## 『Exampapers247

## SSC CHSL 4 March 2018 Morning Shift

## General Awareness

Instructions
For the following questions answer them individually

## Question 1

The competitive position of a company can be improved by $\qquad$ .

A increasing the selling price
B reducing the margin of profit

C ignoring competitors
D understanding and fulfilling customers needs
Answer: D

## Question 2

Deficit financing means the government borrows money from the $\qquad$ .

A International Monetary Fund

B Ministry of Finance
C Reserve Bank of India

D World Trade Organization
Answer: C

## Question 3

Which of the following information is found in Ashoka's inscriptions?

A Life story

B Internal policy
C Foreign policy
D All option are correct.
Answer: D

Question 4
Bahadur Shah, the ruler of Gujarat was killed in a conflict with which of the following?

A Dutch
B English
C Portuguese

D French
Answer: C

## Question 5

Which part of the Earth has the abundance of nickel and iron?

A SIAL

B SIMA

C NIFE

D No option is correct.
Answer: C

## Question 6

Konkan coast is stretched from where to where?

A Goa to Kochi
B Goa to Diu

C Daman to Goa

D Goa to Mumbai
Answer: C

## Question 7

Which of the following pair is NOT matched correctly?

A Bharatanatyam-Tamilnadu

B Kathakali-Karnataka
C Odissi-Odisha

D Kuchipudi-Andhra Pradesh
Answer: B

## Question 8

How much water has been allowed to India for irrigation, power generation and transport purposes from Indus river?

A $10 \%$
B $15 \%$

C $20 \%$

D $25 \%$
Answer: C

## Question 9

Who among the following was NOT one of the recipients of Dronacharya Award for the year 2017?

A R. Gandhi
B Prashant Singh
C Heera Nand Kataria
D Sanjay Chakarvorthy
Answer: B

## Question 10

China has the longest border with which of the following country?

A Russia
B India
C Myanmar
D Mongolia

Answer: D

## Question 11

Which of the following statement(s) is/are CORRECT?
I. Bakelite is a good conductor of heat.
II. Bakelite is a poor conductor of electricity.
III. Bakelite can be softened by heating.

A Only I and II
B Only I and III

C Only II

D All I, II and III
Answer: C

## Question 12

- Which of the following has minimum ignition temperature?

A Petrol

B Plastic

C Wood

D Paper
Answer: A

## Question 13

- Which Article of Indian Constitution empowers Indian Parliament to amend the constitution?

A Article 368

B Article 252

C Article 254

D Article 256
Answer: A

## Question 14

- Which part of Indian constitution deals with Union Territories?

A Part VI

B Part VII

C Part VIII

D Part IX
Answer: C

## Question 15

- The rhythmic contraction of the lining of muscles of canal to push the food along the gut is called $\qquad$ .

A peristalsis
B facilitation

C guttation

D No option is correct.
Answer: A

Question 16

- Which of the following represents the pair of sex chromosomes in men?

A XY

B XX

C YY

D No option is correct.
Answer: A

## Question 17

- How much amount has been reserved for the 'National Biopharma Mission' named 'i3' by the Government of India?

A USD 250 million

B USD 350 million

C USD 500 million
D USD 150 million
Answer: A

## Question 18

- Scientists of which country have developed working human skeletal muscle from stem cells in the laboratory for the first time?

A China

B Japan
C India

D United States of America
Answer: D

## Question 19

In July 2017, how much revised cost was approved for the cost Socio Economic and Caste Census 2011 (SECC 2011)?

A Rs. 4893 crore

B Rs. 7983 crore
C Rs. 9893 crore

D Rs. 10,000 crore
Answer: A

## Question 20

- From May 2017, the Real Estate Act has come into effect. Under the Act, the Regulatory Authorities are required to dispose of complaints in how many
days?

A 60
B 30

C 45

D 90
Answer: A

## Question 21

- A body of mass 4 kg accelerates from $15 \mathrm{~m} / \mathrm{s}$ to $25 \mathrm{~m} / \mathrm{s}$ in 5 seconds due to the application of a force on it. Calculate the magnitude of this force (in N ).

A 32
B 8

C 16

D 64
Answer: B

Question 22

- During $\qquad$ motion of an object along a straight line, the change in velocity of the object for any time interval is zero.

A linear
B translational
C equilibrium
D uniform
Answer: D

## Question 23

- The tropical rainforests $\qquad$ .

A are dry and hot

B are in the coastal regions only
C are mostly covered in snow
D get plenty of rainfall
Answer: D

## Question 24

- Which of the statements given below are correct?
A) Valentino Rossi won the Motorcycle race 2017 Dutch TT MotoGP.
B) United Kingdom hosted the Table Tennis 2017 ITTF Women's World Cup.
C) In 2017, Glenn Maxwell captained the IPL team Kings XI Punjab.

A A and B
B B and C
C A and C

D A, B and C
Answer: C

Question 25

- In Microsoft Word, under character formatting $\qquad$ is used to underline some particular text.

A Font style
B Underline

C Effects

D Size
Answer: B

## English

Instructions
For the following questions answer them individually

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option.
If a sentence is free from error, select 'No Error'.
Due to the (1) snow the (2) marks was unrecognisable. (3) No error (4)

A 1

B 2

C 3

D 4
Answer: C

## Question 27

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option.
If a sentence is free from error, select 'No Error'.
Acceptance is not about allowing everything to occur or to go on, (1) it is neither related to passivity and weakness, (2) nor is it about confirmation or mediocrity.
(3) No error (4)

A 1

B 2

C 3

D 4
Answer: C

## Question 28

In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate
it by selecting the appropriate option.
She jumped $\qquad$ the bar table.

A upon

B up

C in
D into
Answer: A

## Question 29

- In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate
it by selecting the appropriate option.
Sun is a $\qquad$ perfect sphere of hot plasma, with internal convective motion that generates a magnetic field.

A nearly

B near

C about

D more
Answer: A

Question 30

- In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.
Hybrid

A Homogeneous
B Composite
C Pure

D Love
Answer: B

## Question 31

- In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.
Discreet

A Described

B Careful
C Rash

D Mundane
Answer: B

## Question 32

- In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.
Heed

A Care
B Caution

C Attention

D Neglect
Answer: D

## Question 33

- In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.
Articulate

A Unclear
B Enunciate

C Eloquent
D Coherent
Answer: A

## Question 34

- Rearrange the parts of the sentence in correct order.

All the sound reasons
P: ever given for conserving
Q : to the conservation of wildlife
R : other natural resources apply

A PRQ

B RQP

C PQR

D QRP
Answer: A

## Question 35

- A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.
She will finish the thesis in a fortnight.

A The thesis would be finished in a fortnight by her.
B The thesis will finished by her in a fortnight.

C The thesis will be finished by her in a fortnight.

D A fortnight is required to finish the thesis.
Answer: B

## Question 36

- A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.
"I know her well" said Manisha.

A Manisha said that she knew her well.

B Manisha said if she knows her well.

C Manisha said that she knows her.

D Manisha says that she knew her well.
Answer: A

## Question 37

- In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.

A Commiety

B Committee

C Comittee

D Commitee
Answer: B

## Instructions

In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Now, what exactly does big business want? Though they cite some $\qquad$ worded performance indicators to compile the index, the true intention appears to be something $\qquad$ They want land at throwaway prices even $\qquad$ it is fertile agriculture land; they want licenses to be issued immediately even if the proposed activities are likely to result in environmental $\qquad$ they want labour laws to be favourable to them so it becomes easy to hire $\qquad$ fire and exploit workers; and they want the government to respond favourably to their 'bailout' demands from time to time so they can transfer their risk on to taxpayers, notwithstanding the fact that they enjoyed their profits during their heyday.

## Question 38

they cite some $\qquad$ worded performance

A cleverly
B cleverer

C cleverest

D cleverness
Answer: A

## Question 39

something $\qquad$ They want land at

B extra
C added

D else
Answer: D

## Question 40

prices even $\qquad$ it is fertile agriculture land;

A if
B then

C but

D also
Answer: A

## Question 41

environmental $\qquad$ ; they want labour laws

A degrade
B degrading
C degraded
D degradation
Answer: D

## Question 42

easy to hire $\qquad$ fire and exploit

A and

B if

C thus

D so

Answer: A

## Instructions

For the following questions answer them individually

## Question 43

- In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.
After one's own heart

A Sharing or having one's tastes or views.
B Infatuation with a person which is not reciprocated.
C Memorise some thing by heart.

D Don't have the courage to do something bad for a good person.
Answer: A

## Question 44

- In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.
Pull the wool over someone's eyes

A To protect someone.

B To keep oneself warm.

C Deceive someone by telling lies.
D To pretend to be blind to the other person's bad behaviour.
Answer: C

## Question 45

- In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.
A warning of impending danger

A Naive

B Monition
C
Obtuse

D Daft
Answer: B

## Question 46

- In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.
Concerned with beauty or the appreciation of beauty

A Foul

B Aesthetic

C Hideous

D Gross
Answer: B

## Question 47

- In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".
We sat on the floor to eat dinner and he (appreciate) the fresh food my mother served.

A had appreciated
B appreciated
C will appreciate
D no improvement
Answer: B

## Question 48

- In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement". We sat there (enjoy) the view.

A enjoyed
B enjoying

C enjoys
D no improvement
Answer: B

## Question 49

The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

Life is never meant to
A-country like India
B-be easy, especially if you
C-live in a developing

A BAC
B ACB

C BCA
D ABC
Answer: C

## Question 50

- In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.

A stridancy
B stridensy
C stridansy
D stridency
Answer: A

## Reasoning

Instructions
For the following questions answer them individually

## Question 51

- In the following question, select the related word pair from the given alternatives.

Train:Track: : ? : ?

A Car:Four wheeler

B Aeroplane: Fly

C Truck: Road

D Car: Speed
Answer: C

## Explanation:

Expression = Train : Track : : ? : ?
The first is the mode of transmission and the second is the medium it runs on, i.e. train runs on track, similarly truck runs on roads.
=> Ans - (C)

## Question 52

In the following question, select the related number pair from the given alternatives.
53: 35: : ? : ?

A 37:73

B $42: 22$

C $16: 62$

D 54:43
Answer: A

Explanation:
Expression = 53 : 35 : : ? : ?
The second number is the reverse of the first number.
Similar pattern is observed only in $\mathbf{3 7} \mathbf{: 7 3}$, where 73 is reverse of 37 .
=> Ans - (A)
Question 53
In the following question, select the related letter/letters from the given alternatives.
PAL : RDP : : MRF : ?

A FAJ

B KUC

C OUJ

D RPT
Answer: C

## Explanation:

Expression = PAL : RDP : : MRF : ?
The pattern followed is :

| $P$ | $A$ | $L$ |
| :---: | :---: | :---: |
| $(+2)$ | $(+3)$ | $(+4)$ |
| $R$ | $D$ | $P$ |

Similarly, for MRF : OUJ

| $M$ | $R$ | $F$ |
| :---: | :---: | :---: |
| $(+2)$ | $(+3)$ | $(+4)$ |
| $O$ | $U$ | $J$ |

=> Ans - (C)

## Question 54

In the following question, select the odd word pair from the given alternatives.

A Reptile-Lizard
B Mammal - Deer
C Mammal - Elephant
D Rodent-Rabbit
Answer: D

## Explanation:

Second is one of the types of first, Lizard is a reptile, deer and elephants are mammals, while rabbit belongs to the lagomorpha family, hence it is the odd one out.
=> Ans - (D)

## Question 55

In the following question, four number pairs are given. The number on left side of $(-)$ is related to the number of the right side of (-) with some
Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

A 20-30

B $35-45$

C 45-55

D 25-30
Answer: D

## Explanation:

The difference between each of the pair of numbers is 10 .
But in the last option => $30-25=5$
Thus, (25-30) is the odd one out.
=> Ans - (D)

## Question 56

In the following question, select the odd letter/letters from the given alternatives.

A RQP

B XWV
c ZYX

D AZX
Answer: D

## Explanation:

(A) : R (-1 letter) $=\mathrm{Q}(-1$ letter $)=P$
(B) : $\mathrm{X}(-1$ letter $)=\mathrm{W}(-1$ letter $)=\mathrm{V}$
(C) : $Z(-1$ letter $)=Y(-1$ letter $)=X$
(D) : $A(-1$ letter $)=Z(-2$ letters $)=X$
=> Ans - (D)

## Question 57

From the given alternatives, according to dictionary, which word will come at THIRD position?

1. Chimney
2. Cherry
3. Childish
4. Chess
5. Chest

A Chest

B Childish

C Chimney

D Chess
Answer: A

Explanation:
As per the order of dictionary :
= Cherry -> Chess -> Chest -> Childish -> Chimney
Thus, the third word = Chest
=> Ans - (A)

## Question 58

In the following question, select the missing number from the given series.
$19,9,28,37,65$, ?

A 99

B 97

C 102

D 113
Answer: C

## Explanation:

The given series is a type of Fibonacci series where the previous two numbers are added to get the next number.
$19+9=28$
$9+28=37$
$28+37=65$
$37+65=102$
=> Ans - (C)

## Question 59

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
I, L, O, R, ?

A S

B T
C U
D V
Answer: C

## Explanation:

Series: I, L, O, R, ?
The pattern followed is :
I (+3 letters) $=\mathrm{L}$ (+3 letters) $=\mathbf{0}$ (+3 letters) $=\mathrm{R}(+3$ letters $)=\mathbf{U}$
=> Ans - (C)
Question 60
Present ages of Ankur and his sister are in the ratio of 4:3. After 6 years ratio of ages of Ankur's sister and his brother will be $3: 2$. If the present age of his brother is 32 years, then after 3 years what will be the age (in years) of Ankur?

A 71
B 68

C 70
D 65
Answer: A

## Explanation:

Ankur's brother's age 6 years from now $=32+6=38$ years
Ratio of Ankur's sister and his brother after 6 years $=3: 2$
=> Ankur's sister's age 6 years from now $=\frac{3}{2} \times 38=57$ years
=> Ankur's sister's present age $=57-6=51$ years

Ratio of Ankur and his sister's present age $=4: 3$
=> Ankur's present age $=\frac{4}{3} \times 51=68$ years
$\therefore$ Ankur's age 3 years from now $=68+3=71$ years
=> Ans - (A)

## Question 61

From the given alternatives, select the word which CANNOT be formed using the letters of the given word.
Statement

A Men

B Same

C Start

D State
Answer: C

## Explanation:

The word STATEMENT does not contain any 'R', thus the term Start cannot be formed.
=> Ans - (C)

## Question 62

In a certain code language, "FRAME" is written as "IUDPH". How is "ROYAL" written in that code language?

A XVTGM

B MRDXO

C XIDPH

D URBDO
Answer: D

## Explanation:

"FRAME" is written as "IUDPH"
The pattern followed is :

| $F$ | $R$ | $A$ | $M$ | $E$ |
| :---: | :---: | :---: | :---: | :---: |
| $(+3)$ | $(+3)$ | $(+3)$ | $(+3)$ | $(+3)$ |
| I | $U$ | $D$ | $P$ | $H$ |

Similarly, for ROYAL :

| $R$ | $O$ | $Y$ | $A$ | $L$ |
| :---: | :---: | :---: | :---: | :---: |
| $(+3)$ | $(+3)$ | $(+3)$ | $(+3)$ | $(+3)$ |
| $U$ | $R$ | $B$ | $D$ | $O$ |

=> Ans - (D)
Question 63
 the answer to the following question.
$15-6+10 \times 3 \div 2=$ ?

A 24

B 9
C 2

D 8
Answer: D

Explanation:
Expression : $15-6+10 \times 3 \div 2=$ ?
$\equiv 15 \times 6 \div 10-3+2$
$=\frac{90}{10}-1$
$=9-1=8$
=> Ans - (D)

## Question 64

The following equation is incorrect. Which two signs should be interchanged to correct the equation? $12+10-28 \div 7 \times 4=48$

A - and $x$

B $\div$ and +

C - and $\div$
D x and +
Answer: A

Explanation:

Expression : $12+10-28 \div 7 \times 4=48$
(A) : - and $x$
$\equiv 12+10 \times 28 \div 7-4=48$
L.H.S. $=12+\left(10 \times \frac{28}{7}\right)-4$
$=12+40-4=48=$ R.H.S.
=> Ans - (A)

## Question 65

If $-4 \$ 1=4,7 \$-7=49$ and $3 \$ 1=-3$, then find the value of $-8 \$-5=$ ?

A -1

B 92

C -40

D -69
Answer: C

## Explanation:

Given : $-4 \$ 1=4,7 \$-7=49$ and $3 \$ 1=-3$
If we replace '\$' with ' $\times$ ' and multiply the product with ' -1 ', then we will get the desired result.
Eg :- $(-4 \times 1) \times(-1)=4$
and $(7 \times-7) \times(-1)=49$
and $(3 \times 1) \times(-1)=-3$
Similarly, $(-8 \times-5) \times(-1)=-40$
=> Ans - (C)

## Question 66

Which of the following terms follows the trend of the given list?
ABABAbab, ABABabaB, ABAbabAB, ABabaBAB, AbabABAB,

A aBABABab

B abaBABAB

C ABABAbab

D ABABabaB
Answer: B

## Explanation:

$\qquad$ .

The pattern followed is that there is a combination of 4 ' $A B$ ', in which there are 3 consecutive small terms starting from right end and shifting one place to the left.

Thus, in the missing term, the first three terms will be small = abaBABAB
=> Ans - (B)

## Question 67

- A hiker walks 2 km South, then he turns West and walks for 4 km , then he turns North and walks for 5 km , then he turns to his right and walks for 4 km .
Where is he now with respect to his starting position?

A 7 km North

B 3 km North

C 3 km South
D 7 km South
Answer: B

## Question 68

- In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at
variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.
Statement I: No spaghetti are noodles
Statement II: Some food are spaghetti
Conclusion I: All noodles are food
Conclusion II: All food are noodles

A Only conclusion I follows

B Only conclusion II follows
C Both conclusions I and II follow

D Neither conclusion I nor conclusion II follows
Answer: D

In the following figure, rectangle represents Plumbers, circle represents Athletes, triangle represents Garners and square represents Cricketers. Which set of letters represents those who are Athletes as well as Cricketers?


A CD

B AB

C FG
D EH
Answer: A

## Question 70

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
COT, DQU, ESV, FUW, ?

A GWY

B GVX

C GWX
D GVY
Answer: C

## Explanation:

Series : COT, DQU, ESV, FUW, ?
The pattern followed in each letter of the terms is :
1st letter : C (+1 letter) = D (+1 letter) $=\mathrm{E}(+1$ letter $)=\mathrm{F}(+1$ letter $)=\mathrm{G}$

2nd letter: 0 (+2 letters $)=\mathrm{Q}(+2$ letters $)=S(+2$ letters $)=U(+2$ letters $)=W$
3rd letter: $\mathrm{T}(+1$ letter $)=\mathrm{U}(+1$ letter $)=\mathrm{V}(+1$ letter $)=\mathrm{W}(+1$ letter $)=\mathrm{X}$
Thus, missing term = GWX
=> Ans - (C)
Question 71

- In the following question, select the missing number from the given series.

49, 46, 43, 40, ?, 34

A 38

B 37

C 36
D 39
Answer: B

## Explanation:

' 3 ' is subtracted from all the numbers.
$49-3=46$
$46-3=43$
$43-3=40$
$40-3=37$
37-3=34
=> Ans - (B)
Question 72

- In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a
Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

A $(1,11,1111)$
B $(2,22,4444)$
C $(4,44,4444)$
D $(8,88,8888)$
Answer: B

The numbers are of the form : $(x, 11 x, 1111 x)$
But in the second option, we have $=1111 \times 2=2222 \neq 4444$
Thus, $(2,22,4444)$ is the odd one out.
=> Ans - (B)

## Question 73

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?


A


B


C


Answer: A

Question 74
Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?


A


B


C


Answer: A

Question 75
A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from $S$ to 9 . A letter from these matrices can be represented first by its row and next by its column, for example 'I.' can be represented by 21,33 etc and 'Z' can be represented by 56,98 etc. Similarly, you have to identify the set for the word 'TOMB'.

| Matrix - I |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 |
| 0 | I | K | L | L | K |
| 1 | G | F | E | F | F |
| 2 | H | L | B | A | F |
| 3 | I | A | I | L | I |
| 4 | E | D | F | M | A |


| Matrix - II |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 6 | 7 | 8 | 9 |  |
| 5 | V | Z | U | R | O |  |
| 6 | R | W | N | S | O |  |
| 7 | Q | U | T | U | V |  |
| 8 | Q | T | N | P | X |  |
| 9 | Q | Y | V | Z | R |  |

A 77,69,43,22

B $\mathbf{1 1}, 88,34,55$

C $42,66,12,58$

D $30,65,24,65$
Answer: A

Explanation:
(A) : 77,69,43,22 = TOMB
(B) : $11,88,34,55=$ FPIV
(C) : 42,66,12,58 = FWER
(D) : $30,65,24,65=$ IRFR
=> Ans - (A)

## Quant

Instructions
For the following questions answer them individually

## Question 76

Find the value $\left((49)^{\frac{3}{2}}+(49)^{\frac{-3}{2}}\right)$

B $117550 / 343$
C 117649/343

D 117650/343
Answer: C

## Explanation:

Expression $=\left((49)^{\frac{3}{2}}+(49)^{\frac{-3}{2}}\right)$
$=\left(\left(7^{2}\right)^{\frac{3}{2}}+\left(7^{2}\right)^{\frac{-3}{2}}\right)$
$=7^{3}+7^{-3}$
$=343+\frac{1}{343}$
$=\frac{117649}{343}$
=> Ans - (C)

## Question 77

Calculate the total numbers of prime factors in the expression $(4)^{11} \times(5)^{5} \times(3)^{2} \times(13)^{2}$

A 30

B 31

C 33

D 32
Answer: B

## Explanation:

Expression: $(4)^{11} \times(5)^{5} \times(3)^{2} \times(13)^{2}$
Prime factorization $=(2)^{22} \times(5)^{5} \times(3)^{2} \times(13)^{2}$
Now, there are 4 distinct factors $=2,3,5,13$
Total number of prime factors $=22+5+2+2=31$
=> Ans - (B)

## Question 78

Which of the following is the correct rationalize form of $\frac{15}{\sqrt{5}+2}=$ ?

A $5 \sqrt{5}-6$
B $5 \sqrt{5}-30$

C $15 \sqrt{5}-30$
D $45 \sqrt{5}-630$
Answer: C

## Explanation:

Expression: $\frac{15}{\sqrt{5}+2}=$ ?
Rationalizing the denominator, we get :
$=\frac{15}{\sqrt{5}+2} \times \frac{(\sqrt{5}-2)}{(\sqrt{5}-2)}$
$=\frac{15(\sqrt{5}-2)}{5-4}=15 \sqrt{5}-30$
=> Ans - (C)

## Question 79

Determine the value of ' $x$ ' if $x=\frac{(943+864)^{2}-(943-864)^{2}}{(1886 \times 1728)}$

A 1

B 4

C 79

D 1789
Answer: A

## Explanation:

Expression : $x=\frac{(943+864)^{2}-(943-864)^{2}}{(1886 \times 1728)}$
Using, $a^{2}-b^{2}=(a+b)(a-b)$, where $a=(943+864)$ and $b=(943-864)$
$=\frac{[(943+864)+(943-864)] \times[(943+864)-(943-864)]}{(1886 \times 1728)}$
$=\frac{(943+943) \times(864+864)}{(1886 \times 1728)}$
$=\frac{(1886) \times(1728)}{(1886 \times 1728)}=1$
=> Ans - (A)

## Question 80

Which of the following options is/are CORRECT about the similarity of the two triangles?

A The corresponding sides are proportional to each other.

B The corresponding angles are equal.
C The corresponding sides may or may not be equal to each other.
D All option are correct.
Answer: D

## Explanation:

If two triangles are similar, then the corresponding sides are proportional to each other. Also, the corresponding angles are equal, but the corresponding sides may or may not be equal to each other. Thus, all are correct.
=> Ans - (D)

## Question 81

If the height of the equilateral triangle is $2 \sqrt{ } 3 \mathrm{~cm}$, then determine the area (in $\mathrm{cm}^{2}$ ) of the equilateral triangle.

A 6
B $2 \sqrt{ } 3$

C $4 \sqrt{ } 3$

D 12
Answer: C

## Explanation:

Let side of the equilateral triangle $=s \mathrm{~cm}$
Median $=$ Height of triangle $=2 \sqrt{3}=\frac{\sqrt{3} s}{2}$
=> $s=2 \times 2=4 \mathrm{~cm}$
$\therefore$ Area of the equilateral triangle $=\frac{\sqrt{3}}{4}(s)^{2}$
$=\frac{\sqrt{3}}{4} \times(4)^{2}$
$=4 \sqrt{3} \mathrm{~cm}^{2}$
=> Ans - (C)

## Question 82

Length and breadth of a rectangle are increased by $10 \%$ and $20 \%$ respectively. What will be the percentage increase in the area of rectangle?

A $30 \%$
B $32 \%$

C $28 \%$
D $33 \%$
Answer: B

## Explanation:

Let both length and breadth of the rectangle be $l=10 \mathrm{~cm}$ and $b=10 \mathrm{~cm}$
Area of rectangle $=A=l \times b=10 \times 10=100 \mathrm{~cm}^{2}$
New length when it is increased by $10 \%=l^{\prime}=10+\left(\frac{10}{100} \times 10\right)=11 \mathrm{~cm}$
Similarly, new breadth when it is increased by $20 \%=b^{\prime}=10+\left(\frac{20}{100} \times 10\right)=12 \mathrm{~cm}$
=> New area $=A^{\prime}=11 \times 12=132 \mathrm{~cm}^{2}$
$\therefore \%$ increase $=\frac{(132-100)}{100} \times 100=32 \%$
=> Ans - (B)

## Question 83

The ratio of three numbers is $3: 6: 8$. If their product is 9216 , then what is the sum of the three numbers?

A 96

B 72

C 144

D 68
Answer: D

## Explanation:

Let the numbers be $3 x, 6 x$ and $8 x$
Product $=3 x \times 6 x \times 8 x=9216$
$\Rightarrow x^{3}=\frac{9216}{144}=64$
"> $x=\sqrt[3]{64}=4$
$\therefore$ Sum of the numbers $=3 x+6 x+8 x=17 x$
$=17 \times 4=68$
=> Ans - (D)

## Question 84

Rohit started a business with Rs 75000 and after some months Simran joined him with Rs 60000 . If the profit at the end of the year is divided in the ratio $3: 1$, then after how many months did Simran join Rohit?

A 7

B 6

C 8

D 4
Answer: A

## Explanation:

Rohit invested Rs. 75,000 for 12 months and Simran invested Rs. 60,000 for $x$ months
$=>$ Ratio of profits of $\mathrm{P}: \mathrm{Q}=(75,000 \times 12):(60,000 \times x)$
According to ques,
$\Rightarrow \frac{75}{5 x}=\frac{3}{1}$
=> $5 x \times 3=75$
=> $x=\frac{75}{15}=5$
Thus, Simran joined Rohit after $=12-5=7$ months
=> Ans - (A)

## Question 85

A boy bought 50 chocolates for Rs 1000 . If the average price of $\mathbf{3 0}$ chocolates is Rs 25 , then what is the average price (in Rs) of the remaining chocolates?

A 10

B 12.5

C 15

D 17.5
Answer: B

## Explanation:

Total price of 50 chocolates = Rs. 1000
Total price of 30 chocolates $=30 \times 25=R s .750$
=> Total price of remaining $(50-30=20)$ chocolates $=1000-750=R s .250$
$\therefore$ Average price of 20 chocolates $=\frac{250}{20}=R s .12 .5$
=> Ans - (B)

## Question 86

The simple interest on a sum for 8 years is Rs 47500 . The rate of interest for the first 5 years is $10 \%$ per annum and for the next 3 years is $15 \%$ per annum. What is the value (in Rs) of sum?

A 50000

B 60000
C 45000
D 62500
Answer: A

## Explanation:

Let the sum = Rs. $100 x$
Rate of interest for first 5 years $=10 \%$ and for next 3 years $=15 \%$
=> Simple interest $=\frac{P \times R \times T}{100}$
$=>\left(\frac{100 x \times 10 \times 5}{100}\right)+\left(\frac{100 x \times 15 \times 3}{100}\right)=47500$
$=>50 x+45 x=47500$
$\Rightarrow x=\frac{47500}{95}=500$
$\therefore$ Sum $=100 \times 500=$ Rs. 50,000
=> Ans - (A)

## Question 87

Selling price of a chair is Rs 1386 . If loss percentage is $23 \%$, then what is the cost price (in Rs) of chair?

A 1600
B 1800

C 1900
D 1067
Answer: B

## Explanation:

Selling price = Rs. 1386
Loss \% = $23 \%$
=> Cost price $=\frac{1386}{(100-23)} \times 100$
$=\frac{126}{7} \times 100=R s .1800$
=> Ans - (B)

## Question 88

Marked price of a computer is Rs 48000 and discount is $13 \%$. What is additional discount (in percentage) should be offered to the customer to bring the price of computer to Rs 39672 ?

A 10

B 5

C 8

D 9
Answer: B

## Explanation:

Marked price of computer = Rs. 48,000 and discount $=13 \%$
=> Selling price $=48,000-\left(\frac{13}{100} \times 48,000\right)$
$=48000-6240=R s .41,760$
Final selling price $=$ Rs. 39,672
=> Additional discount $\%=\frac{(41760-39670)}{41760} \times 100$
$=\frac{2090}{417.6} \approx 5 \%$
=> Ans - (B)

## Question 89

Which of the following statement is/are true?
I. $\sqrt{144} \times \sqrt{36}<\sqrt[3]{125} \times \sqrt{121}$
II. $\sqrt{324}+\sqrt{49}>\sqrt[3]{216} \times \sqrt{9}$

A Only I
B Only II

C Neither I nor II
D Both I and II
Answer: B

## Explanation:

I: $\sqrt{144} \times \sqrt{36}<\sqrt[3]{125} \times \sqrt{121}$
L.H.S. $=12 \times 6=72$
R.H.S. $=5 \times 11=55$

Thus, L.H.S. > R.H.S.
॥ $: \sqrt{324}+\sqrt{49}>\sqrt[3]{216} \times \sqrt{9}$
L.H.S. $=18+7=25$
R.H.S. $=6 \times 3=18$

Thus, L.H.S. > R.H.S., which is correct.
$\therefore$ Only II is correct.
=> Ans - (B)

## Question 90

Pipe $X$ can fill a tank in 20 hours and Pipe $Y$ can fill the tank in $\mathbf{3 5}$ hours. Both the pipes are opened on alternate hours. Pipe Y is opened first, then in how much time (in hours) the tank will be full?

A $269 / 11$
B 280/11

C $179 / 7$
D $172 / 7$
Answer: C

## Explanation:

Let capacity of tank = L.C.M. $(20,35)=140$ litres
Pipe $X$ can fill the tank in 20 hours, => X's efficiency $=\frac{140}{20}=7 \mathrm{I} / \mathrm{hr}$
Similarly, Y's efficiency $=\frac{140}{35}=4 \mathrm{I} / \mathrm{hr}$
Pipes Y and X are alternatively opened, => Tank filled in 2 hours $=4+7=11$ litres
Multiplying both sides by 12 , we get => Tank filled in 24 hours $=132$ litres
Now, its Y's turn to be opened, it will 4 more litres, => $\ln 25$ hours $=136$ litres
Thus, the remaining tank is filled by pipe $X$ in $\frac{4}{7}$ hours
=> Total time $=25+\frac{4}{7}=\frac{179}{7}$ hours
=> Ans - (C)

## Question 91

A train is moving at the speed of $54 \mathrm{~km} / \mathrm{hr}$. How many seconds it will take to cover a distance of 450 metres?

A 60
B 30

C 45

D 36
Answer: B

## Explanation:

Speed of train $=54 \mathrm{~km} / \mathrm{hr}=\left(54 \times \frac{5}{18}\right)=15 \mathrm{~m} / \mathrm{s}$
Let time taken to cover $450 \mathrm{~m}=t$ seconds
Using, time = distance/speed
$\Rightarrow t=\frac{450}{15}=30$ seconds
=> Ans - (B)

## Instructions

The bar graph shows average marks scored in a 100 marks Science exam by students of 7 divisions of Standard X. Study the diagram and answer the following questions.

Average Science Marks


## Question 92

Which division scored the second lowest marks?

A F

B B

C G

D D

Answer: C

## Explanation:

Marks when arranged in ascending order are : $45<50<60<65<75,75<80$
Corresponding division is : $F, G, D, B, A, E, C$
Thus, G division scored second lowest marks.
=> Ans - (C)

## Question 93

What is the ratio of average marks scored by Division D to Division A ?

A 4:5

B $5: 4$

C $4: 7$

D 7:4
Answer: A

## Explanation:

Average marks scored by Division $\mathrm{D}=60$
Average marks scored by Division A=75
=> Required ratio $=\frac{60}{75}=4: 5$
=> Ans - (A)

## Question 94

Marks of division F were lesser than that of Division C by

A $35 \%$

B 47.25\%

C $45 \%$

D $43.75 \%$
Answer: D

## Explanation:

Marks scored by Division F $=45$
Marks scored by Division C $=80$
$\Rightarrow$ Required $\%=\frac{(80-45)}{80} \times 100$
$=\frac{35 \times 5}{4}=43.75 \%$
=> Ans - (D)

## Question 95

If all students of Division A lost 5 marks each for indiscipline then their new average marks would decrease by how much?

A $5 \%$

B $11.11 \%$

C $6.67 \%$

D 10\%
Answer: C

## Explanation:

Current average marks of all students of Division $A=75$
If all students of Division A lost 5 marks each, then new average marks $=75-5=70$
$=>$ Required $\%$ decrease $=\frac{(75-70)}{75} \times 100$
$=\frac{100}{15}=6.67 \%$
=> Ans - (C)

## Instructions

For the following questions answer them individually
Question 96
If the length of one side and the diagonal of a rectangle are 7 cm and 25 cm respectively, then find its perimeter (in cm ).

A 124

B 36

C 62

D 72
Answer: C

## Explanation:

Let $l$ be the length of rectangle and breadth $=b=7 \mathrm{~cm}$
Diagonal of rectangle $=d=25 \mathrm{~cm}$
$\Rightarrow(l)^{2}=(d)^{2}-(b)^{2}$
$\Rightarrow(l)^{2}=(25)^{2}-(7)^{2}$
$\Rightarrow(l)^{2}=625-49=576$
=> $l=\sqrt{576}=24 \mathrm{~cm}$
$\therefore$ Perimeter of rectangle $=2(l+b)$
$=2(24+7)=2 \times 31=62 \mathrm{~cm}$
=> Ans - (C)

## Question 97

If a regular polygon has 5 sides then the measure of its interior angle is greater than the measure of its exterior angle by how many degrees?

A $60^{\circ}$

B $36^{\circ}$
C $90^{\circ}$

D $100^{\circ}$
Answer: B

## Explanation:

Sum of interior angles of a regular polygon $=(n-2) \times 180^{\circ}$
Sum of all interior angles of a pentagon $=(5-2) \times 180^{\circ}=540^{\circ}$
=> Measure of an interior angle of a polygon $=\frac{540}{5}=108^{\circ}$
Sum of all exterior angles of a pentagon $=360^{\circ}$
=> Measure of an exterior angle of a polygon $=\frac{360}{5}=72^{\circ}$
$\therefore$ Required difference $=108^{\circ}-72^{\circ}=36^{\circ}$
=> Ans - (B)

## Question 98

Find the volume in $\mathrm{cm}^{2}$ of a cube of side 3.5 cm .

A 69.845
B 42.875

C 19.765

D 11.165

Answer: B

## Explanation:

Side of cube $=a=3.5 \mathrm{~cm}$
=> Volume of cube $=a^{3}$
$=(3.5)^{3}=42.875 \mathrm{~cm}^{3}$
=> Ans - (B)

## Question 99

$\Delta X Y Z$ is right angled at $Y$. If $m \angle X=60^{\circ}$, then find the value of $(\sec Z+2 / \sqrt{ } 3)$

A $4 / \sqrt{ } 3$

B $(\sqrt{ } 2+2) / 2 \sqrt{ } 2$
C $7 / 2 \sqrt{ } 3$

D $4 / 2 \sqrt{ } 3$
Answer: A

Explanation:


Sum of angles of $\triangle \mathrm{XYZ}=\angle X+\angle Y+\angle Z=180^{\circ}$
$=>60^{\circ}+90^{\circ}+\angle Z=180^{\circ}$
=> $\angle Z=180^{\circ}-150^{\circ}=30^{\circ}$
To find : $\left(\sec Z+\frac{2}{\sqrt{3}}\right)$
$=\sec \left(30^{\circ}\right)+\frac{2}{\sqrt{3}}$
$=\frac{2}{\sqrt{3}}+\frac{2}{\sqrt{3}}=\frac{4}{\sqrt{3}}$
=> Ans - (A)
Question 100
In $\triangle U V W$ measure of angle $V$ is $90^{\circ}$. If $\operatorname{tanU}=12 / 5$, and $U V=10 \mathrm{~cm}$, then what is the length (in cm ) of side VW?

A 26

B 24

C 25

D 5
Answer: B

## Explanation:



Given : $\tan U=\frac{12}{5}$
Also, $\tan U=\frac{V W}{U V}=\frac{12}{5}$
Let $\mathrm{VW}=12 x \mathrm{~cm}$ and $\mathrm{UV}=5 x \mathrm{~cm}$
According to ques, $=>5 x=10$
$\Rightarrow x=\frac{10}{5}=2$
$\therefore \mathrm{VW}=12 \times 2=24 \mathrm{~cm}$
=> Ans - (B)

## SSC CHSL 4 March 2018 Evening Shift

## Quant

## Instructions

For the following questions answer them individually

## Question 1

Simplify: $b-[b-(a+b)-b-(b-a-b)+2 b]$

A $2 b$
B 1

C 0
D 3b
Answer: C

## Explanation:

Expression : $b-[b-(a+b)-b-(b-a-b)+2 b]$
$=b-[(b-a-b)+(-b-b+a+b)+2 b]$
$=b-[-a-b+a+2 b]$
$=b-b=0$
=> Ans - (C)

## Question 2

Simplify: $(213 \times 213+187 \times 187)$

A 80338
B 80438
C 60338

D 60438
Answer: A

## Explanation:

Expression : $(213 \times 213+187 \times 187)$
$=(200+13)^{2}+(200-13)^{2}$
$=\left[(200)^{2}+(13)^{2}+2(200)(13)\right]+\left[(200)^{2}+(13)^{2}-2(200)(13)\right]$
$=\left[2 \times(200)^{2}\right]+\left[2 \times(13)^{2}\right]$
$=80000+338=80338$
=> Ans - (A)

## Question 3

What is the reminder, when $4 x^{2} \div 10 x^{2}-20 x^{2} \div 90$ is divided by $(x \div 2)$ ?

A 0

B 6

C 45

D 90
Answer: B

## Question 4

What will be the value of xy , if $x^{2}+y^{2}=45$ and $x-y=5$ ?

A 10

B 15

C 20

D 25
Answer: A

## Explanation:

Given : $x^{2}+y^{2}=45-$--------(i)
Also, $x-y=5$
Squaring both sides, we get :
$\Rightarrow(x-y)^{2}=(5)^{2}$
$\Rightarrow x^{2}+y^{2}-2 x y=25$
Substituting value from equation (i),
=> $45-2 x y=25$
=> $2 x y=45-25=20$
=> $x y=\frac{20}{2}=10$
=> Ans - (A)

## Question 5

The smallest angle of a triangle is $40^{\circ}$ less than the largest angle. If the largest angle is $80^{\circ}$, then find the third angle of the triangle.

A $40^{\circ}$

B $90^{\circ}$
C $80^{\circ}$

D $60^{\circ}$
Answer: D

## Explanation:

Largest angle of triangle $=80^{\circ}$
=> Smallest angle $=80^{\circ}-40^{\circ}=40^{\circ}$
Let third angle $=\theta$
Thus, sum of the three angle $=\theta+80^{\circ}+40^{\circ}=180^{\circ}$
$\Rightarrow \theta=180^{\circ}-120^{\circ}=60^{\circ}$
=> Ans - (D)

## Question 6

If the line $D E$ is drawn parallel to the base $B C$ of a triangle $A B C$ by intersecting the other two sides, then which of the following is the CORRECT equation for this case.

A $A B / D B=A C / E C$
B $\mathrm{AD} / \mathrm{AB}=\mathrm{DB} / \mathrm{EC}$
c $\mathrm{AD} / \mathrm{DB}=\mathrm{EC} / \mathrm{AE}$
D $A D / D B=A E / E C$
Answer: D

## Explanation:



Given : DE is parallel to $B C$
In $\triangle A B C$ and $\triangle A D E$,
$\angle \mathrm{ABC}=\angle \mathrm{ADE} \quad$ (corresponding angles)
$\angle \mathrm{ACB}=\angle \mathrm{AED} \quad$ (corresponding angles)
Thus, $\angle \mathrm{ABC} \sim \angle \mathrm{ADE}$
$\therefore \frac{A B}{A D}=\frac{A C}{A E}$
Using componendo and dividendo, we have $=\frac{A D}{D B}=\frac{A E}{E C}$
=> Ans - (D)

## Question 7

Price of 1 kg of sugar is increased by $30 \%$ and the increase is of Rs 48 . What is the new price (in Rs) of the sugar per kg ?

A 178

B 160

C 208

D 216
Answer: C

## Explanation:

Let original price of sugar $=$ Rs. $100 x$
Increase in price = 30\%
$\Rightarrow$ New price $=100 x+\left(\frac{30}{100} \times 100 x\right)=R s .130 x$
According to ques,
=> $100 x+48=130 x$
=> $130 x-100 x=30 x=48$
$\Rightarrow x=\frac{48}{30}=1.6$
$\therefore$ New price $=130 \times 1.6=$ Rs. 208
=> Ans - (C)

## Question 8

The sum of three numbers is 67 . If the ratio of the first number to the second number is $3: 5$ and that of the second number to the third number is $4: 7$, then what is the second number?

A 20

B 24

C 18

D 16
Answer: A

## Explanation:

Ratio of first number to second number $=3: 5$ and ratio of the second number to the third number $=4: 7$
Multiplying first equation by 4 and second equation by 5 to make the second (common) term equal.
Let first number be $=12 x$, second number $=20 x$ and third number $=35 x$
=> Sum $=12 x+20 x+35 x=67 x=67$
$\Rightarrow x=\frac{67}{67}=1$
$\therefore$ Second number $=20 \times 1=20$
=> Ans - (A)

## Question 9

A started a business with the capital of Rs 1800. After 4 months B joined with Rs 3600.6 months after the business started C joined with Rs 1200. If the total profit earned at the end of the year is Rs 1760 , then what is the share (in Rs) of A ?

A 540

B 660

C 840

D 720
Answer: B

## Explanation:

Amount invested by A = Rs. 1800 for 12 months

Amount invested by $B=$ Rs. 3600 for 8 months
Amount invested by C = Rs. 1200 for 6 months
=> Ratio of profit of $A: B: C=(1800 \times 12):(3600 \times 8):(1200 \times 6)$
= $216: 288: 72=3: 4: 1$
Total profit = Rs. 1760
$\therefore$ A's share $=\frac{3}{(3+4+1)} \times 1760$
$=3 \times 220=R s .660$
=> Ans - (B)

## Question 10

The average of 8 consecutive integers is $23 / 2$. What is the average of first three integers?

A 9

B $19 / 2$

C 8

D 10
Answer: A

## Explanation:

Let the 8 consecutive integers be $=(x),(x+1),(x+2),(x+3),(x+4),(x+5),(x+6)$ and $(x+$ 7)

Sum of integers $=(x)+(x+1)+(x+2)+(x+3)+(x+4)+(x+5)+(x+6)+(x+7)=$ $\frac{23}{2} \times 8$
=> $8 x+28=92$
"> $8 x=92-28=64$
$\Rightarrow x=\frac{64}{8}=8$
$\therefore$ Average of first three integers $=\frac{(8)+(8+1)+(8+2)}{3}$
$=\frac{27}{3}=9$
=> Ans - (A)

## Question 11

Simple interest on a sum for eight months at $6 \%$ per annum is Rs 340 . What is the value (in Rs) of sum?

B 9500
C 8000

D 6800
Answer: A

## Explanation:

Let principal amount $=$ Rs. $x$
Rate of interest $=6 \%$ and time period $=\frac{8}{12}=\frac{2}{3}$ years
=> Simple interest $=\frac{P \times R \times T}{100}$
=> $\frac{x \times 6 \times 2}{3 \times 100}=340$
=> $\frac{x}{25}=340$
=> $x=340 \times 25=R s .8,500$
=> Ans - (A)

## Question 12

A trader sells wire and gains $60 \%$ on the cost price. What will be the profit percentage on selling price?

A 33.33
B 40
C 60

D 37.5
Answer: D

## Explanation:

Let cost price = Rs. 100
Profit $=\frac{60}{100} \times 100=$ Rs. 60
=> Selling price $=100+60=R s .160$
$\therefore$ Profit percentage on selling price $=\frac{60}{160} \times 100$
$=\frac{3}{8} \times 100=37.5 \%$
=> Ans - (D)

## Question 13

Marked price of an article is Rs 520 and selling price is Rs 384.8. What is the discount percentage?

A 26
B 24.42

C 35.13
D 29
Answer: A

## Explanation:

Marked price $=$ Rs. 520
Selling price = Rs. 384.8
=> Discount $\%=\frac{(520-384.8)}{520} \times 100$
$=\frac{1352}{52}=26 \%$
=> Ans - (A)

## Question 14

What is the value of $\frac{5}{\sqrt{2}+1}+\frac{5}{\sqrt{3}+\sqrt{2}}+\frac{5}{\sqrt{4}+\sqrt{3}}+\ldots \frac{5}{\sqrt{121}+\sqrt{120}}$ ?

A 25

B 50

C 100

D 75
Answer: B

## Explanation:

Expression : $\frac{5}{\sqrt{2}+1}+\frac{5}{\sqrt{3}+\sqrt{2}}+\frac{5}{\sqrt{4}+\sqrt{3}}+\ldots \frac{5}{\sqrt{121}+\sqrt{120}}$
Rationalizing the denominator, we get :
$=\left(\frac{5}{\sqrt{2}+1} \times \frac{\sqrt{2}-1}{\sqrt{2}-1}\right)+\left(\frac{5}{\sqrt{3}+\sqrt{2}} \times \frac{\sqrt{3}-2}{\sqrt{3}-2}\right)+\left(\frac{5}{\sqrt{4}+\sqrt{3}} \times \frac{\sqrt{4}-\sqrt{3}}{\sqrt{4}-\sqrt{3}}\right)+\ldots .+\left(\frac{5}{\sqrt{121}+\sqrt{120}} \times \frac{\sqrt{121}-\sqrt{120}}{\sqrt{121}-\sqrt{120}}\right)$
Using, $(a-b)(a+b)=a^{2}-b^{2}$
$=\frac{5 \times(\sqrt{2}-1)}{(2-1)}+\frac{5 \times(\sqrt{3}-\sqrt{2})}{(3-2)}+\frac{5 \times(\sqrt{4}-\sqrt{3})}{(4-3)}+\ldots .+\frac{5 \times(\sqrt{121}-\sqrt{120})}{(121-120)}$
Thus, after cancelling the positive and negative terms alternatively, we are left with :
$=-5+5(\sqrt{121})=-5+55=50$
=> Ans - (B)

## Question 15

Ram and Shyam undertook a work for Rs 5600. Ram alone can do the work in 5 days and Shyam alone can do the work in 9 days. If they work together, then what will be the difference (in Rs.) in the amount they receive?

A 1800

B 2400
C 2200
D 1600
Answer: D

## Explanation:

Ram alone can do the work in 5 days and Shyam alone can do the work in 9 days.
=> Efficiency of work done by Ram : Shyam = $9: 5$
Thus, difference in amount received by them $=\frac{(9-5)}{9+5} \times 5600$
$=4 \times 400=R s .1600$
=> Ans - (D)

## Question 16

A man covered a certain distance by a train at the speed of $40 \mathrm{~km} / \mathrm{hr}$ and covers the same distance back by walking at the speed of $8 \mathrm{~km} / \mathrm{hr}$. If the whole journey took 12 hours, then what is the one side distance (in km )?

A 80
B 60

C 90
D 100

## Answer: A

## Explanation:

Let total distance covered (both sides) $=2 d \mathrm{~km}$
Speed of train $=40 \mathrm{~km} / \mathrm{hr}$ and walking speed $=8 \mathrm{~km} / \mathrm{hr}$
Using, time = distance/speed
$=>\frac{d}{40}+\frac{d}{8}=12$
$\Rightarrow>\frac{6 d}{40}=12$
$\Rightarrow d=12 \times \frac{40}{6}=80 \mathrm{~km}$
=> Ans - (A)

## Instructions

The pie chart shows the breakup of expenditure of a trading company for the year 2017. Study the diagram and answer the following questions.

Expenditure (in lakhs)


## Question 17

The second highest expenditure is for which item?

A Rent

B Marketing

C Logistics
D Accounts
Answer: B

## Explanation:

The second highest expenditure is for Marketing = Rs. 450 lakhs
=> Ans - (B)
Question 18
What is the total expenditure (in Rs lakhs)?

A 2200

B 2400

C 2100

D 2000

Answer: B

## Explanation:

Total expenditure (in Rs lakhs)
$=250+300+500+350+450+400+150$
$=2400$
=> Ans - (B)
Question 19
The measure of the central angle of the sector representing Rent is $\qquad$ degrees.

A 50

B 60

C 75

D 40
Answer: B

## Explanation:

Expenditure in rent (in Rs lakhs) $=400$
Total expenditure (in Rs lakhs)
$=250+300+500+350+450+400+150=2400$
=> Required central angle $=\frac{400}{2400} \times 360^{\circ}$
$=\frac{360^{\circ}}{6}=60^{\circ}$
=> Ans - (B)

## Question 20

Expenditure on Sales and Marketing constitute what percent of total expenditure?

A $30 \%$

B $36 \%$

C $27.5 \%$

D 33.33\%
Answer: D

## Explanation:

Expenditure on Sales and Marketing (in Rs lakhs) $=350+450=800$
Total expenditure (in Rs lakhs)
$=250+300+500+350+450+400+150=2400$
=> Required $\%=\frac{800}{2400} \times 100$
$=\frac{100}{3}=33.33 \%$
=> Ans - (D)
Instructions
For the following questions answer them individually

## Question 21

The side of an equilateral triangle is 8 cm . Find its area (in cm )

A $25 \sqrt{ } 3$

B $16 \sqrt{ } 2$

C $25 \sqrt{ } 2$

D $16 \sqrt{ } 3$
Answer: D

## Explanation:

Side of equilateral triangle $=s=8 \mathrm{~cm}$
$\Rightarrow$ Area $=\frac{\sqrt{3}}{4} s^{2}$
$=\frac{\sqrt{3}}{4} \times(8)^{2}$
$=\sqrt{3} \times 16=16 \sqrt{3} \mathrm{~cm}^{2}$
=> Ans - (D)
Question 22
The area of a circle is 346.5 cm 2 . Find its circumference (in cm).

A 132

B 38

C 66

D 76
Answer: C

Explanation:

Let the radius of circle $=r \mathrm{~cm}$
=> Area $=\pi r^{2}=346.5$
$\Rightarrow>\frac{22}{7} \times r^{2}=346.5$
$\Rightarrow r^{2}=346.5 \times \frac{7}{22}=110.25$
$\Rightarrow r=\sqrt{110.25}=10.5 \mathrm{~cm}$
$\therefore$ Circumference $=2 \pi r$
$=2 \times \frac{22}{7} \times 10.5$
$=44 \times 1.5=66 \mathrm{~cm}$
=> Ans - (C)

## Question 23

Find the total surface area (in $\mathrm{cm}^{2}$ ) of a cube of side 7.5 cm .

A 364.5

B 446

C 337.5

D 684
Answer: C

## Explanation:

Side of cube, $a=7.5 \mathrm{~cm}$
=> Total surface area $=6 a^{2}$
$=6 \times(7.5)^{2}=337.5 \mathrm{~cm}^{2}$
=> Ans - (C)

## Question 24

What is the value of $45^{\circ}+\frac{1}{\sqrt{2}}$

A $5 \sqrt{3}$
B $\frac{7}{2 \sqrt{3}}$
C $(\sqrt{2}+1) \sqrt{2}$
D $4 / \sqrt{3}$

Answer: C

## Explanation:

Expression : $\tan \left(45^{\circ}\right)+\frac{1}{\sqrt{2}}$
$=1+\frac{1}{\sqrt{2}}$
$=\frac{\sqrt{2}+1}{\sqrt{2}}$
=> Ans - (C)

## Question 25

$\triangle P Q R$ is right angled at $Q$. If $\operatorname{cosec} P=17 / 15$, then what is the value of $\sin R$ ?

A $15 / 17$
B $8 / 17$

C $17 / 8$

D $17 / 15$
Answer: B

## Explanation:



Given : $\operatorname{cosec} P=\frac{17}{15}$
$=>\sin P=\frac{Q R}{P R}=\frac{15}{17}$
Let $\mathrm{QR}=15 \mathrm{~cm}$ and $\mathrm{PR}=17 \mathrm{~cm}$
Thus, in $\triangle \mathrm{PQR},=>(P Q)^{2}=(P R)^{2}-(Q R)^{2}$
$\Rightarrow(P Q)^{2}=(17)^{2}-(15)^{2}$
$\Rightarrow(P Q)^{2}=289-225=64$
$\Rightarrow P Q=\sqrt{64}=8 \mathrm{~cm}$
To find : $\sin R=\frac{P Q}{P R}$
$=\frac{8}{17}$
=> Ans - (B)

## Reasoning

Instructions
For the following questions answer them individually

## Question 26

In the following question, select the related word pair from the given alternatives Lotus : Flower : : ? : ?

A Rabbit: White

B Peacock: Bird

C Crow: Flies

D Krishna: Speak
Answer: B

## Explanation:

Expression = Lotus : Flower : : ? : ?
The first comes under the category of second, i.e. Lotus is a flower, similarly peacock is a bird.
=> Ans - (B)

## Question 27

In the following question, select the related word pair from the given alternatives
13: 167:: 23 : ?

A 527

B 525

C 531

D 532
Answer: A

## Explanation:

Expression = 13 : 167 : : 23 :?
The pattern followed is $=x:\left(x^{2}-2\right)$

Eg :- $13:\left(13^{2}-2\right)=13: 167$
Similarly, $(23)^{2}-2=529-2=527$
=> Ans - (A)

## Question 28

In the following question, select the related word pair from the given alternatives PIR:OHQ: : ? : ?

A KLO: MOR
B LNT: JLQ

C FAX: EZW

D KMN: LNO
Answer: C

Explanation:
Expression = PIR : OHQ : : ? : ?
The pattern followed is :

| $P$ | I | R |
| :---: | :---: | :---: |
| $(-1)$ | $(-1)$ | $(-1)$ |
| O | H | Q |

Similar pattern is observed only in :

| $F$ | $A$ | $X$ |
| :---: | :---: | :---: |
| $(-1)$ | $(-1)$ | $(-1)$ |
| $E$ | $Z$ | $W$ |

=> Ans - (C)

## Question 29

In the following question, select the odd word pair from the given alternatives.

A Carnivorous-Tiger
B Herbivorous-Cow
C Rabbit-Herbivorous

D Carnivorous - Dog
Answer: C

## Explanation:

First is the characteristic of the second.

Tiger and Dog are carnivorous and cow are herbivorous. Although, rabbit are also herbivorous, but the order is incorrect.
=> Ans - (C)

## Question 30

In the following question, four number pairs are given. The number on left side of (-) is related to the number of the right side of (-) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

A 8-64

B 6-36

C 4-16

D 2-12
Answer: D

## Explanation:

The second number is the square of the first number.
$(8)^{2}=64$
$(6)^{2}=36$
$(4)^{2}=16$
$(2)^{2}=4 \neq 12$
=> Ans - (D)
Question 31
In the following question, select the odd letter/letters from the given alternatives.

A SW

B GK

C FJ

D DG
Answer: D

## Explanation:

(A) : S (+4 letters) = W
(B) : G (+4 letters) $=K$
(C) : F (+4 letters) $=J$
(D) : D (+3 letters) = G
=> Ans - (D)
Question 32
From the given alternatives, according to dictionary, which word will come at FIRST position?

1. Clause
2. Cigar
3. Clever
4. Cinema
5. Client

A Cinema

B Client

C Cigar
D Clause
Answer: C

## Explanation:

As per the order of dictionary :
= Cigar -> Cinema -> Clause -> Clever -> Client
Thus, first word is Cigar
=> Ans - (C)

## Question 33

In the following question, select the missing number from the given series.
34, 69, 140, 283, ?, 1145

A 440

B 545

C 570

D 625
Answer: C

## Explanation:

The pattern followed is:
$34 \times 2+1=69$
$69 \times 2+2=140$
$140 \times 2+3=283$
$283 \times 2+4=570$
$570 \times 2+5=1145$
=> Ans - (C)

## Question 34

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
CX, EV, GT, IR, ?

A LP
B LQ
C KP

D KQ
Answer: C

## Explanation:

Series: CX, EV, GT, IR, ?
The pattern followed in each letter of the terms is:
1st letter: $\mathrm{C}(+2$ letters $)=\mathrm{E}(+2$ letters $)=\mathrm{G}(+2$ letters $)=I$ (+2 letters $)=\mathrm{K}$
2nd letter: $\mathrm{X}(-2$ letters $)=\mathrm{V}(-2$ letters $)=\mathrm{T}(-2$ letters $)=R(-2$ letters $)=P$
Thus, missing term = KP
=> Ans - (C)

## Question 35

In a row of boys, Rahul is 19th from top and Ajay is 21 st from bottom. They interchange their position. Ajay now becomes 28th from bottom. How many total boys are there in the row?

A 47
B 46

C 45
D 48
Answer: B

## Explanation:

Rahul's position from top $=$ 19th
When Ajay goes to Rahul's position, Ajay's new position $=28$ th from bottom $=$ Rahul's original position
=> Total number of boys $=(19+28)-1=46$
=> Ans - (B)

## Question 36

From the given alternatives, select the word which CANNOT be formed using the letters of the given word.
Liabilities

A Lite

B Able

C Like

D Table
Answer: C

## Explanation:

The word LIABILITIES does not contain any ' $K$ ', thus the term Like cannot be formed.
=> Ans - (C)

## Question 37

In a certain code language, "HARMS" is written as "81181319" and "FLUTE" is written as "61221205". How is "WOUND" written in that code language?

A 21144152

B 21441514

C 231521144

D 171921415
Answer: C

## Explanation:

The letters are numbered on the basis of their position according to the English alphabetical order. $A=1, B=2$, $C=3, D=4$ and so on.

Eg :- HARMS = 8,1,18,13,19 -> 81181319
FLUTE $=6,12,21,20,5->61221205$
Similarly, WOUND $=23,15,21,14,4->231521144$
=> Ans - (C)

## Question 38

In a certain code language, ' - ' represents '+', '-' represents 'x', '+' represents ' $-\div$ ' and 'x' represents '-'. Find out the answer to the following question.

## $8 \div 14-20+5 \times 2=$ ?

A 46

B 62

C 32

D 14
Answer: B

Explanation:
Expression : $8 \div 14-20+5 \times 2=$ ?
$\equiv 8+14 \times 20 \div 5-2$
$=8+(14 \times 4)-2$
$=6+56=62$
=> Ans - (B)

## Question 39

The following equation is incorrect. Which two signs should be interchanged to correct the equation? $6 \times 5+20 \div 4=31$

A + and $\div$

B + and x

C - and +

D $\div$ and $x$
Answer: B

Explanation:
Expression : $6 \times 5+20 \div 4=31$
(A) : + and $\div$
$\equiv 6 \times 5 \div 20+4=31$
L.H.S. $=\frac{30}{20}+4=5.5 \neq$ R.H.S.
(B) : + and $x$
$\equiv 6+5 \times 20 \div 4=31$
L.H.S. $=6+\frac{100}{4}=6+25=31=$ R.H.S.
=> Ans - (B)

## Question 40

If $70 * 10=7,50 * 5=10$ and $10 * 5=2$, then find the value of $80 * 1=$ ?

A 45

B 25

C 20

D 80
Answer: D

## Explanation:

Given : 70*10 $=7,50 * 5=10$ and $10 * 5=2$
If we replace ${ }^{\prime} \times^{\prime}$ with ${ }^{\prime} \div^{\prime}$, then L.H.S. $=$ R.H.S.
Eg :- $\frac{70}{10}=7$
and $\frac{50}{5}=10$
and $\frac{10}{5}=2$
Similarly, $\frac{80}{1}=80$
=> Ans - (D)

## Question 41

Which of the following terms follows the trend of the given list?
XYXYXYxy, XYXYXyxY, XYXYxyXY, XYXyxYXY, XYxyXYXY, $\qquad$ .

A $x y X Y X Y X Y$
B XYXYXYxy
c $X Y X Y X y x Y$
D XyxYXYXY
Answer: D

## Explanation:

Expression : XYXYXYxy, XYXYXyxY, XYXYxyXY, XYXyxYXY, XYxyXYXY,

The pattern followed is that in each term there are 4 combinations of ' XY ' and in each term, the last two terms in decreasing order are small alphabets.

Thus, in the missing term, the second and third term will be small = XyxYXYXY
=> Ans - (D)

## Question 42

Two trucks start from the same warehouse. Truck A goes 6 km North, then turns to its right and goes 4 km . In the meanwhile truck B goes 9 km East, then turns North and goes 6 km , then turns to its right and goes 4 km . Where is truck $B$ with respect to truck $A$ ?

A 17 km East

B 9 km West

C 17 km West

D 9 km East
Answer: D

## Question 43

In the question two statements are given, followed by two conclusions, I and II.
You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.
Statement I: No mirrors are glass
Statement II: No reflective are mirrors
Conclusion I: All glass are reflective
Conclusion II: All reflective are glass

A Only conclusion I follows
B Only conclusion II follows

C Both conclusions I and II follow

D Neither conclusion I nor conclusion II follows
Answer: D

In the following figure, rectangle represents Copywriters, circle represents
Cartoonists, triangle represents Comedians and square represents Mothers. Which set of letters represents Copywriters who are neither Comedians nor Mothers?


A BE
B $C D$

C AF
D IH
Answer: D

## Question 45

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
NIP, KGO, HEN, ECM, ?

A CBM

B BAL

C CAL
D BBM
Answer: B

## Explanation:

Series : NIP, KGO, HEN, ECM, ?
The pattern followed in each letter of the terms is:

1st letter : $\mathrm{N}(-3$ letters $)=\mathrm{K}(-3$ letters $)=\mathrm{H}(-3$ letters $)=\mathrm{E}(-3$ letters $)=\mathrm{B}$
2nd letter: $\mathrm{I}(-2$ letters $)=\mathrm{G}(-2$ letters $)=\mathrm{E}(-2$ letters $)=\mathrm{C}(-2$ letters $)=\mathrm{A}$
3rd letter: $P(-1$ letter $)=0(-1$ letter $)=N(-1$ letter $)=M(-1$ letter $)=L$
Thus, missing term = BAL
=> Ans - (B)
Question 46
In the following question, select the missing number from the given series.
146, 137, 128, ?, 110, 101

A 123

B 121

C 117

D 119
Answer: D

## Explanation:

' 9 ' is subtracted from all the numbers.
$146-9=137$
137-9 = 128
128-9 = 119
$119-9=110$
110-9 = 101
=> Ans - (D)
Question 47
In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

A $(44,42,36)$
B $(56,54,48)$
C $(38,36,32)$
D $(64,62,56)$
Answer: C

## Explanation:

The numbers are of the form : $(x, x-2, x-8)$
But in the third option, we have $=38-8=30 \neq 32$
Thus, $(38,36,32)$ is the odd one out.
=> Ans - (C)

## Question 48

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?


B


C



Answer: B

## Question 49

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?


A


B


C


D


Answer: D

## Question 50

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9 . A letter from these matrices can be represented first by its row and next by its column, for example T can be represented by 21, 42 etc and can be represented by 69, 89 etc. Similarly, you have to identify the set for the word 'TENS'.

| Matrix-I |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 |
| 0 | L | G | J | G | B |
| 1 | F | M | H | B | E |
| 2 | E | I | D | F | H |
| 3 | J | K | B | M | D |
| 4 | L | M | I | A | N |


| Matrix-II |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 6 | 7 | 8 | 9 |  |
| 5 | V | U | W | X | X |  |
| 6 | Q | S | P | V | Y |  |
| 7 | V | Q | V | S | O |  |
| 8 | N | P | U | N | Y |  |
| 9 | T | W | X | U | V |  |

A 95,14,85,78

B 10,56,24,99

C $20,96,41,69$

D $24,77,22,78$
Answer: A

Explanation:
(A) : 95,14,85,78 = TENS
(B) : 10,56,24,99 = FUHV
(C) : $20,96,41,69=$ EWMY
(D) : $24,77,22,78=$ HVDS
=> Ans - (A)

## English

Instructions
In the following question, some part of the sentence may have errors. Find out
which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

Question 51
She was (a)/ quite amusing (b)/ at that story. (c)/ No error (d)

B quite amusing
C at that story

D No error
Answer: B

## Question 52

Money bills could only be introduced in the Lok Sabha, (a)/ and upon being passed, are sent to the Rajya Sabha, (b)/ where it can be deliberated upon for upto 14 days. (c)/ No error (d)

A Money bills could only be introduced in the Lok Sabha
B and upon being passed, are sent to the Rajya Sabha
C where it can be deliberated upon for upto 14 days

D No error
Answer: A

## Instructions

In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

## Question 53

$\qquad$ not attend the party.

A probably be
B will be

C won't
D shall
Answer: D

## Question 54

Happy thoughts release hormones that work for our well-being and negative thoughts release hormones
that make us

B happy
C excited
D rejuvenated
Answer: A

## Instructions

In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

## Question 55

## Accolade

A Silence
B Mediocrity
C Laurels

D Lowliness
Answer: C

Question 56
Invective

A Invent
B Expressive
C Abusive
D Invitation
Answer: C

## Instructions

In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.

## Question 57

Elated

A Inspired
B Cheered

C Disheartened

D Encouraged
Answer: C

## Question 58

Baneful

A Harmful

B Cruel

C Disastrous

D Lucky
Answer: D

Instructions
For the following questions answer them individually
Question 59

- Rearrange the parts of the sentence in correct order.

To many women human rights are
$P$ : foreign to their culture and
Q : of individual and community identity
$R$ : challenge deeply held notions

A PQR

B RPQ

C QPR

D PRQ
Answer: D

## Question 60

A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.
Some girls were helping the wounded men.

A The wounded men were helping some girls.

B The wounded men were being helped by some girls.
C The wounded men are being helped by some girls.
D The wounded men received help from some girls.
Answer: B

## Question 61

A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.
Shyam said, "My master is eating."

A Shyam inform that his master is eating.

B Shyam say that his master is eating.
C Shyam and his master was eating.
D Shyam said that his master was eating.
Answer: D

## Question 62

In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.

A Asassination

B Assasination

C Assassination

D Assaissination
Answer: C

## Instructions

In the following passage, some of the words have been left out. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

A little thought will show you how vastly your own $\qquad$ depends on the way other people bear themselves toward you. The looks $\qquad$ tones at your breakfast-table, the conduct of $\qquad$ fellow-workers or employers, the $\qquad$ or unreliable men you deal with, what people say to you on the street, the way your cook and housemaid do their work, the letters you get, the friends or foes you meet,-these things make $\qquad$ very much of the pleasure or misery of your day.

## Question 63

how vastly your own $\qquad$ depends on the way

A happiness
B happy
C happily
D happiest
Answer: A

## Question 64

The looks $\qquad$ tones at your breakfast-table

A but

B if

C then

D and
Answer: D

## Question 65

the conduct of $\qquad$ fellow-workers

A you
B your
C them

D they
Answer: B

## Question 66

employers, the $\qquad$ or unreliable men

A faithful
B faith

C faithfully
D faithfulness
Answer: A

## Question 67

things make $\qquad$ very much of the pleasure

A up
B upon
C above

D on
Answer: A

## Instructions

In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.

## Question 68

At somebody's expense

A Paid for by someone.
B To blame a crime on someone else.
C The unlucky persons who lose a race.
D If one person benefits it is always at the loss of another.

Answer: A

## Question 69

Cock and bull story

A An implausible story used as an explanation or excuse.
B A fairy tale told down generations.
C A story of animals with hidden morals.
D The meek can defeat the bully by being clever.
Answer: A

## Instructions

In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.

## Question 70

An upright bar, post, or frame forming a support or barrier

A Repose
B Stanchion

C Recumbent
D Supine
Answer: B

## Question 71

A routine task, especially a household one

A Chore

B Servitude
C Moil
D Travail
Answer: A

## Instructions

In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

Question 72
Opening the door to her each morning is like (lets) a breath of fresh air into my world.

A let

B to let

C letting
D no improvement
Answer: C

## Question 73

What seeds you (has sow) in the garden of your mind determine the quality of life you shall have.

A sowing

B sow

C had sow

D no improvement
Answer: B

## Instructions

For the following questions answer them individually

## Question 74

The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph. If your ward talks
A-well to convince you, be
B-social and interpersonal creativity
C-proud that he or she has

A ABC

B ACB
C CBA

D CAB
Answer: B

## Question 75

In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.

A arbittrates

B arbitrates

C arbetrates

D arbettrates
Answer: B

## General Awareness

Instructions
For the following questions answer them individually

## Question 76

"Global Competitiveness Report" is released by which of the following organization?

A WTO

B WEF

C SAARC
D EU
Answer: B

Question 77
Economic planning in India is in $\qquad$ .

A Union List

B State list

C Concurrent List

D No option is correct.
Answer: C

## Question 78

Which of the following indicates the circle of the Saranath Pillar?

A Law

B Revolution

C Progress

D Religion
Answer: C

## Question 79

Which of the following is related to the Tinkathiya Pratha?

A Champaran

B Kheda

C Bardoli

D Darbhanga
Answer: A

## Question 80

The distance between the two latitudes is approximately $\qquad$ .

A 111 miles

B 121 miles
C 111 km

D 121 km
Answer: C

## Question 81

Which place is now known as 'White Water' in India?

A Leh

B Ladakh
C Kargil

D Siachen
Answer: D

## Question 82

Leela Samson is associated to which classical dance style?

A Bharatanatyam
B Kathakali

C Kuchipudi
D Odissi
Answer: A

## Question 83

At which place a joint military exercise 'Yudh Abhyas' was held in September 2017 between United States and Indian army?

A Pune

B Newyork
C Vishakhapattnam
D Washington

Answer: D

## Question 84

Which Bollywood actor was honoured with the 24 th Crystal Award at the world Economic Forum meeting in January 2018?

A Shahrukh Khan

B Aamir Khan

C Salman Khan

D Saif Ali Khan
Answer: A

## Question 85

The saffron orange colour of Bhutan's national flag symbolizes $\qquad$ .

A the authority of the king
B the secular power of the country
C the practice of religion
D the purity of the country
Answer: C

## Question 86

How CNG is a cleaner fuel?
I. It produces oxides of Sulphur and Nitrogen in very small amounts.
II. It makes environment less polluted.
III. It emits less greenhouse gases.

A Only I and II
B Only II and III

C Only I and III
D All I, II and III
Answer: D

## Question 87

In a compound the elements are always present in definite proportions by $\qquad$ .

A mass

B volume

C size

D No option is correct.
Answer: A

Question 88
The Chief Election Commissioner of India holds the office for $\qquad$ .

A 60 years of age or for six years, whichever early
B 65 years of age or for six years, whichever early
C 70 year of age or for six years, whichever early

D 55 year of age or for five years, whichever early
Answer: B

## Question 89

The Attorney General of India is the $\qquad$ of the Government of India.

A Chief Account Officer
B Chief Law Officer
C Chief Audit Officer

D Chief Election Officer
Answer: B

## Question 90

Which of the following is a CORRECT relation of length of small intestines of an herbivore and a carnivore?

A Herbivore = Carnivore

B Herbivore < Carnivore

C Herbivore > Carnivore

D No option is correct.
Answer: C

## Question 91

Limbs of frog, lizard, bird and human are example of $\qquad$ organs.

A Homogenous
B Heterogeneous

C Analogous
D Homologous
Answer: D

## Question 92

Energy Efficiency Services Limited (EESL) launched UJALA scheme in which country in September, 2017?

A Indonesia

B Malaysia
C Maldives

D Australia
Answer: B

## Question 93

India's fastest and first multi - petaflops supercomputer named Pratyush was unveiled at $\qquad$ _.

A Indian Institute of Science, Bangalore

B Indian Space Research Organisation, Bangalore
C Indian Institute of Tropical Meteorology, Pune
D Indian Institute of Technology, New Delhi
Answer: C

## Question 94

In December 2017, SEBI raised the investment limit for FPIs in central government securities to over from January 2018.

A Rs 1.91 lakh crore

B Rs 3.91 lakh crore

C Rs 5.91 lakh crore
D Rs 0.91 lakh crore
Answer: A

## Question 95

On 8 June 2017, Law Ministry cleared the Prevention of Cruelty to Animals (Karnataka Amendment) Bill, 2017. It will help in legislating_

A Jalikattu
B Cockfight
C Bailgadi Shariat
D Kambala
Answer: D

## Question 96

What is the resistance (in $\Omega$ ) of an electrical component if a current of 0.1 A passes through it on application of 5 V of potential difference across it?

A 0.5

B 100
C 50

D 1
Answer: C

## Question 97

The motion of a freely falling body is an example of $\qquad$ accelerated motion.

A non uniformly
B uniformly
C uniquely

D specially
Answer: B

## Question 98

Increased wind speed is accompanied by a reduced air $\qquad$ .

A humidity

B pressure
C density
D aridity
Answer: B

Question 99
Which of the statements given below are correct?
A) In 2017, Sebastian Vettel raced in Formula One for Ferrari.
B) Grigor Dimitrov won the Tennis 2017 Cincinnati Masters Men's Singles.
C) In 2017 Pro Kabaddi League, Nitin Tomar played for Jaipur Pink Panthers.

A A and B

B A and C

C B and C

D None of these

Answer: A

Question 100
In Microsoft Word, $\qquad$ are small dots, squares, dashes or graphics
that are often seen before the text.

A Indentation

B Bullets
C Numbering
D Tabs
Answer: B

