Nuclear Programme'?

A   Vikram Sarabhai

B   CV Raman

C   Homi Jehangir Bhabha

D   APJ Abdul Kalam

Answer: C

Question 93

Shivaji's son from Saibai was named ....

A   Shahaji

B   Shahu

C   Sambhaji

D   Bajirao

Answer: C

Question 94

Under Article .... of the Constitution of India, the quorum to constitute a sitting of the House is one-tenth of the total number of Members of the House.

A   102

B   100

C   103

D   101

Answer: B

Question 95

Calcutta became the capital of British India in ....

A   1765

B   1727

C   1756

D   1772

Answer: D

Question 96

Who founded the Servants of India Society in 1905?

A   Sayid Ahmed Khan

B   Annie Besant

C   Gopal Krishna Gokhale

D   Raja Ram Mohan Roy

   Answer: C

Question 97

With which of the following games is the Deodhar Trophy associated?

A   Hockey

B   Football

C   Cricket

D   Golf

   Answer: C

Question 98

In pre-independent India, the British moved the capital of India from Calcutta to Delhi in ....

A   1911

B   1913

C   1924

D   1921

   Answer: A

Question 99

The .... waterfalls in Chhattisgarh are also known as the Niagara Falls of India.

A   Hebbe

B   Dudhsagar

C   Magod

D   Chitrakoot

   Answer: D

Question 100

The Nehru-Liaquat Pact was signed in ....

A 1948

B 1947

C 1949

D 1950

   Answer: D

Quant

Instructions
For the following questions answer them individually

Question 101

A square cardboard with side 3 m is folded through one of its diagonal to make a triangle. The height of the triangle is:

A $\frac{3}{\sqrt{2}}$ m

B $2\sqrt{3}$ m

C $3\sqrt{2}$ m

D $\frac{2}{\sqrt{3}}$ m

   Answer: A

Question 102

What percentage of ₹ 124 is ₹ 49.60?

A 250

B 16

C 123

D 40

   Answer: D

Explanation:
let 49.60 is 'x'% of 124 so to find value of x

$\frac{124}{100} \times x = 49.6$

$x = 40\%$

Question 103

$\sin 18° - \cos 72°$ **is equal to:**

A $\frac{1}{2}$

B 0

C 2

D 1

Answer: B

Explanation:

$\sin 18° - \cos 72°$

we can write $\sin 18° = \sin(90 - 72)°$

$\sin(90 - 72)° - \cos 72°$ (Cos **Theta** = Sin (**90** - **Theta**))

$\cos 72° - \cos 72°$

0

Question 104

The surface area of a cube is 1176 cm^2. Its volume is:

A 3486 cm^3

B 3206 cm^3

C 2744 cm^2

D 3964 cm^3

Answer: C

Explanation:

Let us assume the edge of the cube be a

We know that,

Total surface area of the cube = 6a^2

6a^2 = 1176 cm^2

a = $\sqrt{\frac{1176}{6}} = \sqrt{196} = 14 cm$

We also know that,

Volume of the cube = a^3 = (14)^3

= 2744 cm^3

Question 105

A boy is standing near a pole which is 2.7 m high and the angle of elevation is 30". The distance of the boy from the pole is ($\sqrt{3}$ =1.73):

A 4.68 m

B 4.63 m

C 4.53 m

D 4.42 m

Answer: A

Question 106

Find the inner surface area of four walls of a rectangular room with length 7 m breadth 5 m and height 3.5 m

A   168 m^2

B   84 m^2

C   126 m^2

D   42 m^2

  Answer: B

Explanation:

The area of the four walls will be given by:

2(length x height) + 2(width x height)

= 2(7m x 3.5m) + 2(5m x 3.5m)

= 2(24.5 m²) + 2(17.5m²)

=49m² + 35m²

= 84m²

The inner surface area of the four walls thus is 84m²

Question 107

The given pie-chart shows runs scored by A in 6 matches.
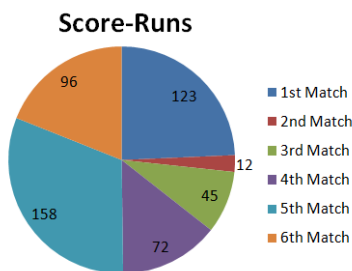
In the given pie-chart. if A scored a century in matches 4 and 6, What would have been her average score?

A   89.7

B   93.4

C   91.2

D   84.5

  Answer: A

Explanation:

A scored total in all matches=123+12+45+72+158+96=506

A score in 4th match=72

A score in 6th match=96

But as per question he makes hundred in 6th and 4th match

new total scores=123+12+45+100+158+96=538

Average= $\frac{538}{6} = 89.7$

Question 108

The line graph shows the temperature on four Sundays of three cities.
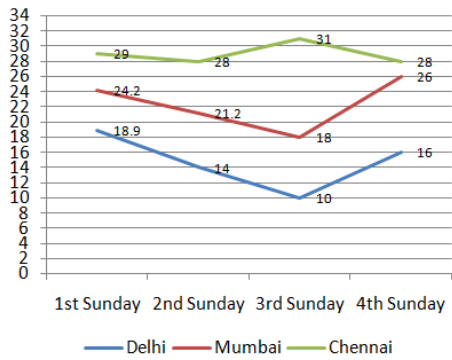
In the given line graph, what was the difference in temperature between Delhi and Mumbai on the 2nd Sunday?

A 13

B 17.2

C 7.2

D 21

Answer: C

Explanation:

temperature of Delhi on 2nd sunday=14

temperature of Delhi on 2nd mumbai=21.2

Difference=21.2-14=7.2

Question 109

The given bar chart shows number of marks scored by a student in each subject in three years:
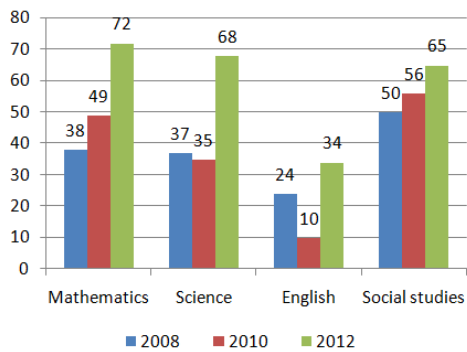
In the given bar-chart. what is the percentage increase in marks in Mathematics in 2012 compared to 2008?(round off)

A 89

B 100

C 95

D 92

Answer: A

Explanation:

marks in Mathematics in 2008=38

marks in Mathematics in 2012=72

increase=72-38=34

percentage increase= $\frac{34}{38} \times 100 = 89.4\%$

Question 110

On dividing a number by 38, the quotient is 24 and the remainder is 13, the number is:

A 956

B 904

C 925

D 975

   Answer: C

Explanation:
Using remainder theorem we have,

Number = $Divisor \times Quotient$ + Remainder

Number = 38×24+ 13

Number =912 + 13

Number = 925

Question 111

A can do a work in 12 days and B can do same work in 18 days. After 5 days of working together, how much work will be left?

A $\frac{7}{25}$

B $\frac{11}{36}$

C $\frac{5}{13}$

D $\frac{5}{12}$

   Answer: B

Explanation:
A completed the work=12 days

work done in 1 day= $\frac{1}{12}$

B completed the work=18 days

work done in 1 day= $\frac{1}{18}$

work done by A and B together in 1 day = $\frac{1}{12} + \frac{1}{18} = \frac{5}{36}$

Work done in 5 days= $5 \times \frac{5}{36} = \frac{25}{36}$

Work left= $1 - \frac{25}{36} = \frac{11}{36}$

Question 112

A customer gets a discount of ₹90 which is 12%. The selling price is:

A ₹770

B ₹540

C ₹660

D ₹580

   Answer: C

Explanation:
Discount amount=90 which is 12% of cost price

so selling pice is 88%=$\frac{90}{12} \times 88 = 660$

Question 113

The line graph shows the temperature on four Sundays of three cities.
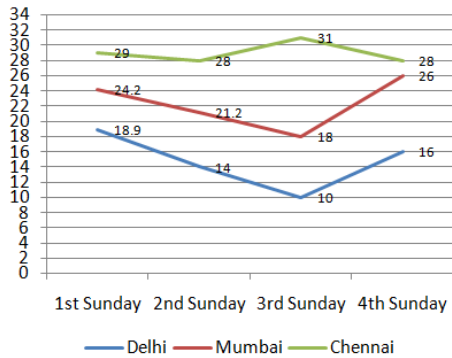
In the given line graph, when was the maximum temperature recorded in Delhi?

A 1st Sunday

B 2nd Sunday

C 4th Sunday

D 3rd Sunday

   Answer: A

Explanation:
temperature recorded on 1st sunday in Delhi=18.9

temperature recorded on 2nd sunday in Delhi=14

temperature recorded on 3rd sunday in Delhi=10

temperature recorded on 4th sunday in Delhi=16

Question 114

If $a^3 - b^3 = 208$ and $a - b = 8$,then $(a+b)^2 - ab$ is equal to:

A 42

B 38

C 52

D 26

Answer: D

Explanation:
$a^3 - b^3 = 208$ and $a - b = 8$,

use identity $a^3 - b^3 = (a-b)(a^2 + ab + b^2)$. & $(a+b)^2 = a^2 + b^2 + 2ab$

$(a+b)^2 - ab = a^2 + b^2 + 2ab - ab = a^2 + b^2 + ab$

$208 = 8(a^2 + ab + b^2)$.

$208 = 8(a^2 + ab + b^2)$

$(a^2 + ab + b^2) = 26$

Question 115

The base of an isosceles triangle is 6 cm and its perimeter is 16 cm. Its area is:

A 11 cm^2

B 12 cm^2

C 9 cm^2

D 10 cm^2

Answer: B

Explanation:
BASE = 6CM

ONE SIDE OF THE TRIANGLE = X

PERIMETER = 16 CM

2X + 6 = 16

X = 5 CM

AREA BY HERONS FORMULA

S = (5 + 5 + 6)/2

S = 8

AREA = √[S (S - A) (S - B) (S - C)]

AREA = √ [8 (8 - 5) (8 - 5) (8 - 6)]

AREA = √ [8 × 3 × 3 × 2]

AREA = √ [144]

AREA = 12 CM²

Question 116

If the compound interest @ 10% p.a compounded half-yearly for $1\frac{1}{2}$ years is ₹2,522. The principal amount is:

A ₹16,000

B ₹15,400

C ₹18,500

D ₹20,000

Answer: A

Question 117

$\frac{14-6\times2}{15\div3+3}$ is equal to:

A $\frac{1}{4}$

B 2

C $\frac{4}{5}$

D $6\frac{2}{5}$

Answer: A

Explanation:

$\frac{14-6\times2}{15\div3+3}$

$= \frac{14-12}{5+3}$

$= \frac{2}{8}$

$= \frac{1}{4}$

Question 118

At a certain time of a day a tree 5.4 m height casts a shadow of 9 m. If a pole casts a shadow of 13.5 m at the same time, the height of the pole is:

A 6.3 m

B 9.9 m

C 7.2 m

D 8.1 m

Answer: D

Question 119

Three partners A, B and C, share profits and losses in the ratio of 3 : 4 : 7. If the profit for the year before charging 30% tax is ₹1,10,166 what is B's share of profit afier tax?

A ₹22,033.20

B ₹24,673.10

C ₹31,476

D ₹9,442.80

Answer: A

Explanation:

A, B and C, share profits and losses in the ratio of 3 : 4 : 7

profit ratio=3:4:7

profit for the year before charging 30% tax is ₹1,10,166

So B's share profit before tax= $\frac{4}{14} \times 110166 = 31,476$

Tax deduction is 30% that mean he gain total 70% of 31476= $\frac{70}{100} \times 31476 = 22,033.20$

Question 120

The shadow of a tower. when the angle of elevation of the sun is $60°$ is found to be 15 in shorter than when it is $45°$. The height of th tower is:

A 26.5 m

B 35.5 m

C 41.5 m

D 20.5 m

Answer: B

Question 121

ABCD is a cyclic quadrilateral such that AB is a diameter of the circle circumscribing it and angle ADC = $142°$. Then angle BAC is equal to:

A $60°$

B $40°$

C $52°$

D $50°$

Answer: C

Explanation:

In a cyclic quadrilateral, the sum of each pair of opposite angles is 180 degrees.

=> ∠ADC + ∠ABC = 180°

=> 142 ° + ∠ABC = 180°

=> ∠ABC = 38°

AB is diameter

=> ∠ACB = 90° (angle in semicircle)

in ΔABC

∠BAC + ∠ACB + ∠ABC = 180°

=> ∠BAC + 90° + ∠38° = 180°

=> ∠BAC = 52°

Question 122

One tap can fill a tank in 3 hours and a leak can empty the tank in 5 hours. If the tap and the leak (which was half closed) were left open. how long will it take for the tank to fill?

A $4\frac{2}{7}$ hours

B $7\frac{1}{2}$ hours

C $5\frac{1}{3}$ hours

D $6\frac{2}{3}$ hours

   Answer: A

Explanation:

One Pipe can fill the tank in 3 hours

1 hour = 1/3 of the cistern

Another Pipe can empty the tank in 5 hours

1 hour = 1/5 of the cistern

leak pipe was half closed so it can empty in 1 hour = 1/10 of the cistern

one pipe (whose fill the tank) and another leak pipe (which was half closed) together then

1 hour=$\frac{1}{3} - \frac{1}{10} = \frac{7}{30}$

So total time for the tank to fill= $\frac{30}{7} = 4\frac{2}{7}$ hours

Question 123

$\frac{64}{25}$ **converted to percentage is:**

A 25.6

B 256

C 0.256

D 2.56

   Answer: B

Explanation:

$\frac{64}{25}$ in percentage = $\frac{64}{25} \times 100 = 256\%$

Question 124

Pipe A can fill a cistern in 4 hours and another pipe B is installed. Both the pipes together fill the cistern in $2\frac{1}{2}$ hours. How long will it take for B alone to fill the cistern?

A $6\frac{2}{3}$ hours

B 5 hours

C $5\frac{1}{6}$ hours

D $6\frac{3}{8}$ hours

   Answer: A

Explanation:

Pipe A can fill the cistern in 4 hours

1 hour = 1/4 of the cistern

Pipe A & B can fill the cistern in $2\frac{1}{2} = \frac{5}{2}$ hours

1 hour=$\frac{2}{5}$

Pipe B can fill the cistern in 1 hour=

$\frac{2}{5} - \frac{1}{4} = \frac{8-5}{20}$

$= \frac{3}{20}$

SO B take total time to fill the cistern = $\frac{20}{3} = 6\frac{2}{3}$ hours

Question 125

If the cost price of 4 chairs is equal to selling price of 3 chairs, then the profit or loss percentage is:

A   33.3%

B   20%

C $16\frac{2}{3}$%

D   25%

Answer: A

Explanation:
Let the cost of each chair be x.

Let the sp of each chair be y.

Now

4x = 3y.

x = $\frac{3y}{4}$

As Sp is greater than cp so there is profit.

So

Profit % is $\frac{SP-CP}{CP} \times 100$

Cp is x = 3y/4 and Sp = y

Profit % is $\frac{y-\frac{3y}{4}}{\frac{3y}{4}} \times 100 = \frac{1}{3} \times 100$

So there is a profit of 33.3%

Question 126

A, B and C start walking together from a point. Their steps measure 42 cm, 56 cm and 64 cm respectively. What is the minimum distance they should walk so that each takes exact number of steps?

A   13.44 m

B   14.06 m

C   14.58 m

D 15.60 m

Answer: A

Explanation:

Minimum distance will be LCM of 40 cm, 42 cm and 45 cm

$64 = 2^6$

$42 = 2 \times 3 \times 7$

$56 = 2^3 \times 7$

LCM = $2^6 \times 3 \times 7$ = 1344 cm=13.44m {we know 1m=100cm}

Question 127

The students of a class donated ₹3,481 towards relief fund. Each student donated an amount equal to the number of students in the class. The number of students in the class is:

A 49

B 59

C 61

D 51

Answer: B

Explanation:

No. of students = x
Money donated by each student= x
Total money collected=3481
3481 = $x \times x$
$x^2 = 3481$
x= 59
No. of students in the class is 59.

Question 128

The average of all prime numbers between 21 and 50 is(round off to one decimal number):

A 32.9

B 35.9

C 33.7

D 34.8

Answer: B

Explanation:

Prime numbers between 20 and 50 are 23,29,31, 37, 41, 43, 47

We know that,

Average = $\dfrac{\text{Sum of observations}}{\text{Total number of observations}}$

Sum of observations = 23+29+31 + 37 + 41 + 43 + 47 = 251

Total number of observations = 7

$$A = \frac{251}{7}$$

☞ A = 35.9

Question 129

The area of a parallelogram is 338 m^2. If its altitude is twice the corresponding base, its base is:

A   13

B   14

C   28

D   26

Answer: A

Explanation:
Let the base of the parallelogram be x m.

Then, the altitude of the parallelogram will be 2x m.

It is given that the area of the parallelogram is 338 m^2.

Area of a parallelogram = Base × Altitude

∴ 338 m^2 = x × 2x

338 m^2 = 2x^2

⇒ x^2 = $\frac{338}{2}$ m^2 = 169 m^2

⇒ x^2 = 169 m^2

⇒ x = 13 m

∴ Base = x m = 13 m

Question 130

A bouglt 38 kg rice @ ₹54.50/kg, 45 kg rice @ ₹62/kg and 55 kg rice @ ₹48/kg. He sold the mixture @ ₹65/kg. His profit or loss percentage is:

A   Loss 1.04

B   Profit 16.8

C   Loss 1.7

D   Profit 19.6

Answer: D

Explanation:
cost of purchasing rice = 38 × 54.5 = 2071

cost of purchasing another rice = 45 × 62 = 2790

cost of purchasing another rice = 55 × 48 = 2640

thus total quantity of rice = 38+45+55 =138kg

and total cost = 2071 + 2790+2640 = 7501

now,

he sold mixture at Rs. 65per kg

so total revenue = 138×65 =8970

profit =8970-7501=1469

profit percentage= $\frac{1469}{7501} \times 100 = 19.58\%$

Question 131

The product of HCF and LCM of two numbers is 3321. If one of the numbers is 369, the HCF of the numbers is:

A 3

B 21

C 9

D 27

Answer: C

Explanation:
Let the other no. be x
HCF. × LCM =product of two numbers
3321=369 × x
x= $\frac{3321}{369} = 9$

Question 132

A and B can finish a work together in 30 days. B and C can finish the same work together in 24 days and A and C can finish the work together in 40 days. If all three work together, how long will it take them to complete the work?

A 15 days

B 10 days

C 20 days

D 5 days

Answer: C

Explanation:
A + B = 30 days

B + C = 24 days

C + A = 40 days

Let's take totak work as LCM of 30,24 and 40 = 120 units

Their unit work in a day will be

A + B = 120/30 = 4 units/day

B + C = 120/24 = 5 units/day

C + A = 120/40 = 3 units/day

Add these equations

2A + 2B + 2C = 4+5+3

2(A + B + C) =12

A + B + C = 12/2=6 units per day

Therefore to complete 120 units they'll take a time of 120/6=20 days

Question 133

In what time will a sum double itself at 8% p.a simple interest?

A   5 years

B   6 years

C   8 years

D   12.5 years

   Answer: D

Explanation:
Let the principal be x

So, Amount = Double of principal = 2x

Rate of interest = 8%

Formula :
$A = P(1+r)^t$
$2x = x(1+0.08)^t$
$2 = (1+0.08)^t$
$t = 9.006$
$t \sim 10$
So, a sum of money double itself at 8% p.a in 10 years.

Question 134

If $x - \frac{1}{x} = 3\sqrt{2}$, then $x^2 + \frac{1}{x^2}$ is equal to:

A   52

B   56

C   20

D   46

   Answer: C

Explanation:
Given $x - \frac{1}{x} = 3\sqrt{2}$

use identity (a − **b**)² = a² − 2ab + **b**.

$(x - \frac{1}{x})^2 = (3\sqrt{2})^2$

$x^2 - 2x \times \frac{1}{x} + \frac{1}{x^2} = 18$

$x^2 - 2 + \frac{1}{x^2} = 18$

$x^2 + \frac{1}{x^2} = 20$

Question 135

The number 45789 is divisible by which of the single digit numbers:

A Only by 9

B Only by 3 and 9

C Only by 3

D Only by 3 and 7

   Answer: C

Explanation:

Only by 3

Numbers are **divisible by 3** if the sum of all the individual digits is evenly **divisible by 3**

45789=4+5+7+8+9=33

33 is divisible by 3

Question 136

$(24 \div 6 - 2) + (3 \times 2 + 4)$ **is equal to:**

A 24

B 16

C 20

D 12

   Answer: D

Explanation:

$(24 \div 6 - 2) + (3 \times 2 + 4)$

$= (4 - 2) + (6 + 4)$

$= 12$

Question 137

If $5 \cos \theta - 12 \sin \theta = 0$**,the value of** $\frac{2 \sin \theta + \cos \theta}{\cos \theta - \sin \theta}$ **is:**

A $1\frac{75}{119}$

B $3\frac{1}{7}$

C $2\frac{34}{35}$

D $3\frac{2}{3}$

   Answer: B

Explanation:

$5 \cos \theta - 12 \sin \theta = 0$

$\cos \theta = \frac{12}{5} \sin \theta$

Noe $\frac{2 \sin \theta + \cos \theta}{\cos \theta - \sin \theta}$

5

$$\frac{2 \times \frac{5}{12} \cos\theta + \cos\theta}{\cos\theta - \frac{5}{12} \cos\theta}$$

$$\frac{\frac{11}{6} \cos\theta}{\frac{7}{12} \cos\theta}$$

$$\frac{22}{7} = 3\frac{1}{7}$$

Question 138

The given bar chart shows number of marks scored by a strident in each subject in three years:

■ 2008   ■ 2010   ■ 2012
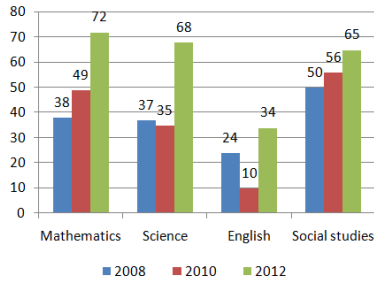
In the given bar-chart, if number of marks in Social Studies in year 2012 is 13% of the school strength, the number of students is:

A   400

B   540

C   500

D   580

Answer: C

Explanation:

marks in Social Studies in year 2012=65 i.e 13% of total school strength

so total strength of school= $\frac{65}{13} \times 100 = 500$

Question 139

PA and PB are two tangents to a circle with centre O, from a point P outside the circle. A and B are points on the circle. If $\angle OAB = 35°$, then $\angle APB$ is equal to:

A $35°$

B $70°$

C $25°$

D $20°$

Answer: B

Explanation:
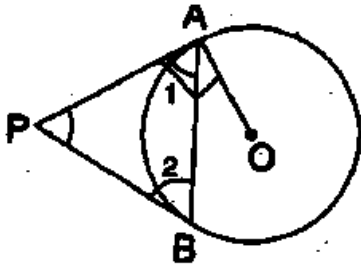
We know that the angle between the tangent and radius is 90° .

Given= $\angle OAB = 35°$

∴ ∠1 + ∠OAB=90°

∠1+35°=90°

∠1=55°
∴ ∠1=∠2 ……(1)

Sum of all the angles of a triangle is 180°.

∠1 + ∠2 + ∠APB=180°

55° + 55° + ∠APB =180°

110°+∠APB =180°

∠APB=70°

Question 140

The given bar chart shows number of marks scored by a student in each subject in three years:
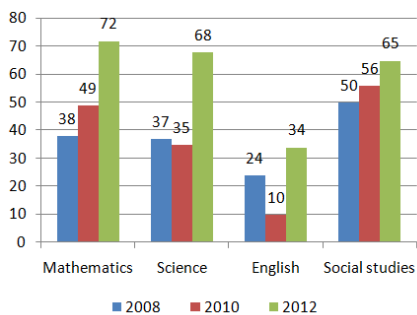
In the given bar-chart, in which subject was the lowest marks scored in 2010?

A Social studies

B Mathematics

C English

D Science

Answer: C

Explanation:
marks scored in 2010 in math=49

marks scored in 2010 in science=35

marks scored in 2010 in english=10

marks scored in 2010 in social studies=56

so lowest mark in english only 10

Question 141

A train travels at a speed of 76 km/h. If it crosses a pole in 36 seconds. the length of the train is:

A 720 m

B 675 m

C 760 m

D 630 m

Answer: C

Explanation:
The speed of a train = 76 kmph = $76 \times \frac{5}{18}$ mps

time=36 second

Distance=$time \times speed$

$= 76 \times \frac{5}{18} \times 36 = 760m$

Question 142

A saves 12% of her income. If she spends ₹2,16,128, her total income is:

A ₹2,42,063

B ₹2,45,600

C ₹2,48,000

D ₹2,43,560

Answer: B

Explanation:
Save=12%

spends=2,16,128

spends in%=88

87.5% of 100=216128

100%=$\frac{100}{88} \times 216128$

=245600

Question 143

The given pie-chart shows runs scored by A in 6 matches.

Score-Runs
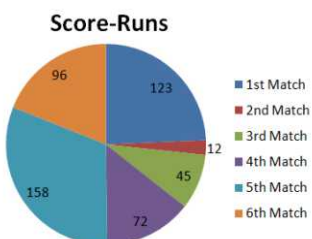
In the given pie-chart, what is the increase or decrease in score in match 4 as compared to match 2?

A +27

B -27

C -60

D +60

Answer: D

Explanation:
Score in match 2=12

Score in match 4=72

Increase=72-12=60

Question 144

The line graph shows the temperature on four Sundays of three cities.
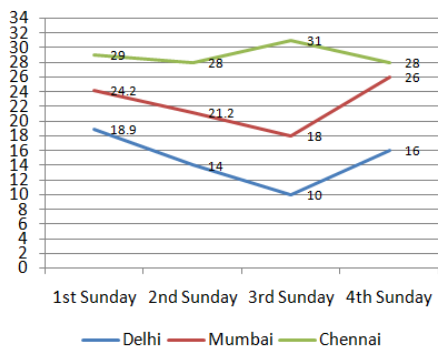
In the given line graph, what was the average temperature on the 3rd Sunday in all the three cities? (rounded to first decimal)

A 24

B 23

C 19.7

D 25.4

Answer: C

Explanation:
temperature on the 3rd Sunday in delhi=10

temperature on the 3rd Sunday in mumbai=18

temperature on the 3rd Sunday in chennai=31

Sum=10+18+31=59

average= $\frac{59}{3} = 19.7$

Question 145

If an airplane covers a distance of 980 km in 35 minutes, then what time it will take to cover a distance of 1470 km.

A $\frac{1}{2}$ hour

B $1\frac{1}{8}$ hours

C $\frac{7}{8}$ hour

D $1\frac{1}{6}$ hours

Answer: C

Explanation:

WE KNOW

$$SPEED = \frac{DISTANCE}{TIME}$$

S= $\frac{980}{\frac{35}{60}}$ $= 1680 km/hr$ {1min= $\frac{1}{60}$ $hour$}

$$TIME = \frac{DISTANCE}{SPEED}$$

$$TIME = \frac{1470}{1680} = \frac{7}{8} hour$$

Question 146

If $(2x-5)^3 + (x+2)^3 + (3x-9)^3 = (2x—5)(3x—9)(3x+6)$, **then what is the value of** x?

A 7

B 2

C 18

D 5

Answer: B

Question 147

The average height of 12 students of a class is 132.5 cm. Ifone more strident joins. the average height becomes 131.2 cm. the height of the new student is:

A 112.7 cm

B 122.3 cm

C 115.6 cm

D 128.5 cm

Answer: C

Explanation:

Average = Sum / Total Observations

=> $Sum = Average \times TotalObservations$

=$132.5 \times 12 = 1590$

Let the height of the new student be x cm.

$131.2 = \frac{x+1590}{13}$

=> x + 1590 = 131.2×13 = 1705.6

=> x = 1705.6 - 1590 = 115.6 cm

So, the height of the new student is 115.6 cm

Question 148

The liquid in a container is sufficient to paint an area of 11.28 m ^{2}. How many boxes of dimension 30 cm $\times$ 25 cm $\times$ 12 cm can be painted with the liquid in this container?

A   40

B   24

C   32

D   12

Answer: A

Question 149

The given pie-chart shows runs scored by A in 6 matches.
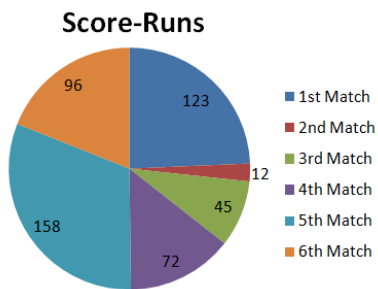
In the given pie-chart. what is the average runs scored in all matches? (rounded off)

A   85

B   90

C   88

D   84

Answer: D

Explanation:
Total Scored by A=123+12+45+72+158+96=506

Average $= \frac{total\ scored}{no.\ of\ match} = \frac{506}{6} = 84$

Question 150

Find the weight of a solid cylinder of height 35 cm and radius 14 cm, if the material of the cylinder weighs 8 gm/cm ^{3}.

A   172.48 kg

B   160 kg

C   177.44 kg

D   166 kg

Answer: A

Explanation:

Dimensions of a cylinder :

Radius (r) = 14cm

Height (h) = 35cm

$$\boxed{Volume \ of \ a \ cylinder = \pi r^2 h}$$

$V = \frac{22}{7} \times (14)^2 \times 35$

$V = \frac{22}{7} \times 196 \times 35$

$V = 22 \times 28 \times 35$

$= 21560 cm^3$

/* According to the problem given,

$1 \ cm^3 \ material \ weight = 8 \ gm$

$21560 \ cm^3 \ cylinder \ material$

$\ weight$
$= 8 \times 21560$

$= 17248 \ gm$

$= 172.48 \ kg$

English

Instructions

For the following questions answer them individually

Question 151

Select the most appropriate meamng of the given idiom.
It's Greek to me

A   incomprehensible

B   incredible

C   intangible

D   inevitable

   Answer: A

Question 152

Select the most appropriate word for the given group of words.
a person who advocates complete political or social change

A   fanatic

B   hero

C   radical

D   leader

   Answer: C

Question 153

Select the antonym of the given word.
RESTRICTED

A banned

B barred

C unmanned

D unbounded

Answer: D

Question 154

Identify the segment in the sentence, which contains the grammatical error.

Though paper has been the dominant medium for print, the British parliament had managed valiantly to hold back the paper tide for over half a millennium.

A to hold back the paper tide

B Though paper has been

C Parliament had managed

D the dominant medium for print

Answer: C

Question 155

Identify the segment in the sentence, which contains the grammatical error.
In 2016, after some unseemly back-and-forth to the Commons and Lords, it was decided that Acts of Parliament should no longer be printed on calfskin.

A should no longer be printed on calfskin

B after some unseemly back-and-forth

C it was decided

D to the Commons and Lords

Answer: D

Question 156

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No substitution required.

It makes no difference to overall health whether you lose weight slow or quick, according to new research by York University.

A No substitution required

B whether you lose weight slow or quickly

C whether you lose weight slowly or quickly

D whether you lose weight slowly or quick

Answer: C

Question 157

Select the synonym of the given word.
CONTRAVENE

A brake

B broach

C flaunt

D breech

Answer: D

Question 158

Select the most appropriate words to fill in the blanks.
For years Indians looking for meaty .... have been stuck with the .... soya nuggets.

A substitutes; ubiquitous

B alternates; global

C Substitutes: regional

D alternative; zonal

Answer: A

Question 159

Select the synonym of the given word.
LYRICAL

A brilliant

B musical

C prosaic

D overwhelming

Answer: B

Question 160

Select the most appropriate word for the given group of words.
an arrangement of flowers that is usually given as a present

A bouquet

B cluster

C   wreath

D   bunch

Answer: A

Question 161

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No substitution required.

We really need to look at interventions who focus in long-term weight management that can achieve sustained weight loss at the recommended one to two pounds per week.

A   that focus on long-term

B   No substitution required

C   that focus with long-term

D   whom focus on long-term

Answer: A

Instructions

Read the following passage and answer the questions given after it.
Passage:

Sedentary lifestyles are killing us — we need to build activity into our everyday lives, not just leave it for the gym. Google searches relating to physical fitness peak in January. Many people even trawl the web to find out about "desk exercises" and "workouts on the go" in case they are too busy to use their new gym memberships.

Our relationship with exercise is complicated. Reports from the UK and the US show it is something we persistently struggle with. As the new year rolls around, we anticipate having the drive to behave differently and become regular exercisers, even in the knowledge that we will probably fail to do so. Why do we want to exercise? What do we expect it to do for us? We all know we are supposed to be exercising, but hundreds of millions of us can't face actually doing it. It is just possible that the problem lies at the heart of the idea of exercise itself.

Exercise is movement of the muscles and limbs for a specific outcome, usually to enhance physical fitness. As such, for most of us, it is an optional addition to the working day — yet another item on a long list of responsibilities alongside the fulfilment of parental duties or earning money to put food on the table. But because the principal beneficiaries of exercises are we ourselves, it is one of the easiest chores to Shirk. At the end of the working day, millions of us prefer to indulge in sedentary leisure activities instead of what we all think is good for us: a workout.

Fitness crazes are like diets: if any of them worked, there wouldn't be so many. CrossFit, the intensely physical, communal workout incorporating free weights, squats, pull-ups and so forth, is still less than 20 years old. Spin classes — vigorous group workouts on stationary bikes — have only been around for about 30. Aerobics was a craze about a decade before that, although many of its highenergy routines had already been around for a while. Before that, there was the jogging revolution, which began in the US in the early 19605. The Joggers Manual, published in 1963 by the Oregon Heart Foundation, was a leaflet of about 200 words that sought to address the postwar panic about sedentary lifestyles by encouraging an accessible form of physical activity, explaining that "jogging is a bit more than a walk". The jogging boom took a few years to get traction, hitting its stride in the mid- to late-80s, but it remains one of the most popular forms of exercise, now also in groups.

The exercise craze that dominated the 19505 was, oddly, not even an exercise. The vibrating exercise belt promised users could achieve effortless weight loss by having their midriffs violently jiggled. It didn't work, but you can still find similar machines available for purchase today.

Question 162

Why do most people make exercise their last priority?

A   It does not help in earning their livelihood.

B It is an added responsibility besides looking after the family.

C The main beneficiaries of exercise are people themselves.

D They prefer to indulge in sedentary leisure activities.

Answer: C

Question 163

Which of the following does not classify as an exercise?

A High-energy Aerobics routines

B Using midriff vibrating belt

C Workouts on stationary bikes

D Squats and pull-ups

Answer: B

Question 164

Why do Google searches related to physical fitness peak in January?

A It is the time to renew gym membership.

B It is a common new year resolution.

C In the new year people want to look slim and trim.

D The cold weather encourages people to exercise.

Answer: B

Question 165

The sentence — "Exercise is movement of the muscles and limbs for a specific outcome, usually to enhance physical fitness"

A defines exercise

B devalues exercise

C defends exercise

D describes exercise

Answer: A

Question 166

Which expression means the same as 'an intense and widely shared enthusiasm for something, especially one that is short-lived; a craze.'

A Mania

B Fad

C Phase

D Obsession

   Answer: B

Question 167

Select the wrongly spelt word.

A admiration

B adroit

C administration

D adreneline

   Answer: D

Question 168

Select the most appropriate word for the given group of words.
a person who has an unnatural anxiety about one 's own health typically involving imagined symptoms of illness.

A nymphomaniac

B hypochondriac

C neurotic

D psychotic

   Answer: B

Question 169

Select the most appropriate meaning of the given idiom.
to give someone the cold shoulder

A ignore or show indifference

B deny someone comforting clothes

C serve cold meat to someone

D bury someone in fleezing cold

   Answer: A

Question 170

Select the wrongly spelt word.

A ingratitude

B   ingredeints

C   indigenous

D   engraving

   Answer: B

Question 171

Select the antonym of the given word.
COMPROMISE

A   dissent

B   agreement

C   disturbance

D   treaty

   Answer: A

Question 172

Select the synonym of the given word.
MEMOIR

A   diary

B   episode

C   anecdote

D   story

   Answer: A

Question 173

Identify the segment in the sentence, which contains the grammatical error.
The Natural History of Selbome, records the importance of the earthworm to soil and describe an England unspoiled by the Industrial Revolution.

A   describe an England

B   unspoiled by the Industrial Revolution

C   records the importance

D   of the earthworm to soil

   Answer: A

Question 174

Identify the segment in the sentence, which contains the grammatical error.
It seems that authors' creativity is not restrict to their work and happily overflows into their names too.

A   happily overflows

B   authors' creativity

C   into their names too

D   restrict to their work

   Answer: D

Question 175

Select the synonym of the given word.
EXASPERATING

A   exhausting

B   saddening

C   exalting

D   flustrating

   Answer: D

Question 176

Select the most appropriate meaning of the given idiom.
put one's cards on the table

A   to be able to continue

B   to be honest

C   to accept defeat

D   to deal a game of cards

   Answer: B

Question 177

Select the most appropriate words to fill in the blanks.
Telemedicine is the delivery of clinical services across .... and IT devices. It's a subset of a wider .... care originally developed for doctors to be able to .... patients living in rural and remote areas.

A   telephone; virtual; diagrose

B   telephones: actual; discharge

C   telecoms; virtual; treat

D   telecom; visual; admit

   Answer: C

Question 178

Select the synonym of the given word.
ENIGMATIC

A   inquisitive

B resolute

C purgative

D mysterious

Answer: D

Question 179

Select the most appropriate word for the given group of words.
to send back a criminal or an unwanted person to the country of his/her origin.

A excavate

B exile

C export

D extradite

Answer: D

Question 180

Select the most appropriate meaning of the given idiom.
be the Devil's advocate

A to present a counter argument just for the sake of it

B to present an argument in favor of a well-known evil man

C to represent an accused in a murder trial

D to represent the devil as an advocate in witch trials

Answer: A

Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each number.
Passage:

A massive fire in Chennai destroyed 184 cars .... (1) to a private cab aggregator. .... (2) blaze is suspected to have been triggered .... (3) tall dried grass caught fire flom a discarded .... (4) cigarette butt, said a rescue services .... (5) .

Question 181

Select the most appropriate option to fill in blank No.1.

A belonged

B belongs

C were belonging

D belonging

Answer: D

Question 182

Select the most appropriate option to fill in blank No.2.

A   One

B   The

C   Some

D   A

Answer: B

Question 183

Select the most appropriate option to fill in blank No.3.

A   of

B   until

C   after

D   by

Answer: C

Question 184

Select the most appropriate option to fill in blank No.4.

A   smoking

B   lighting

C   firing

D   smouldering

Answer: D

Question 185

Select the most appropriate option to fill in blank No.5.

A   special

B   victim

C   official

D   culprit

Answer: C

Instructions

Question 186

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to as substitute it, select No substitution required.

A simple life of freedom and happiness is <u>one of the more difficult thing to achieve.</u>

A No substitution required

B one of the most difiicult things to achieve.

C one of the most difiicult thing to achieve.

D one of the more difiicult things to achieve.

Answer: B

Question 187

Select the most appropriate meaning of the given idiom.
get a taste of your own medicine

A be given the medicine meant for others

B be treated by the same doctor

C be given the same treatment that you have given to others

D make, taste and take medicines for others

Answer: C

Question 188

Select the wrongly spelt word.

A existensial

B ecstatic

C extortion

D extensive

Answer: A

Question 189

Select the most appropriate words to fill in the blanks.
At the back of the eye there are light-sensitive .... which connect to a small patch of brain tissue. They also .... to areas of the brain that .... mood and alertness.

A cells; link; adjust

B cells; join; adjust

C cells; link; regulate

D muscle; link; regulate

Answer: C

Question 190

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No substitution required.

I sometimes pass a delivery man wheeling a large handcart of Japanese food. The cart bears a striking message: <u>'Creating a world where everyone believes in their own authenticity.'</u>

A No substitution required

B Creating a world whereas everyone believes in their own authenticity

C Been created a world where everyone believes in their own authenticity

D Created a world where everyone believes in their own authenticity

Answer: A

Question 191

Select the antonym of the given word.
PERPETRATE

A prevent

B commit

C react

D perpetuate

Answer: A

Question 192

Select the most appropriate words to fill in the blanks.
People flom .... societies go to bed and wake up several hours earlier than people in .... countries do and seem to sleep better than the ....

A traditional; developed; later

B modern ; developed; latter

C modern; undeveloped; later

D traditional; developed; latter

Answer: D

Question 193

Select the wrongly spelt word.

A exclamation

B eccentricity

C exscitement

D expenditure

Answer: C

Question 194

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No substitution required.

Just as technology has changed the way we shop, book a taxi, hold business meetings, and even find a parking spot, <u>so too is it transforming the way we accessed healthcare</u>, wherever we are in the world.

A so too was it transforming the way we accessed healthcare

B No substitution required

C so too is it transforming the way we access healthcare

D so too had it transformed the way we access healthcare

Answer: C

Question 195

Select the antonym of the given word.
RECOVERED

A lost

B last

C latest

D leased

Answer: A

Question 196

Select the most appropriate words to fill in the blanks.
Even on an overcast vtinter's day, it is at least 10 times .... outside than in a standard oflice. By .... to work and getting outdoors at lunchtime, we can begin to reconnect with the light.

A brightest; walking

B brighter; walking

C brighter; walk

D bright; walk

Answer: B

Question 197

Select the wrongly spelt word.

A   furios

B   frenzied

C   freeze

D   fractional

Answer: A

Question 198

Select the antonym of the given word.
THREATEN

A   criticize

B   compete

C   coax

D   commend

Answer: D

Question 199

Select the most appropriate word for the given group of words.

a table or flat surface where offerings are made to a deity

A   sanctorurn

B   pew

C   altar

D   stone

Answer: C

Question 200

Identify the segment in the sentence, which contains the grammatical error.
To be interested in the changing seasons is a happy state of mind than to be hopelessly in love vtith spring.

A   To be interested

B   a happy state of mind

C   hopelessly in love with spring

D   in the changing seasons

Answer: B