SSC MTS 7th August 2019 Shift-1

English

Instructions

For the following questions answer them individually

Question 1

Select the most appropriate antonym of the given word.
Captivity

A   Liberty

B   Imprisonment

C   Cheer

D   Offense

   Answer: A

Question 2

Select the most appropriate option to fill in the blank
When are you _____ to write to your friend?

A   Gone

B   Going

C   Goes

D   Go

   Answer: B

Question 3

Select the most appropriate antonym of the given word
Approve

A   Agree

B   Reject

C   Appeal

D   Confirm

   Answer: B

Question 4

Select the most appropriate meaning of the given idiom.
cut one shot

A   To stop something

B   To Interrupt some one

C   To act quickly

D To be rude

  Answer: B

Question 5

Find the part of the given sentence that has an error in it. If there is no error, choose 'Noerror'.
Do not let the opportunity slip away and you will repent. /No error

A No error

B And you will repent

C Do not let the

D opportunity slip away

  Answer: B

Question 6

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.
You must apologise <u>with</u> him for this.

A No Improvement

B from

C of

D to

  Answer: D

Question 7

Choose the most appropriate word that can substitute the given group of words.
One who is unable to read or write.

A Illiterate

B Incomprehensible

C Frugal

D Illegible

  Answer: A

Question 8

Select the most appropriate option to fill in the blank.
Man _____ a strong desire to accumulate wealth.

A have

B   had

C   is having

D   has

   Answer: D

Question 9

Select the most appropriate meaning of the given idiom.
To take one's hat off

A   To fool someone

B   To feel hot

C   To please someone

D   To admire someone

   Answer: D

Question 10

Select the most appropriate option to fill in the blank.
Marconi _____ the radio.

A   discovered

B   invented

C   built

D   assembled

   Answer: B

Question 11

Select the most appropriate synonym of the given word.
Forgive

A   Forget

B   Accuse

C   Pardon

D   Compel

   Answer: C

Question 12

Select the most appropriate option to fill in the blank
I _____ him to use my bike to go to the office

A   granted

B allowed

C admonished

D sanctioned

  Answer: B

Question 13

Select the most appropriate synonym of the given word.
Agile

A Dull

B Stiff

C Quick

D Rigid

  Answer: C

Question 14

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

He <u>lives</u> in this remote colony since 2001.

A Dull

B Stiff

C Quick

D Rigid

  Answer: A

Question 15

Choose the most appropriate word that can substitute the given group of words
Yearly celebration of a date or an event

A Gala

B Anniversary

C Carnival

D Bash

  Answer: B

Question 16

Choose the correctly spelt word.

A Convenience

B Konvenience

C Convinience

D Conveniense

Answer: A

Question 17

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
The funding for the project will entirely born on the center

A No error

B born on the centre

C The funding for the project

D will be entirely

Answer: B

Question 18

Find the part of the given sentence that has an error in it. If there is no error, choose 'Noerror'.
I did not see anybody in the auditorium. /No error

A No error

B see anybody

C I did not

D In the auditorium

Answer: A

Question 19

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.
He not only speaks Hindi fluently but English as well as.

A No Improvement

B But also English

C As well as English

D But English too as well

Answer: B

Question 20

Choose the correctly spelt word

A   Axhilarate

B   Exhilarate

C   Axilarate

D   Exilarate

   Answer: B

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 blank.

Comprehension:

The Narmada River, (1)_____ called the Rewa was previously known (2)____ Nerbudda. It is a river in central India along (3)_____ the Godavari and the Krishna. It is also (4)____ as the "Life Line of Gujarat and Madhya Pradesh" for its huge (5)_____ to these states. The Narmada rises from Amarkantak Plateau near Anuppur district.

Question 21

Select the most appropriate option for blank No. 1.

A   But

B   Are

C   Also

D   End

   Answer: C

Question 22

Select the most appropriate option for blank No. 2.

A   by

B   as

C   so

D   even

   Answer: B

Question 23

Select the most appropriate option for blank No. 3.

A   To

B   With

C   By

D   Beside

Answer: B

Question 24

Select the most appropriate option for blank No. 4.

A Told

B Said

C Known

D Spoken

   Answer: C

Question 25

Select the most appropriate option for blank No. 5.

A Donation

B Reformation

C Irrigation

D Contribution

   Answer: D

Reasoning

Instructions

For the following questions answer them individually

Question 26

In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives

9	3	7
6	2	8
4	5	3
38	20	?

A 72

B 36

C 54

D 18

   Answer: B

Explanation:

The pattern followed in each column is that twice the sum of the first three numbers is equal to the last number.
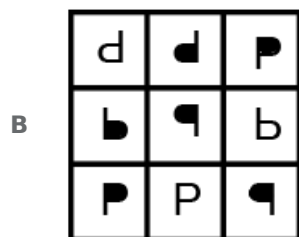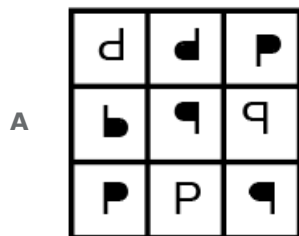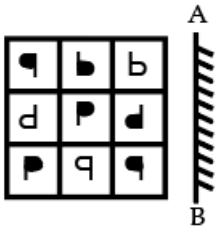
Eg :- $2 \times (9 + 6 + 4) = 38$

and $2 \times (3 + 2 + 5) = 20$

Similarly, $2 \times (7 + 8 + 3) = 2 \times 18 = 36$

=> Ans - (B)

Question 27

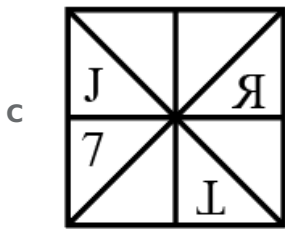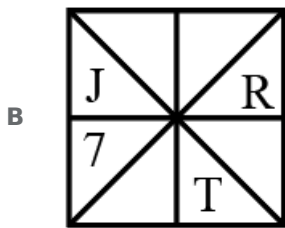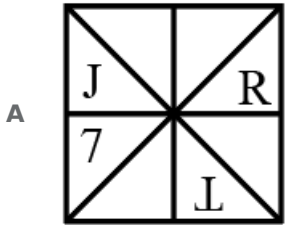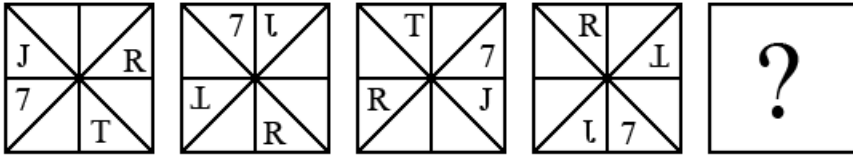If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?

A

B

C

D
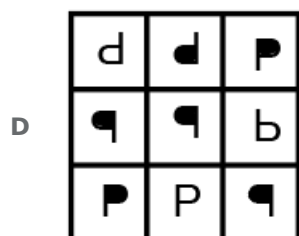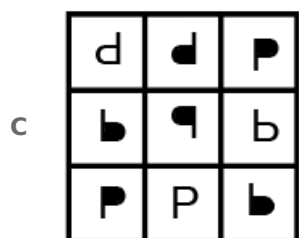
Answer: B

Question 28

In the following question, select the figure which can be placed at the sign of question mark (?) from the given alternatives.

A

B

C

D
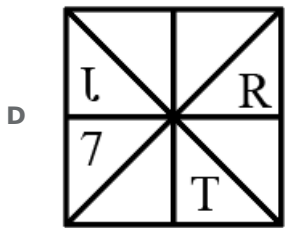
Answer: B

Question 29

Study the given pattern carefully and select the figure that will complete the pattern given in the question figure

Question 30

Select the number that can replace the question mark (?) in the following series.
16,17,21,30,46,?

A   81

B   77

C   71

D   63

   Answer: C

Explanation:
The pattern followed is :

$16 + (1)^2 = 17$

$17 + (2)^2 = 21$

$21 + (3)^2 = 30$

$30 + (4)^2 = 46$

$46 + (5)^2 = $ **71**

=> Ans - (C)

Question 31

After interchanging the given two numbers, what will be the value of $6 + 7 \times 3 - 8 \div 4$?

3 and 6

A   41

B 42

C 43

D 38

   Answer: C

Explanation:

Expression : $6 + 7 \times 3 - 8 \div 4$?

After interchanging 3 and 6, we get :

$= 3 + 7 \times 6 - 8 \div 4$

$= 3 + 42 - 2 = 43$

=> Ans - (C)

Question 32

Select the number that can replace the question mark (?) in the following series.
1138, 1150, 1163, 1177, ?

A 1196

B 1202

C 1192

D 1204

   Answer: C

Explanation:

The pattern followed is :

1138 + 12 = 1150

1150 + 13 = 1163

1163 + 14 = 1177

1177 + 15 = **1192**

=> Ans - (C)

Question 33

In a certain code language, 'STORED' is written as 'URQPGB'. What is the code for 'POINTA'in that code language?

A SNMLWZ

B SNLMWZ

C RMLKVY

D RMKLVY

   Answer: D

Question 34

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
RAM, VET, ZIA, ? , HQO

A DNI

B DNH

C DMI

D DMH

  Answer: D

Question 35

Select the option that is related to the third number in the same way as the second number is related to the first number.
39 : 117 :: 45 : ?

A 145

B 155

C 135

D 125

  Answer: C

Explanation:
Expression = 39 : 117 :: 45 : ?

The pattern followed is = $x : 3x$

Eg :- $39 : 3 \times 39 = 39 : 117$

Similarly, $3 \times 45 = 135$

=> Ans - (C)

Question 36

Six shopkeepers K, P, R, X, A and C are sitting around a circular table facing towards the centre (not necessarily in the same order). C is second to the left of A. P is to the immediate right of K. X is second to the right of R. A is to the immediate left of X. Which of the following pair of shopkeepers represents the immediate neighbours of X?

A A and K

B A and c

C K and P

D A and R

  Answer: A

Question 37

In a certain code language, 'TABLE' is written as '2012125', 'ROBIN' is written as '18152914'. What is the code for 'NATOM' in that code language?

A   142101153

B   142011513

C   141201315

D   141201513

   Answer: D

Question 38

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

A   Both conclusion I and II follows

B   Only conclusion II follows

C   Only conclusion I follows

D   Neither conclusion follow

   Answer: C

Question 39

In a certain code language, 'PANKIL' is written as 'SDQNLO'. What is the code for 'ROHANS'in that code language?

A   VRKDQU

B   VRKDQV

C   URKDQU

D   URKDQV

   Answer: D

Question 40

In a certain code language, 'GUD' is written as '31', 'PUH' is written as '44'. What is the code for 'FAR' in that code language?

A   25

B 23

C 24

D 26

   Answer: C

Question 41

Select the option that is related to the third term in the same way as the second term is related to the first term.
Septagon : Figure :: Male : ?

A Female

B Gender

C Brother

D Work

   Answer: B

Explanation:
First is the type of second, septagon is a 7-sided figure, similarly male is one of the genders.

=> Septagon : Figure :: Male : **Gender**

=> Ans - (B)

Question 42

By interchanging the given two signs which of the following equation will be correct?
$+$ and $-$

A $13 - 14 \times 3 + 7 = 48$

B $9 + 16 - 11 \times 2 = 3$

C $11 \times 3 + 5 - 2 = 36$

D $16 \times 4 + 11 - 10 = 65$

   Answer: A

Explanation:
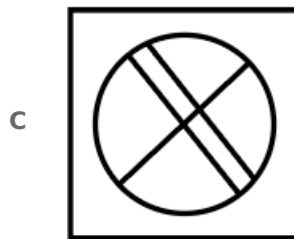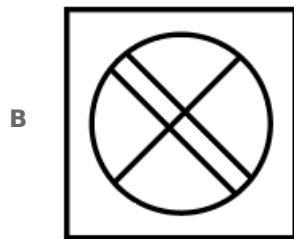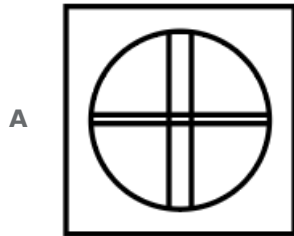By interchanging '$+$' and '$-$'

(A) : $13 - 14 \times 3 + 7 = 48$

L.H.S. $\equiv 13 + 14 \times 3 - 7$

$= 13 + 42 - 7 = 48 =$ R.H.S.

=> Ans - (A)

Question 43

From the given answer figures, select the one in which the question figure is hidden/embedded.

A

B

C

D

Answer: C

Question 44

Select the option in which the words share the same relationship as that shared by the given pair of words.
Garage : Mechanic :: ?

A   Labour : Factory

B   Hospital : Doctor

C   Temple : Teacher

D   Teacher : School

Answer: B

Explanation:

The second operates in the first, similarly, a doctor works in a hospital.

=> Garage : Mechanic :: **Hospital : Doctor**

=> Ans - (B)

Question 45

Six friends B, D, F, H, J and L are sitting around a circular table facing towards the centre (not necessarily in the same order). B is to the immediate right of L. D is second to the left of J. F is second to the left of H. L is second to the right of H. Who is sitting third to the left of F?

A D

B B

C J

D L

   Answer: C

Question 46

There are five cinema halls in a building - Hall 1, Hall 2, Hall 3, Hall 4 and Hall 5. They are one above the other. Hall 1 is at the bottom, then Hall 2 above it and so on. Five movies A, B, C, D and E are displayed in these given halls. Only one movie is displayed in a particular cinema hall. Each movie is displayed only one time. Movie E is displayed at a even numbered hall. Movie B is displayed at Hall 1. Movie A is displayed at the hall just below E. Movie D is not displayed at even numbered hall.

Which of the following statement is not correct about movie C?

A   C is displayed at the hall just below A

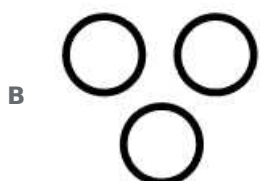**B**   C is displayed at the odd number Hall

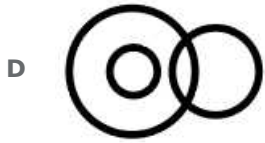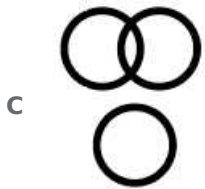**C**   B is displayed at the hall just below C

D   C is displayed at the even number Hall

   Answer: B

Question 47

Identify the diagram that best represents the relationship amongthe given classes.
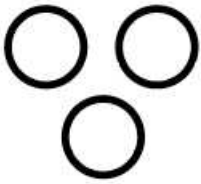**Rat, Shoes, Bat**

A

B

C

D

Answer: B

Explanation:
Rat, shoes and bat are completely different things from each other, hence the venn diagram that best describes above relation is :

=> Ans - (B)

Question 48

Select the option that is related to the third term in the same way as the second term is related to the first term
JOM : KPN :: PET : ?
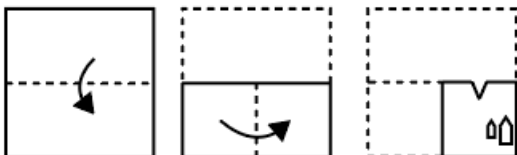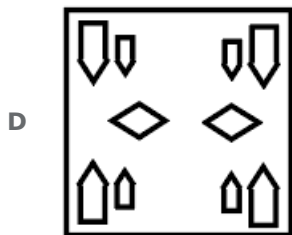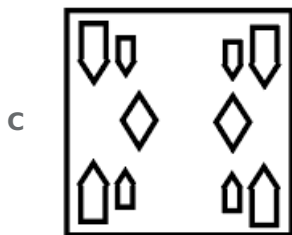
A   QFV

B   ODS

C   QFU

D   QDU

Answer: C

Question 49

A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

A

B

C

D
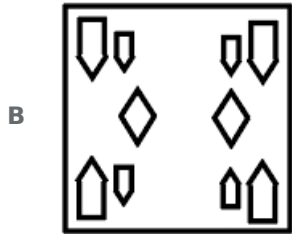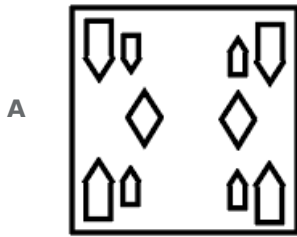
Answer: C

Question 50

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:
I. Some wires are black.
II. Some wires are yellow.
Conclusions:
I. Some black are yellow.
II. Some black are wires.

A   Only conclusion I follows

B   Both conclusion I and II follows

C   Neither conclusion follow

D   Only conclusion II follows

Answer: D

Quant

Question 51

A man can finish a piece of work in 15 days. A woman can complete the same work in 10 days. Both work together for 5 days, then the man leaves. How many days will be taken by the woman to finish the remaining work?

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

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

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

D $1\frac{2}{3}$

Answer: D

Explanation:

Man = 15

Woman =10

Lcm= 15,10=30=total work

Efficency = $\frac{30}{15}, \frac{30}{10}$

= 2,3 respectively

Both work together for 5 days

(2+3)×5 =25

Work = $efficiency \times days$

Work done by both + work done by Woman = total work

$25 + woman effeciency \times days$ =30

$25 + 10 \times days = 30$

Days left = $\frac{5}{10}$

= $\frac{1}{2}$

Question 52

The cost price of two articles is the same. One article among them is sold at a profit of 15% and the other is sold at a profit of 12%. if the difference between their selling prices is 218, what is the cost price of each article?

A ₹570

B ₹690

C ₹400

D ₹600

Answer: D

Question 53

The monthly incomes of Mohit and Prakash are in the ratio 2: 3. Their monthly expenditures are in the ratio 3: 5. If each saves 25000 per month, then what is the sum of monthly incomes of Mohit and Prakash?

A ₹40000

B ₹50000

C ₹60000

D ₹42000

   Answer: B

Explanation:
profit = income- expenditure

income of Mohit and Prakash is 2x and 3x

and their expenditre is 3y and 5y

saving by ram is

2x-3y = 25000

saving by rahim is 3x - 5y = 25000

by solving both equation we get

x=2y

put x=2y in above equations we get

x = 50000

y = 25000

so 2x = $2 \times 50000 = 100000RS$

   3x = $3 \times 50000 = 125000RS$

Question 54

Whatis the area of a triangle whose sides are 7 cm, 24 cm and 25 cm?

A 72 cm^2

B 108 cm^2

C 84 cm^2

D 42 cm^2

   Answer: C

Explanation:
If we look at the given sides, it satisfies the pythogarus theorem, which is $side^2 + side^2 = hypotnuse^2$

$= 7^2 + 24^2 = 25^2$

$=> 49 + 576 = 625$

Hence it would be a right angled triangle.

Area of a right angled triangle = $\frac{base \times height}{2}$

  Here longer side would be hypotenuse

So, Area = $\frac{base \times height}{2}$

$\frac{7 \times 24}{2}$

$= 84 \ cm^2$

Question 55

What is the area of the largest square which can be inscribed in a circle of radius 14 cm? Take ($\pi = \frac{22}{7}$)

A $392 \ cm^2$

B $484 \ cm^2$

C $196 \ cm^2$

D $784 \ cm^2$

  Answer: A

Explanation:
Diagonal of the Square = Diameter of the circle

Radius = 14 cm

Diameter = 28 cm

So diagonal = 28 cm

Area of square = $\frac{Diagonal \times diagonal}{2}$

$\qquad\qquad\qquad = \frac{28 \times 28}{2}$

$\qquad\qquad\qquad = 392 \ cm^2$

Question 56

What is the value of $\left\{ \frac{(0.7)^2 \div 0.14 + (0.6)^2 \div 0.18 + (0.5)^2 \div 0.05}{4(2.5 \ of \ 4 - 13 \times 0.25 \times 3)} \right\}$**?**

A $\frac{25}{2}$

B $\frac{19}{2}$

C $\frac{23}{2}$

D $\frac{21}{2}$

  Answer: D

Explanation:
Firstly solve bracket then apply bodmass

$\left\{ \frac{(0.7)^2 \div 0.14 + (0.6)^2 \div 0.18 + (0.5)^2 \div 0.05}{4(2.5 \ of \ 4 - 13 \times 0.25 \times 3)} \right\}$

$$\left\{ \frac{0.49 \div 0.14 + 0.36 \div 0.18 + 0.25 \div 0.05}{4(10 - 13 \times 0.25 \times 3)} \right\}$$

$$\left\{ \frac{\frac{7}{2} + 2 + 5}{4(10 - 13 \times 0.25 \times 3)} \right\}$$

$$\left\{ \frac{\frac{21}{2}}{4(10 - 9.75)} \right\}$$

$$\left\{ \frac{\frac{21}{2}}{4(10 - 9.75)} \right\}$$

$$\frac{21}{2}$$

Question 57

A bus covers first 200 km ofa journey in 4 hours and the next 600 km in 6 hours. What is the average speed of the bus for the whole journey?

A   100 km/h

B   90 km/h

C   60 km/h

D   80 km/h

Answer: D

Explanation:

Average speed $= \frac{total distance}{total time taken}$

Total distance = 800 km

Total time = 10 hours

Average speed $= \frac{800}{10}$

80 km/h

Question 58

The ratio of two whole numbers is 5 : 7. Which of the following can be their sum?

A   54

B   60

C   46

D   68

Answer: B

Explanation:

The ratio 5:7

The no. is 5x and 7x

So the sum is $5x + 7x$

$\qquad = 12x$

The number should be divisible by 12 . So the number is 60

Question 59

A certain sum invested on compoundinterest (compounded annually) grows to 25040 in three years. If the rate of interest is 20% for the first year, 40% for the second and 50% forthe third year, then whatis the sum?

A ₹1210

B ₹2566

C ₹1800

D ₹2000

Answer: D

Explanation:

Sum = $P(1 + \frac{R1}{100})(1 + \frac{R2}{100})(1 + \frac{R3}{100})$

$25040 = P(1 + \frac{20}{100})(1 + \frac{40}{100})(1 + \frac{50}{100})$

= 9936.5

Question 60

Samrat alone can complete a work in 10 days and Virat alone can complete the same work in 40 days. If they are working on alternate days with Samrat starting the work, then in how manydays will the total work be completed?

A 14 days

B 16 days

C 8 days

D 12 days

Answer: B

Explanation:

S = 10 days

V= 40 days

Total work = lcm (10,40)= 40 days

S's effiency = $40 \div 10 = 4$

V's effiency = $40 \div 40 = 1$

Work = $efficency \times day$

Starting with Samrat and followed by Virat

4+ 1 + 4 + 1 ....= 40

Consider 4+1 as a 1 unit

5 n = 40

n = 8

 = 8×2

 = 16 days

Question 61

The Bar graph given below presents the amount (volume in litres) of water in ten different mixtures.
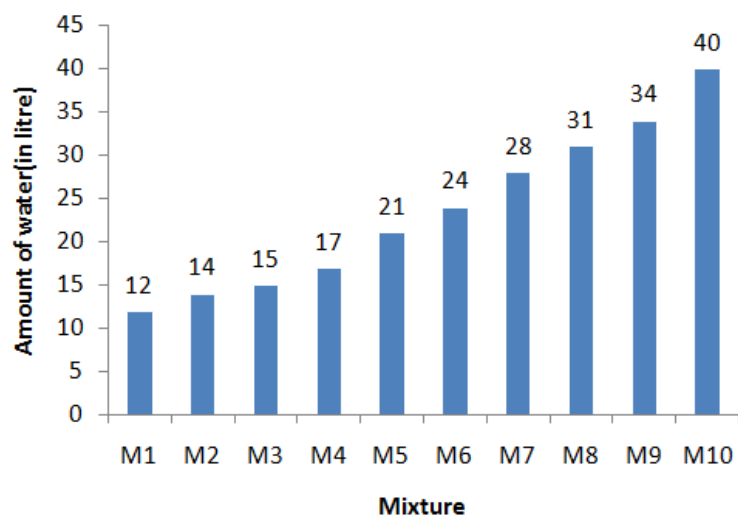
The amount of water in mixture M7 is how much more than the average amount of water per mixture?

A 4

B 4.4

C 4.2

D 4.6

   Answer: B

Question 62

Whatis the Least Common Multiple of all even numbers between 5 and 13?

A 120

B 90

C 180

D 60

   Answer: A

Explanation:
even no. between 5 to 13

6,8,10,12

$6 = 2\times 3$

$8 = 2\times 2\times 2$

10 =2\times 5

12 =2\times 2\times 3

Select the common terms

LCM = 2\times 2\times 2\times 3\times 5

= 120

Question 63

Average of 12 numbersis 48. If each numberis increased by 11, then what will be the new average?

A 13

B 58

C 64

D 59

Answer: D

Explanation:

average $= \frac{sum of no.}{total no.}$

$48 = \frac{sum of no.}{12}$

Sum of no.= 576

If each no. Is increased by 11

So, $11 \times 12 = 132$

New avg $= \frac{sum of no.}{total no.}$

New avg $= \frac{576+132}{12}$

$= 59$

Question 64

A sum of 21500 is invested at simple interest for x months.Ifthe rate of interest is =% per annum, then the sum grows to 1590. Whatis the value of x ?

A 3.2

B 2.4

C 32

D 24

Answer: D

Question 65

A man sold a watch at a discount of 60% for 21560. What is the marked price of the watch?

A ₹3900

B ₹3600

C ₹3300

D ₹3700

Answer: A

Explanation:
marked price = 100

Discount = 60

$= \frac{60}{100} 100$

$= 60$

s.p = marked price - discount

$= 100 - 60$

$= 40$

S.p = 1560

40=1560

$= 39$

So marked price $= 39 \times 100$

$=$ Rs 3900

Question 66

The Bar graph given below presents the amount (volume in litres) of water in ten different mixtures.
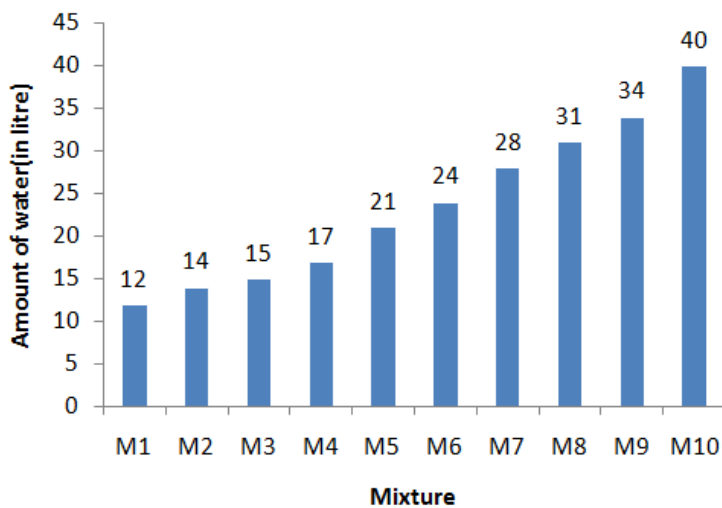
The amount of water in mixture M3 is what percent of amount of water in mixture M6?

A 44.5

B 62.5

C 50.5

D 56.5

Answer: B

Question 67

The difference between the cost price and the selling price of a bat is 180.If there is a profit of 20%, then what is the selling price ofthe bat?

A   ₹1080

B   ₹1240

C   ₹1040

D   ₹1120

Answer: A

Explanation:
let C.P = Rs 100

Profit = 20%

$\qquad$ = 20% of 100

$\qquad$ =Rs 20

So S.P =120

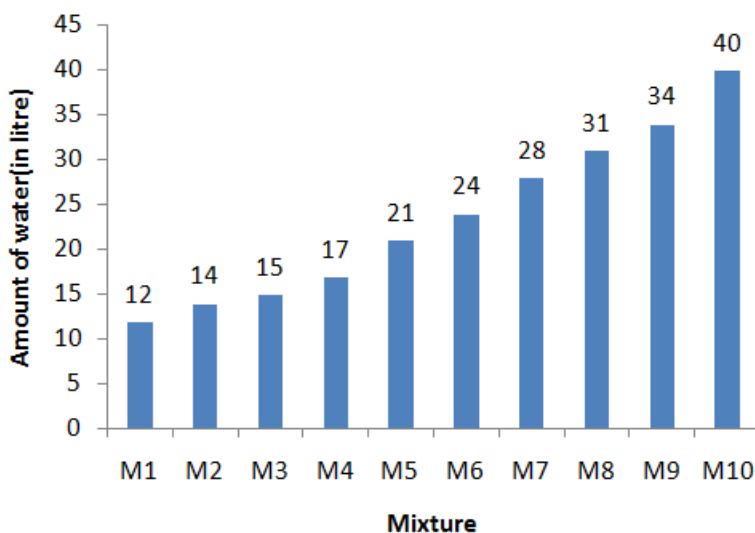Given that $C.P - S.P = 180$

$\qquad$ 20 = 180

$\qquad$ 1 = 9

So, $\qquad$ 120 = 120×9

$\qquad$ = Rs 1080

Question 68

The Bar graph given below presents the amount (volume in litres) of water in ten different mixtures.

What is the average amount of water per mixture?

A   24.8 litre

B   23.6 litre

C   24.4 litre

D 24 litre

   Answer: B

Question 69

The number of tables that can be purchased by a person in 22800 gets reduced by 20 if the price is increased by 40%. What is the initial price of each table?

A ₹40

B ₹36

C ₹56

D ₹48

   Answer: A

Question 70

What is the value of $\dfrac{\left(1-\frac{1}{4}\right)+\left(\frac{1}{2}\ of\ \frac{1}{2}\right)\div\frac{2}{5}}{\frac{2}{5}\div\frac{1}{4}+\frac{3}{2}\left(2-\frac{8}{5}\right)}$?

A $\frac{2}{3}$

B $\frac{5}{8}$

C $\frac{4}{5}$

D $\frac{5}{11}$

   Answer: B

Explanation:

Firstly solve bracket then apply bodmass

$$\frac{\left(1-\frac{1}{4}\right)+\left(\frac{1}{2}\ of\ \frac{1}{2}\right)\div\frac{2}{5}}{\frac{2}{5}\div\frac{1}{4}+\frac{3}{2}\left(2-\frac{8}{5}\right)}$$

$$\frac{\frac{3}{4}+\frac{1}{4}\div\frac{2}{5}}{\frac{2}{5}\div\frac{1}{4}+\frac{3}{5}}$$

$$\frac{\frac{3}{4}+\frac{5}{8}}{\frac{8}{5}+\frac{3}{5}}$$

$$\frac{5}{8}$$

Question 71

If $X^2 + Y^2 = 100$ and $X : Y = 4 : 3$, then what is the value of $X^2 - Y^2$?

A 18

B 28

C 36

D 24

  Answer: B

Explanation:

let X:Y= 4a:3a

$X^2 + Y^2 = 100$

Now put x, y value in above equation

$(4a)^2 + (3a)^2 = 100$

$25a^2 = 100$

a = 2

X= 8

Y= 6

$X^2 - Y^2 = 8^2 - 6^2$ = 64 - 36 = 28

Question 72

What is the median of 7, 18, 6, 9, 4, 15, 21, 14, 26?

A 14.5

B 14

C 15

D 16

  Answer: B

Explanation:

7, 18, 6, 9, 4, 15, 21, 14, 26

Arrange this no.

4,6,7,9,14,15,18,21,26

Middle term is our median

= 14

Question 73

Whatis the average ofall the multiples of6 from 20 to 80?

A 51

B 50

C 48

D 52

   Answer: A

Explanation:

Sum of no. $= \frac{no.ofterm}{2} \times (firstterm + lastterm)$

Avg $= \frac{sumofno}{no.Ofterm}$

$= \frac{firstterm+Lastterm}{2}$

First term which is multiplied by 6 after 20 is 24 and last no. Is 80

$= \frac{24+80}{2}$

$=52$

Question 74

A boatcovers 64 km upstream in 8 hours and 120 km downstream in 12 hours. Whatis the speed (in m/s)ofthe boat in still water

A 2.5

B 2

C 3.5

D 3

   Answer: A

Explanation:

downstream speed $= \frac{distance}{time}$

downstream speed $= \frac{120}{12}$

$=10$km/hr

upstream speed $= \frac{distance}{time}$

upstream speed $= \frac{64}{8}$

$= 8$km/hr

Speed of the boat in still water $= \frac{speedofupstream+speedofdownstream}{2}$

$= \frac{10+8}{2}$

$= 9$km/hr

Change into m/s

$=(9) \times \frac{5}{18}$ $=2.5$ m/s

Question 75

The height of a right circular cone is 24 cm and the radius of its base is 7 cm. What is the cost of painting the curved surface area of the cone at the rate of ₹6 per cm^2? (Take $\pi = \frac{22}{7}$)

A ₹3600

B ₹3300

C ₹880

D ₹4200

Answer: B

Explanation:

r= 7 cm

Curved surface area of cone $= \pi \times r \times l$

$l = \sqrt{r^2 + h^2} = 24^2 + 7^2 = 576 + 49 = \sqrt{625}$

= 25 cm

Curved surface area of cone $= \pi \times 7 \times 25$

= 550 cm^2

Given ,rate = ₹6 per cm^2

$= 550 \times 6$

= Rs3300

General knowledge

Instructions

For the following questions answer them individually

Question 76

What will be the size of image formed by a concave mirror when an object placed between Pole and Focus?

A Same Size

B Enlarged

C Point Size

D Diminished

Answer: B

Question 77

Where was Guru Nanak Dev born?

A Gurdaspur

B Jalalabad

C   Talwandi

D   Phillaur

    Answer: C

Question 78

Which of the following is NOT an Indian Multi National Company?

A   Mahindra Group

B   Unilever

C   Infosys

D   Aditya Birla Group

    Answer: B

Question 79

In which year the National Food Security Act was passed in India?

A   2011

B   2013

C   2012

D   2014

    Answer: B

Question 80

In which of the following state 'Hampi Dance Festival' is celebrated?

A   Kerla

B   Karnataka

C   Tamilnadu

D   Telangana

    Answer: B

Question 81

Which state in India has made roof top rainwater harvesting structure compulsory to all the houses in the state?

A   Maharastra

B   Kerala

C   Tamil Nadu

D   Odisha

Answer: C

Question 82

What combination of paternal chromosome results in a female?

A ZX

B XX

C YZ

D XY

   Answer: B

Question 83

Who is the Minister of Youth Affairs and Sports in India as of June 2019?

A Vijay Goel

B Kiren Rijiju

C Rajyavardhan Singh Rathore

D Jitendra Singh

   Answer: B

Question 84

Which of the following gas causes rancidity in food product?

A Oxygen

B Hydrogen

C Nitrogen

D Carbon monoxide

   Answer: A

Question 85

Who among the following is the writer of the novel 'The room on the roof'?

A Ruskin Bond

B Khushwant Singh

C Manohar Malgonkar

D R. K. Narayan

   Answer: A

Question 86

Which of the following synthetic chemical is responsible for ozone layer depletion?

A   Biopolymer

B   Chlorofluorocarbons

C   Polyvinylchloride

D   Methanol

Answer: B

Question 87

Arundhati Roy is the recipient of which of the following International awards?

A   Ramon Magsaysay

B   Noble Prize

C   Pulitzer Prize

D   Man Booker Prize

Answer: D

Question 88

Amoeba' belongs to which of the following kingdom?

A   Monera

B   Fungi

C   Protista

D   Animalia

Answer: C

Question 89

Who is known as 'Haryana Hurricane'?

A   Kapil Dev

B   Jogindar Rao

C   Virendra Sehwag

D   Yuzvendra Chahal

Answer: A

Question 90

he Hanging Gardens of Babylon is associated to which of the following ancient cultures?

A   Egyptian

B   Mesopotamia

C   Chinese

D   Harappan

Answer: B

Question 91

Which dynasty had developed the Gandhara School of Art in ancient India?

A   Kushan dynasty

B   Gupta dynasty

C   Mauryan dynasty

D   . Chola dynasty

Answer: A

Question 92

Which of the following Motif is present on 2000 Rupee note of Indian Currency?

A   Mangalyaan

B   Sanchi Stupa

C   Sun Temple

D   Hampi with Chariot

Answer: A

Question 93

Who was appointed as Assembly's Constitutional Adviser in 1946 during the framing of Indian Constitution?

A   B.N. Rau

B   B.R. Ambedkar

C   Gopalswami Ayengar

D   K.M. Munshi

Answer: A

Question 94

With reference to the GI Tag in India, which of thee following pairs is correct?

A   Chanderi saree - Maharashtra

B   Aranmula Kannadi - Karnataka

C   East India Leather - Tamil Nadu

D   Kani Shawl - Gujarat

    Answer: C

Question 95

Which article in Indian Constitution states about Fundamental Duties?

A   Article 31C

B   Article 21A

C   Article 15

D   Article 51A

    Answer: D

Question 96

What is the name of Captain of Indian Mens National Hockey team 2019?

A   Hardik Singh

B   Jaskaran Singh

C   Sandeep Singh

D   Manpreet Singh

    Answer: D

Question 97

Where is headquarter of Allahabad Bank situated?

A   Allahabad

B   Hyderabad

C   Mumbai

D   Kolkata

    Answer: D

Question 98

What was the name of Swami Vivekananda's Guru?

A   Ramana Maharishi

B   Paramhansa Yogananda

C   Adi Shankaracharya

D   Ramkrishna Paramhansa

   Answer: D

Question 99

When was the national anthem adopted in its Hindi version?

A   24 January 1950

B   26 January 1950

C   2 October 1948

D   15 August 1947

   Answer: A

Question 100

Guru Ghasidas National Park is located in:

A   Chhattisgarh

B   Madhya Pradesh

C   Uttar Pradesh

D   Bihar

   Answer: A

SSC MTS 7th August 2019 Shift-2
English

Instructions

For the following questions answer them individually

Question 1

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

My car broke off on my way to home.

A   down

B   out

C   on

D   No Improvement

   Answer: A

Question 2

Select the most appropriate option to fill in the blank.
She returned the book after she _____ it.

A   reads

B   read

C   had read

D   Was read

   Answer: C

Question 3

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
There is few to be said on both sides. /No error

A   to be said

B   There is few

C   on both sides

D   No error

   Answer: B

Question 4

Choose the correctly spelt word.

A   Disccusion

B   Suspition

C   Adjourn

D Procedings

  Answer: C

Question 5

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.
I will write to you when <u>I will reach</u> New Delhi.

A I reach

B I will be reaching

C I am reached

D No Improvement

  Answer: A

Question 6

Select the most appropriate antonym of the given word.
Quarrel

A Strife

B Feud

C Harmony

D Bias

  Answer: C

Question 7

Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.
We must start now <u>unless</u> it will be too late.

A but

B or

C no improvement

D untill

  Answer: B

Question 8

Select the most appropriate meaning of the given idiom.
Let bygones be bygones

A Neat and tidy

B Just at the last moment

C To remember the past

D To forgive and forget

Answer: D

Question 9

Find the part of the given sentence that has an error in it. If there is no error, choose 'Noerror'.
Some people is always talking about themselves. /No error

A o error

B about themselves

C Some people

D is always talking

Answer: D

Question 10

Select the most appropriate option to fill in the blank.
The passengers were afraid, but the captain _____ them that there was no danger.

A cautioned

B assured

C claimed

D confided

Answer: B

Question 11

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
She loved herself so more that she thought of no one else. /No error

A thought of no one else

B No error

C so more that she

D she loved herself

Answer: C

Question 12

Select the most appropriate option to fill in the blank.
Akbar had a _____ reign than Babar

A more long

B longer

C longest

D long

   Answer: B

Question 13

Select the most appropriate antonym of the given word.

A Obliterate

B Abolish

C Preserve

D Shine

   Answer: C

Question 14

Select the most appropriate option to fill in the blank.
The frightened convict _____ for mercy

A shouted

B whispered

C mumbled

D pleaded

   Answer: D

Question 15

Select the most appropriate meaning of the given idiom.
To lead by the nose

A To hit someone on the nose

B To completely control someone

C To burden someone with work

D To depend totally on someone

   Answer: B

Question 16

Select the most appropriate synonym of the given word.
Eager

A Satisfied

B Active

C Keen

D Alert

Answer: C

Question 17

Choose the most appropriate word that can substitute the given group of words.
Person with no fixed abode

A Artist

B Crusader

C Nomad

D Tourist

Answer: C

Question 18

Select the most appropriate synonym of the given word.
Strange

A despair

B conventional

C abnormal

D natural

Answer: B

Question 19

Choose the most appropriate word that can substitute the given group of words.
A polygon with eight sides and eight angles

A Triangle

B Hexagon

C Octagon

D Pentagon

Answer: C

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 blank.

Comprehension:

The Harmandir Sahib, also known as Darbar Sahib is a Gurudwara (1)_____ in the city of Amritsar. It (2)_____ an eminent pilgrimage site (3)_____ Sikhism. It is usually (4)_____ the Golden Temple in English (5)_____ it is plated with gold.

Question 20

Select the most appropriate option for blank No. 1.

A   locate

B   located

C   locates

D   locating

   Answer: B

Question 21

Select the most appropriate option for blank No. 2.

A   is

B   was

C   has

D   are

   Answer: A

Question 22

Select the most appropriate option for blank No. 3.

A   of

B   on

C   by

D   with

   Answer: A

Question 23

Select the most appropriate option for blank No. 4.

A   named

B   known

C   regarded

D   called

   Answer: D

Question 24

Select the most appropriate option for blank No. 5.

A   even

B   also

C   but

D   because

   Answer: D

Instructions
For the following questions answer them individually

Question 25

Choose the correctly spelt word.

A   Explanation

B   Submision

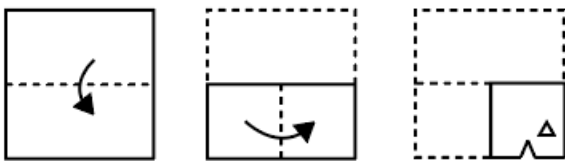**C**   Conquor

D   Confidense
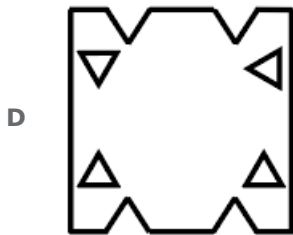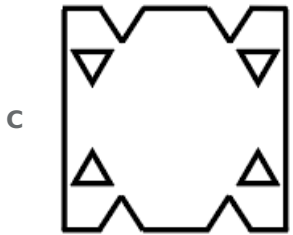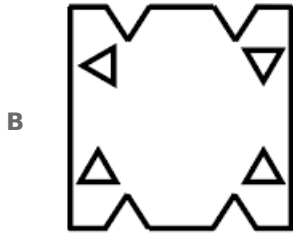
   Answer: A

Reasoning

Instructions
For the following questions answer them individually

Question 26

A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened ?

A

B

C

D
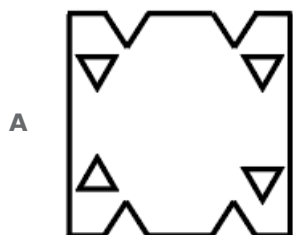
Answer: C

Question 27

Six phones P1, P2, P3, P4, P5 and P6 are placed in a row facing towards north (Not necessarily in the same order). P1 is placed to the immediate left of P6. P5 is placed second to the left of P2. P4 is placed second to the right of P6. P4 is to the immediate right of P5. P3 is towards the left of P1. How many phones are placed between P3 and P6?
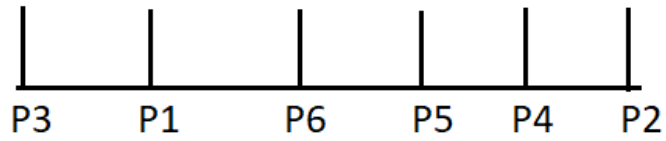
A   4

B   1

C   0

D   2

Answer: B

Explanation:

P3   P1   P6   P5   P4   P2

So, there is only one phone between P3 and P6 i.e; P1

Question 28

Five tables T1, T2, T3, T4 and T5 are kept one above the other (Not necessarily in the same order). Number of tables above T4 are same as the number of tables below T5. T3 is just above T1. T5 is at the bottom. There are two tables between T2 and T5. Which of the following is the correct position of T1?

A   T1 is just above T5

B   T1 is just below T5

C   T1 is three places below T2

D   T2 is two places below T1

  Answer: A

Explanation:

T4
_____

T2
_____

T3
_____

T1
_____

T5
_____
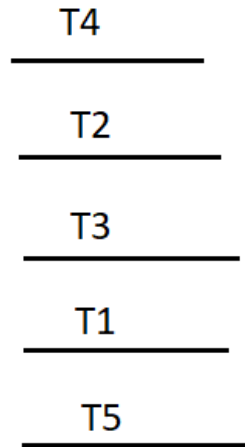
So, here T1 is just above T5.

Question 29

In a certain code language, 'RAFTS' is written as '96432', 'WEBAR' is written as '75169'. What is the code for 'FRAWT' in that code language?

A   49673

B   49672

C   49675

D   49671

   Answer: A

Explanation:
This type of coding is called direct coding.

Here, R=9, A=6, F=4, T=3, S=2

and, W=7, E=5, B=1, A=6, R=9

These numbers for the letter are just given here. So, FRAWT= 49673

Question 30

In a certain code language, 'HORSED' is written as 'ABPOLE'. What is the code for 'PRISON'in that code language?

A   LMQGPN

B   LNQGPN

C   KMPFOM

D KLPFOM

Answer: D

Question 31

By interchanging which two signs the equation will be correct?
$11 + 9 - 4 \times 12 \div 6 = 32$

A $\div \, and \, -$

B $- \, and \, +$

C $\times \, and \, +$

D $\times \, and \, \div$

Answer: A

Question 32

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
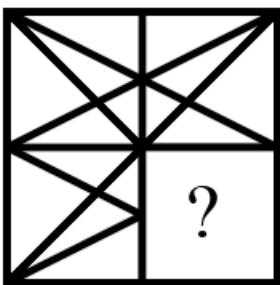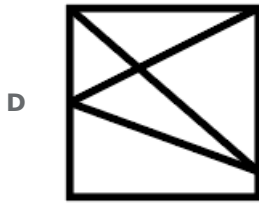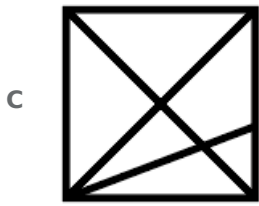**JG, FC, BY, XU, ?**

A TR

B VQ

C VR

D TQ

Answer: D

Question 33

Study the given pattern carefully and select the figure that will complete the pattern given in the question figure.

A

B

C

D
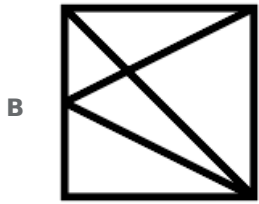
Answer: B

Question 34

After interchanging the given two signs, what will be the value of $9 + 143 \div 13 \times 11 - 160 = ?$
$\times \ and \div$

A   18

B   -32

C   -17

D   28

Answer: A

Question 35

Select the number that can replace the question mark (?) in the following series.
13, 22, 33, 48, 69, ?

A   112

B   96

C   98

D   88

Answer: C

Question 36

In the following question, select the figure which can be placed at the sign of question mark (?) from the given alternatives

A

B

C

D
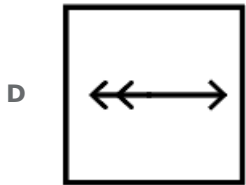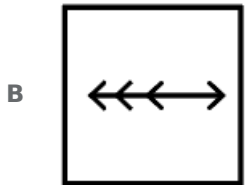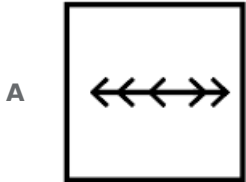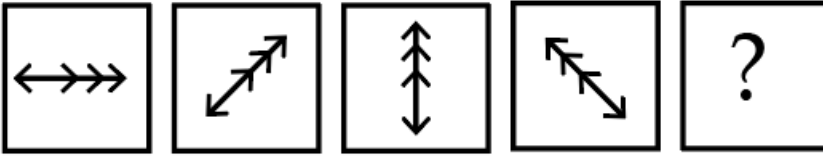
Answer: B

Explanation:
Here, the three arrows are moving in 45° anticlockwise direction. So the answer figure will be option B

Question 37

In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

7	6	3	48
4	9	8	63
2	5	7	?

A 68

B 37

C 64

D 42

Answer: D

Explanation:

Here, (7+6+3) =16

$16 \times 3 = 48$

Similarly, (2+5+7)=14

Here, $14 \times 3 = 42$

Question 38

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
Statements:
I. Some P are Q.
II. Some S are R.
III. No R is Q.
Conclusions:
I. Some S are Q.
II. Some Q are P.
III. Some R are S.

A Both conclusion I and II follows

B Both conclusion II and III follows

C Neither conclusion follow

D Only conclusion I follows
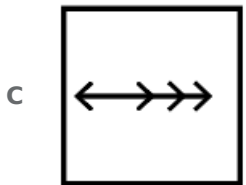
Answer: B

Question 39

Select the number that can replace the question mark (?) in the following series.
197, 220, 244, 269, 295, ?

A 328

B 322

C 330

D 312

Answer: B

Question 40

Select the option that is related to the third term in the same way as the second term is related to the first term.
Nest : Bird :: Palace : ?

A Jeep

B Soldier

C Big

D King

Answer: D

Explanation:

The living place of birds is nest similarly, living place of King is palace.

Question 41

Select the option that is related to the third number in the same way as the second number is related to the first number.
31 : 963 :: 17 : ?

A 291

B 290

C 289

D 287

Answer: A

Explanation:

Here, square of 31=961 and 961+2=963.

Similarly, square of 17=289 and 289+2=291.

Question 42

From the given answer figures, select the one in which the question figure is hidden/embedded. (Rotation is not allowed)

A

B

C

D
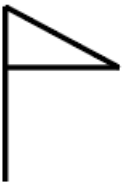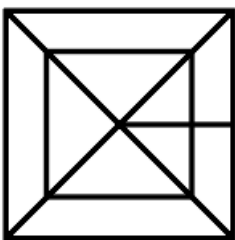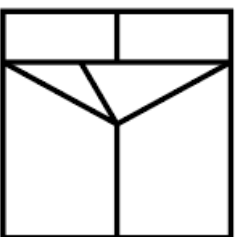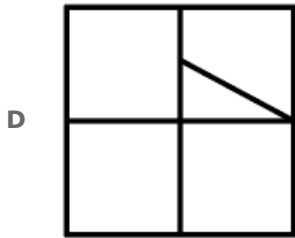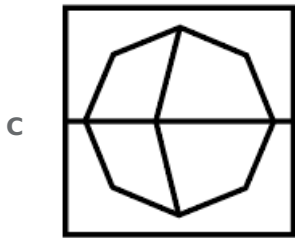
Answer: D

Question 43

Select the option in which the letters share the same relationship as that shared by the given pair of letters.
GUN : JYS :: ?

A   TOL : WSQ

B   NAP : QWU

C   HUB : KYH

D   SUC : VYG

Answer: A

Question 44

Five teachers P, K, A, R and M are sitting in a row facing towards south (Not necessarily in the same order). K is sitting second to the right of R. M is sitting to the immediate right of P.Two teachers are sitting between M and A. Who is sitting to the immediate left of R?

A   M

B   K

C   P

D   A

Answer: D

Question 45

Identify the Venn diagram that best represents the relationship between the given classes.
Female, Mother, Sister

A

B

C

D
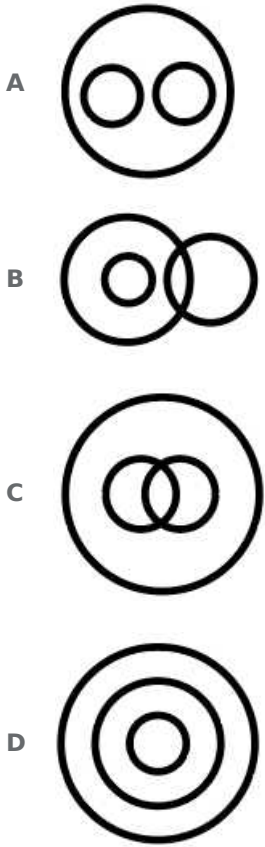
Answer: C

Question 46

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

A

B

C

D
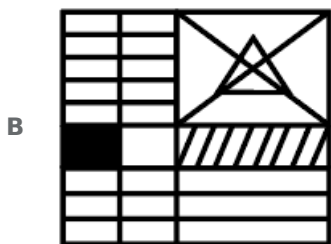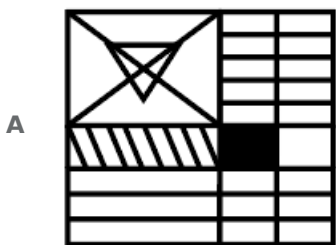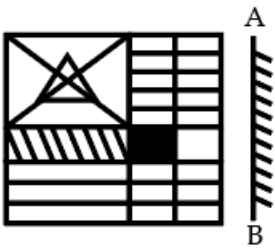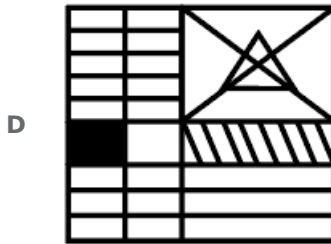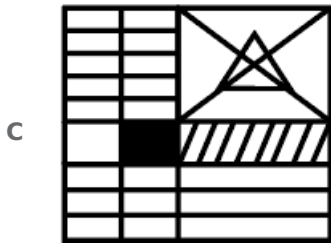
Answer: C

Question 47

In a certain code language, 'CHIRPS' is written as 'AJGTNU'. What is the code for 'RAINED' in that code language?

A QEHQEG

B PDGPDF

C PCGPCF

D QDHQDG

Answer: C

Question 48

Select the option that is related to the third term in the same way as the second term is related to the first term.
Amphibian : Frog :: Insect : ?

A Butterfly

B Ostrich

C Rat

D Snake

Answer: A

Explanation:
Frog is a type of amphibian. Similarly, Butterfly is a type of insect.

Question 49

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
Statements:
I. No T is R.
II. All R are V.
Conclusions:
I. Some V are R.
II. Some T are R.
III. All V are T.

A   Only conclusion I follows

B   Both conclusion I and III follows

C   Both conclusion II and III follows

D   Neither conclusion follow

   Answer: A

Question 50

In a certain code language, 'SOL,' is written as '45', 'KIN' is written as '33'. What is the code for 'OWL' in that code language?

A   49

B   50

C   48

D   51

   Answer: A

Explanation:
Here, S=19, O=15, L=12

So, (19+15+12)=46-1=45

Therefore, O=15, W=23, L=12

(15+23+12)=50-1=49.

Quant

Instructions
For the following questions answer them individually

Question 51

The data below shows the number of wickets taken by each bowler and the number of bowlers who took them.

Number of Wickets per bowler	Number of Bowlers
5	2
4	3
3	4
2	5
1	9

What is the median of the number of wickets?

A 3

B 2

C 4

D 2.5

  Answer: B

Question 52

If discount offered on a article is 40%,then what will be the ratio selling price and marked price?

A   2 : 5

B   4 : 7

C   5 : 8

D   3 : 5

  Answer: D

Explanation:
Let marked price = 100

discout %= 40%

 Discount $= \frac{40}{100} 100$

       = 40

Selling price will be= marked price - discount

                = 100-40

                =60

the ratio selling price and marked price

60 : 100

3 : 5

Question 53

The ratio(by volume) of milk and water in a mixture is 2 : 1. If we add 12 litres of water in the mixture, then the ratio of milk and water becomes 4 : 3. What is the quantity of water in the new mixture?

A   84 litres

B   24 litres

C   38 litres

D   46 litres

   Answer: D

Explanation:
The ratio(by volume) of milk and water in a mixture is 2 : 1.

After adding 12 litres of water

New ratio becomes =4:3

 the ratio of milk before and after adding water is same

To equalise the mike ratio before and after , multiply 2:1 with 2

=4:2

Now water ratio is changed ,(4:3)-(4:2)

1 = 12 lit

Quantity of water in new mixture= 3×12

                           = 36 lit

Question 54

Ajay sold an article for 284 at a loss of 30%. If he sells the same article at 120, then what will be his profit or loss percentage?

A   10% loss

B   15% loss

C   20% profit

D   Noprofit no loss

   Answer: D

Question 55

A sum of ₹900 is invested at compound interest (compounded annually) for 2 years. If the rate of interest is 10% per annum, then what will be the amount?

A   ₹1071

B ₹1089

C ₹1289

D ₹1121

  Answer: B

Explanation:

compound interest $= P(1 + \frac{R}{100})^n$

$= 900(1 + \frac{10}{100})^2$

$= 900 \times (\frac{11}{10})^2$

$= 900 \times (\frac{11}{10}) \times (\frac{11}{10})$

$=$Rs1089

Question 56

The Bar graph shown below presents the number of employees in an office during eight consecutive years.
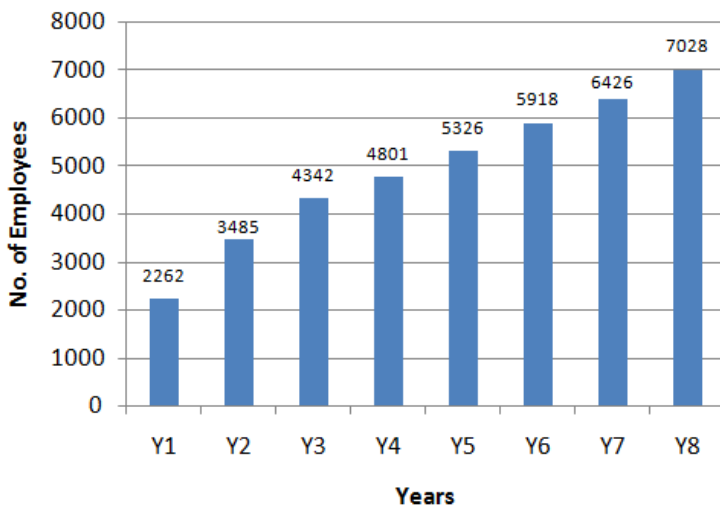
What is the average number of employees per year?

A 5148.5

B 5348.5

C 5548.5

D 4948.5

  Answer: D

Question 57

A takes 10 minutes more than B in covering a certain distance. If their speedsare in the ratio of 3 : 4, then whatis thetime taken by B to cover the same distance?

A 40 minutes

B 30 minutes

C 50 minutes

D 20 minutes

Answer: B

Explanation:

Given ,

Distance by A,B= D

Speed ratio= 3:4

Time= $\frac{distance}{time}$

Time taken by A - Time taken by B = 10min

$\frac{D}{3} - \frac{D}{4} = 10$

$\frac{D}{12} = 10$

D= 120m

Time taken by B= $\frac{120}{4}$

$\qquad\qquad$ = 30 min

Question 58

C and D together can make a chair in 4 days and C alone can make this chair in 12 days. In how many days D alone can make this chair?

A   10 days

B   6 days

C   4 days

D   8 days

   Answer: B

Explanation:

C+D = 4 days

C   = 12 days

Total work = lcm(4,12)

$\qquad\qquad$ =12

Efficiency of C+D= 12 ÷ 4 =3

Efficiency of C   = 12 ÷ 12 =1

So ,

Efficiency of D= (Efficiency of C+D)-(Efficiency of C)

$\qquad\qquad$ = 2

So, D can work alone = $totalwork \div 2$

$\qquad\qquad\qquad$ = 6 days

Question 59

If length of the diagonals of a rhombus are 24 and 18 cm .what is the area of a rhombus?

A 196 cm^2

B 188 cm^2

C 204 cm^2

D 216 cm^2

Answer: D

Explanation:

length of the diagonals of a rhombus are 24 and 18 cm

Area of Rhombus = $\frac{length\,of\,diagonl1 \times length\,of\,diagonal2}{2}$

$\frac{24 \times 18}{2}$

=216 cm^2

Question 60

The simple interest on a certain sum for two years is 1000 at the rate of 10% per annum. What is the amount after these two years?

A ₹6500

B ₹6000

C ₹7000

D ₹5500

Answer: B

Explanation:

S.I = $\frac{P \times R \times T}{100}$

1000 = $\frac{P \times 10 \times 2}{100}$

P= 5000

Amount = S.I + P

1000+ 5000

= 6000Rs

Question 61

If $V1 : V2 = 1 : 2$ and $V1 + V2 = 147$, then what is the value of $V2 - V1$?

A 48

B 56

C 98

D 49

   Answer: D

Explanation:

let $v1 : v2 = 1x : 2x$

Given ,

$v1 + v2 = 147$

3x=147

x=49

v1=49,v2=98

So,

$v1 - v2 = 49$

Question 62

The average of 36, 28, 43, 56, 74, 65, 12 and x is 45. What is the value of x ?

A 48

B 42

C 44

D 46

   Answer: D

Explanation:

Avg $= \frac{36+28+43+56+74+65+12+X}{8}$

$45 = \frac{36+28+43+56+74+65+12+X}{8}$

X=46

Question 63

If the Least Common Multiple of 56, 57 and 58 is K, then what will be the Least Common Multiple of 56, 57, 58 and 59?

A 177 K

B 59 K

C 56 K

D 57 K

   Answer: B

Explanation:

lcm of 56,57,58 is k

then lcm of k and 59 is 59k

Question 64

₹975 is distributed among Anuj, Bharat and Shekhar. The proportion of their shares is 3 : 4 : 8 , respectively. What is the share of Bharat?

A   ₹198

B   ₹260

C   ₹296

D   ₹280

   Answer: B

Explanation:

Bharat share $= \frac{bharat\,ratio}{total\,ratio} \times 975$

$= \frac{4}{15} \times 975$

= Rs 260

Question 65

320 is how much percentage less than 100?

A   20%

B   18%

C   12%

D   15%

   Answer: A

Question 66

Two articles were sold of ₹2400 each by a shopkeeper. The shopkeeper incurred no profit and no loss on the whole transaction. If one of the two articles sold at a profit of 20%, then what was the loss incurred on the other article?

A   ₹600

B   ₹400

C   ₹380

D   ₹240

   Answer: B

Explanation:

selling price = 2400

Profit of 1st article $= \frac{20}{100}$

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

Here

1-> profit

5->c.p

S.p -> 6

6=2400

1= 400

Profit = 400

For no loss and profit case

Loss should be 400

Question 67

The base and hypotenuse of a right angled triangle are 9 cm and 41 cm respectively. What is the area of the triangle?

A   180 cm^2

B   170 cm^2

C   190 cm^2

D   160 cm^2

   Answer: B

Question 68

The Bar graph shown below presents the number of employees in an office during eight consecutive years.
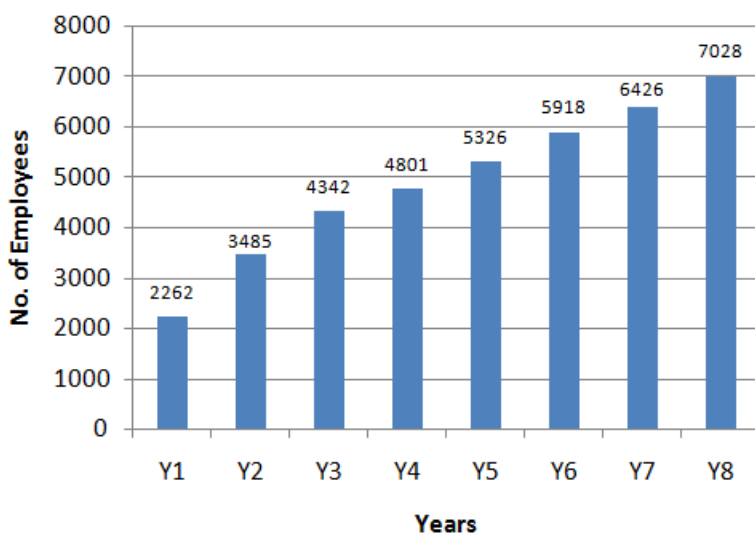
What is the growth percentage in the number of employees from Y5 to Y6?

A   10.00

B   11.96

C   11.11

D   12.04

   Answer: C

Question 69

If Dev can make 40 chairs in 20 days, working 10 hours per day then in how many days can he make 10 chairs working 8 hours per day?

A   8

B   6

C $6\frac{1}{4}$

D $7\frac{1}{2}$

   Answer: C

Explanation:
solved by chain rule,

$M1 \times H1 \times D1 \times W2 = M2 \times H2 \times D2 \times W1$

$10 \times 10 \times 20 = 8 \times D2 \times 40$

D2 =
$6\frac{1}{4}$

Question 70

What is the area of the largest square which can be inscribed in a circle of radius 28 cm ?

A   3136 cm^2

B   1578 cm^2

C   784 cm^2

D   196 cm^2

   Answer: B

Explanation:
R = 28 cm

Area of square= $a \times a$

side of square should be less than diameter of circle

So by checking option

1-> 56 is side which is equal to diameter

2-> 40 is side which is less than diameter

And remaining option side is less

So answer is 1578 cm^2

Question 71

The Bar graph shown below presents the number of employees in an office during eight consecutive years.
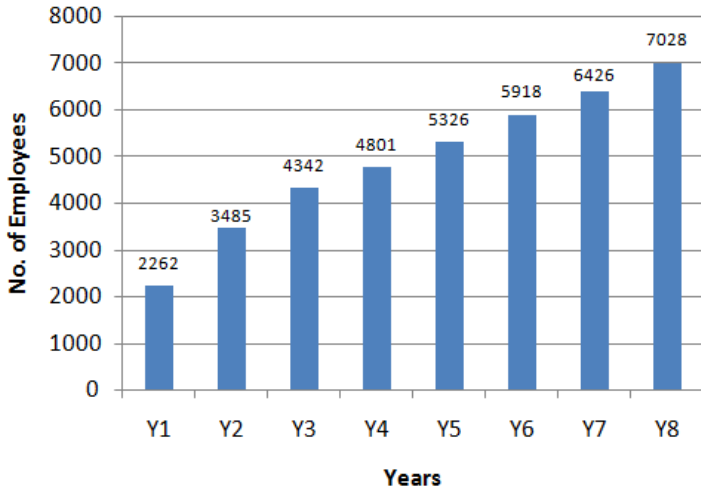
The number of employees in year Y2 is how much percent less than average number of employees per year?

A 29.57%

B 23.57%

C 41.54%

D 35.57%

Answer: A

Question 72

What is the value of $\left(1 + \frac{3}{4}\right) \times \frac{3}{21} \ of \ 5\frac{1}{3} \div \frac{128}{49} + \frac{2}{3} \times \frac{7}{11} \times \frac{121}{49} \div \left(\frac{15}{14} - \frac{2}{7}\right)$?

A $\frac{69}{25}$

B $\frac{62}{29}$

C $\frac{57}{41}$

D $\frac{59}{32}$

Answer: D

Explanation:

$\left(1 + \frac{3}{4}\right) \times \frac{3}{21} \ of \ 5\frac{1}{3} \div \frac{128}{49} + \frac{2}{3} \times \frac{7}{11} \times \frac{121}{49} \div \left(\frac{15}{14} - \frac{2}{7}\right)$

$\frac{7}{4} \times \frac{3}{21} \ of \ 5\frac{1}{3} \div \frac{128}{49} + \frac{2}{3} \times \frac{7}{11} \times \frac{121}{49} \div \frac{11}{14}$

$\frac{7}{4} \times \frac{16}{21} \div \frac{128}{49} + \frac{2}{3} \times \frac{7}{11} \times \frac{121}{49} \div \frac{11}{14}$

$\frac{7}{4} \times \frac{7}{24} + \frac{2}{3} \times \frac{7}{11} \times \frac{22}{7}$

$\frac{49}{96} + \frac{4}{3}$

$\frac{177}{96}$

Question 73

The average age of a group of 20 men is 30 years. A 50 year old man leaves the group, while a woman joins the group. The average age decreases by 1 year. What is the age of the woman ?

A 40 years

B 30 years

C 35 years

D 38 years

    Answer: B

Question 74

A train moves at the years speed of 80 km/h and crosses a platform in 0.75 minutes. If the length of the train is equal to the length of the platform, then what is the length of the platform?

A 400 m

B 480 m

C 450 m

D 500 m

    Answer: D

Explanation:

speed $= \frac{length\, of\, train + length\, of\, platform}{time}$

Let length of train = l = length of platfom

$80 \times \frac{5}{18} = \frac{l+l}{0.75 \times 60}$

l = 500 metre

Question 75

If $A = 2 \div 3 \times 4, B = 3 \, of \, 4 + (7 - 2)$ **and** $C = 4 + 5 - 6$**, then what is the value of** $A + B + C$**?**

A $\frac{85}{3}$

B $\frac{79}{3}$

C $\frac{59}{3}$

D $\frac{68}{3}$

    Answer: D

Explanation:

$A = 2 \div 3 \times 4, B = 3 \, of \, 4 + (7 - 2)$ and $C = 4 + 5 - 6$

First solve bracket then apply bodmas rule

$A = \frac{8}{3}$

B = $3 \, of \, 4 + (7 - 2)$

   $= 12 + 5$

   $= 17$

C = $4 + 5 - 6$

   =3

Then

A+B +C= $\frac{8}{3}$ +17 +3

            $= \frac{68}{3}$

General knowledge

Instructions

For the following questions answer them individually

Question 76

Who introduced 'Charbagh' style of architecture in India?

A   Mughals

B   Rajputs

C   Mauryas

D   Marathas

   Answer: A

Question 77

Which of the following is NOT a Constitutional body?

A   Finance commission

B   NITI Aayog

C   National Commission for Schedule Tribes

D   Election commission

   Answer: B

Question 78

Which of the following regions of northern plains is the most fertile?

A   Khadar

B   Terai

C   Bhabar

D   Bhangar

   Answer: A

Question 79

Who invented penicillin?

A   Galileo Galilei

B   Alexander Fleming

C   Evangelista Torricelli

D   Theodore H. Maiman

   Answer: B

Question 80

'Broom and Groom' book is co-authored by:

A   Salman Rushdie

B   Shashi Tharoor

C   Kiran Bedi

D   Narendra Modi

   Answer: C

Question 81

Which of the following Scheme is described in Union Budget 2019-20?

A   Pradhan Mantri Sahaj Bijli Har Ghar Yojana

B   Pradhan Mantri Ujjwala Yojana

C   Pradhan Mantri Jan Arogya Yojana

D   Pradhan Mantri Shram Yogi Maandhan

   Answer: D

Question 82

Bruny Surin, the Olympian athlete belongs to which of the following countries?

A   Spain

B   Austria

C   Mexico

D   Canada

   Answer: D

Question 83

Where is the Great Barrier Reef located?

A   Australia

B   Bahrain

C   Peru

D   Mexico

   Answer: A

Question 84

The full form of INTACH is:

A   Indian National Trust for Art and Cultural Heritage

B   Indian National Trust for Archaeological and Cooperative Heritage

C   Indian National Trust for Architectural and Calligraphic Heritage

D   Indian National Trust for Art and Cooperative Heritage

   Answer: A

Question 85

Bagh caves are situated in which state?

A   Madhya Pradesh

B   Uttar Pradesh

C   Karnataka

D   Assam

   Answer: A

Question 86

Katarniaghat Wildlife Sanctuary is situated in which state?

A   Uttar Pradesh

B   Karnataka

C   Madhya Pradesh

D   Bihar

   Answer: A

Question 87

Who is the Author of the book "The Bachelor of Arts"?

A   Ruskin Bond

B   R. K. Narayan

C   Rudyard Kiplimg

D   Vikram Seth

   Answer: B

Question 88

The High Court of Kerala and Lakshadweep is situated at:

A   Ernakulam

B   Thrissur

C   Kochi

D   Kannur

   Answer: A

Question 89

Which of the following countries was the earliest to give women the right to vote?

A   Australia

B   France

C   UK

D   USA

   Answer: A

Question 90

Who among the following is a co-founder of e-commerce store Flipkart?

A   Peyush Bansal

B   Vishal Sikka

C   Binny Bansal

D   Rohit Bansal

    Answer: C

Question 91

Sveriges Riksbank Prize in Economic Sciences is awarded every year in the memory of

A   John Keynes

B   Karl Marx

C   Alfred Nobel

D   Adam Smith

    Answer: C

Question 92

The Subject of Sports comes under which list of Indian Constitution?

A   Union list

B   State list

C   Residuary list

D   Concurrent list

    Answer: B

Question 93

Subhas Chandra Bose was elected President of the Haripura Congress Session in _____.

A   1938

B   1942

C   1936

D   1940

    Answer: A

Question 94

Arrange the following hills according to their location from north to south:
1. Nallamala hills
2. Shevaroy hills
3. Palkonda hills
4. Javadi hills

A 4-2-1-3

B 1-3-2-4

C 1-3-4-2

D 3-1-4-2

 Answer: C

Question 95

Who is the Chairman of National Commission of Population control?

A Union Minister of Health and Family Welfare

B President

C Secretary of Concerned Department

D Prime Minister

 Answer: D

Question 96

Which of the following passes are NOT correctly matched with their location?

A Zojila pass - Jammu and Kashmir

B Mana pass - Uttarakhand

C Shipki-la pass - Arunachal Pradesh

D Nathu - la pass - Sikkim

 Answer: C

Question 97

In which of the following peasant uprisings, Sardar Vallabhbhai Patel took part?

A Eka Movement

B Tebhaga Movement

C Kisan Sabha

D Bardoli Satyagrah

 Answer: D

Question 98

Rotavirus vaccine is used to prevent which disease?

A   Polio

B   Diarrhoea

C   AIDS

D   Hepatitis

   Answer: B

Question 99

Tiger belongs to which category under IUCN

A   Endangered

B   Critically endangered

C   Extinct

D   Vulnerable

   Answer: A

Question 100

Which of the following department publishes Index of Industrial Production (IIP)?

A   Central Statistics Office

B   National Sample Survey Organisation

C   Department of Industrial Policy and Promotion

D   Labour bureau

   Answer: A

SSC MTS 7th August 2019 Shift-3

English

Instructions
For the following questions answer them individually

Question 1

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.
It take her a long time to get over her failure in the examination. /No error

A   long time to get over

B   her failure in the examination

C   No error

D   It take her a

   Answer: D

Question 2

Select the most appropriate option to fill in the blank.
My little cousin is _____ a movie.

A   watching

B   looking

C   seeing

D   observing

   Answer: A

Question 3

Select the most appropriate option to substitute the underlined segment in the given sentence,if there is no need to substitute it,select No improvement.
The inflation rate <u>raised up</u> 8% last month.

A   rose to

B   no improvement

C   rise to

D   raise up

   Answer: A

Question 4

Select the most appropriate antonym of the given word.
Morose

A   Cranky

B   Cheerful

C Prudent

D Solemn

   Answer: B

Question 5

Choose the most appropriate word that can substitute the given group of words.
The state of growing to maturity

A Immigrant

B Innocence

C Adolescence

D Apartheid

   Answer: C

Question 6

Select the most appropriate meaning of the given idiom.
To pull someone's legs

A Of a kind and sympathetic nature

B To use all possible methods

C To play a joke on someone

D Not a serious information

   Answer: C

Question 7

Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

Don't worry, there is less time for the train to arrive. /No error

A Don't worry,

B there is less time

C No error

D for the train to arrive

   Answer: B

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 blank.

Comprehension:

Television in India made a humble beginning in September, 1959. The first television programmes were meant (1)____ schools and rural areas. The first general services on a (2)____ basis started in August, 1965. Colour television came into (3)____ in on the eve of the Ninth Asian Games. Around (4)____ time it became possible to take television programmes to rural areas (5)____ the help of satellites. November, 1982

Question 8

Select the most appropriate option for blank No. 1.

A   on

B   at

C   to

D   for

   Answer: D

Question 9

Select the most appropriate option for blank No. 2.

A   regular

B   usual

C   proper

D   final

   Answer: A

Question 10

Select the most appropriate option for blank No. 3.

A   existence

B   establishment

C   creation

D   location

   Answer: A

Question 11

Select the most appropriate option for blank No. 4.

A   it

B   this

C   those

D   these

   Answer: B

Question 12

Select the most appropriate option for blank No. 5.

A   from

B   with

C   among

D   for

  Answer: B

Instructions
For the following questions answer them individually

Question 13

Choose the correctly spelt word

A   Knoledge

B   Jealusy

C   Odour

D   Langauge

  Answer: C

Question 14

Select the most appropriate antonym of the given word.
Loiter

A   Loaf

B   Hasten

C   Dawdle

D   Repel

  Answer: B

Instructions

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

Question 15

A study suggests that <u>woman is good</u> at handling emotions than men.

A   women is better

B   No Improvement

C   woman are best

D women are better

   Answer: D

Question 16

MS Dhoni has no immediate <u>plans to retire.</u>

A plan to retirement

B plans retiring

C planning for retire

D No Improvement

   Answer: D

Instructions

For the following questions answer them individually

Question 17

Select the most appropriate synonym of the given word.
Tangled

A Orderly

B Regulated

C Knotted

D Organized

   Answer: C

Instructions

Select the most appropriate option to fill in the blank.

Question 18

He _____ for a week when his father came.

A has been ill

B had been ill

C is being ill

D is ill

   Answer: B

Question 19

The air-conditioner has made ceiling fans a little _____ in today's world.

A extinct

B absurd

C additional

D redundant

   Answer: D

Instructions
For the following questions answer them individually

Question 20

Select the most appropriate meaning of the given idiom.
As clear as a bell

A To have a tinkling sound

B At a very low price

C To get fooled

D Readily understood

   Answer: D

Question 21

Choose the most appropriate word that can substitute the given group of words.
A person travelling on foot

A Vagabond

B Pedestrian

C Bibliophile

D Equestrian

   Answer: B

Question 22

Choose the correctly spelt word

A Peirce

B Necessary

C Noticeing

D Permmit

   Answer: B

Question 23

Find the part of the given sentence that has an error in it. If there is no error, choose 'No
He lost all his hardly earned money. /No error

A all his

B hardly earned money

C No error

D He lost

   Answer: B

Question 24

Select the most appropriate synonym of the given word.
Proclaim

A Oppose

B Produce

C Declare

D Conceal

   Answer: C

Question 25

Select the most appropriate option to fill in the blank.
They were astonished _____ his failure in the competition.
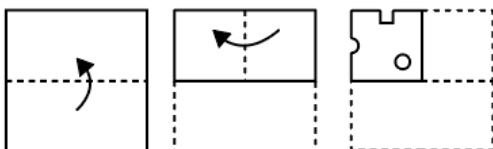
A in

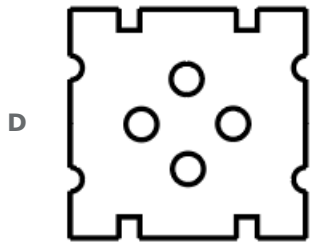**B** at

C on

D from

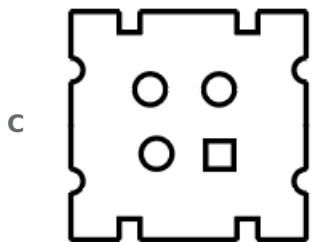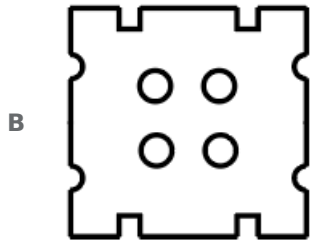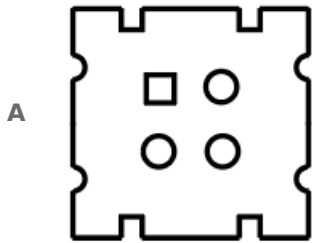   **Answer:** C

Reasoning

Instructions
For the following questions answer them individually

Question 26

A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

A

B

C

D

Answer: B

Question 27

In a certain code language, 'FLOWER' is written as 'GKPVFQ'. What is the code for 'PRODUCT' in that code language?

A RRWDQC

B RRQDWC

C QQRCVB

D QQPCVB

Answer: D

Explanation:

As per the English alphabetical order, each letter of the word's next and previous letters are written alternatively.

```
F  L  O  W  E  R
↓  ↑  ↓  ↑  ↓  ↑
G  K  P  V  F  Q
```

Therefore PRODUCT can be written as

```
P  R  O   D  U  C
↓  ↑  ↓   ↑  ↓  ↑
Q  Q  P   C  V  B
```

Question 28

Select the letter-pair that can replace the question mark (?) in the following series.
RJ, XP, DV, JB, ?

A   QH

B   PI

C   QJ

D   PH

  Answer: D

Explanation:
Difference between first letter of each group is 5

Difference between second letter of each group is 5

So the next group must be PH.(J + 5 --> P ; B + 5 --> H)

Question 29

In a certain code language, 'DRAPE' is written as '4181165', 'CEMANT' is written as '351311420'. What is the code for 'PRINTR' in that code language?

A   16184192018

B   16418920188

C   16189142018

D   16819412018

  Answer: C

Question 30

Select the option that is related to the third term in the same way as the second term is related to the first term.
Car : Wheel :: Clock : ?

A   Second

B   Hour

C   Needle

D   Circular

   Answer: C

Explanation:
Wheel is a part of Car. In the same way Needle is a part of Clock.

hence Car : Wheel :: Clock : Needle

Question 31

Five pens D, E, F, G and H are kept one above the other (not necessarily in the same order). Only H is between E and F. F is below E. G is just below F. D is three places below H. How many pens are between E and D ?

A   3

B   0

C   2

D   1

   Answer: A

Explanation:
From the statement,

i.Only H is between E and F.

ii.F is below E. G is just below F.

E
H
F
G

iii.D is three places below H.

E
H
F
G
D

Therefore from the diagram, it is known that 3 pens are between E and D.

Question 32

In a certain code language, 'DIRTYS' is written as 'FMTXAW'. What is the code for 'MONDAX' in that code language?
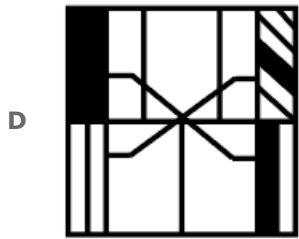
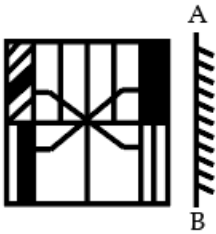**A**   PTRIDD

B   ORPHCB

C PTQIDD

D OSPHCB

Answer: D

Question 33

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

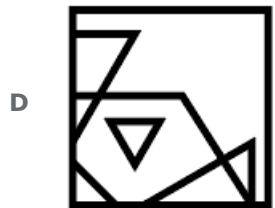**A**

B

C

D
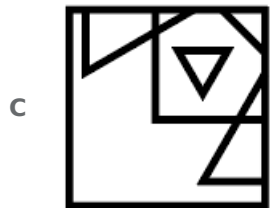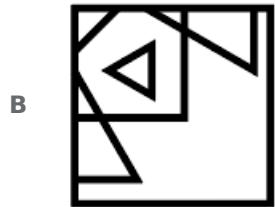

Answer: C

Question 34

In a certain code language, 'TYRE' is written as '70', 'MON' is written as '44'. What is the code for 'FROM' in that code language?

A 50

B 52

C 55

D 54

Answer: D

Question 35

Which answer figure will complete the pattern in the question figure?

A

B

C

D
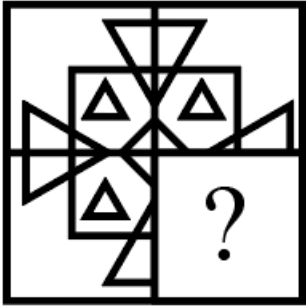
Answer: A

Question 36

In the following question, select the related number from the given alternatives.
446 : 491 :: 963 : ?

A   1008

B   1014

C   1024

D   1018

   Answer: A

Explanation:
Difference between 446 and 491 is 45.

Therefore 963 + 45 = 1008

hence 446 : 491 :: 963 : 1008 is the answer.

Question 37

In the following question, select the figure which can be placed at the sign of question mark (?) from the given alternatives.

A M	A M K	A T M K	?	A T M G K R

A
A G M K T

B
A T M R K

C
A T M G K

D

```
┌─────────┐
│  A K    │
│  M G    │
│  T      │
└─────────┘
```
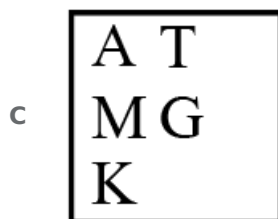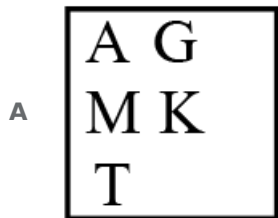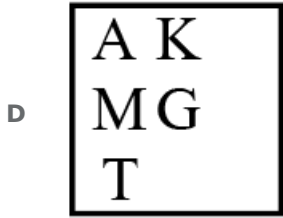
Answer: C

Question 38

Select the word pair in which the two words are related in the same way as the two words in the following word-pair.
Star : Sun :: ?

A   Sparrow : Bird

B   Animal : Wild

C   Venus : Hot

D   Planet : Mars

Answer: D

Question 39

By interchanging which two numbers the equation will be correct?
$3 + 6 \div 2 \times 4 - 7 = 5$

A   4 and 3

B   3 and 2

C   7 and 6

D   6 and 3

Answer: D

Explanation:
Implementing the options one by one, Option D gives the correct answer.

Interchange the position of 6 and 3 in 3 + 6 ÷ 2 × 4 - 7 = 5,

$6 + \overset{3}{\underset{2}{}} \times 4 - 7 = 5$

$6 + 6 - 7 = 5$

$12 - 7 = 5$

$5 = 5$

therefore option D is the answer.

Question 40

From the given answer figures, select the one in which the question figure is hidden/embedded.

A

B

C

D
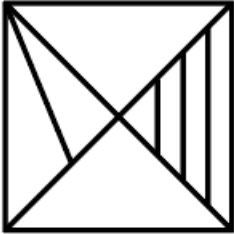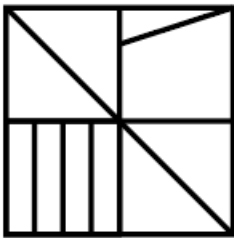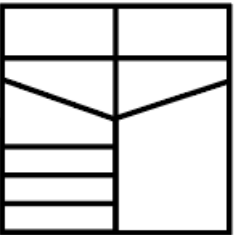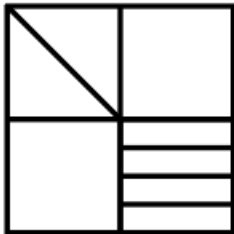
Answer: B

Question 41

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
Statements:
I. Some yellow are pen.
II. Some pen are sharpener.
Conclusions:
I. Some sharpener are yellow.
II. No yellow is pen.

A   Neither conclusion follow

B   Both conclusion I and II follows

C Only conclusion I follows

D Only conclusion II follows

   Answer: A

Question 42

Select the number that can replace the question mark (?) in the following series.
961, 984, 1008, 1033, 1059, ?

A 1086

B 1084

C 1078

D 1096

   Answer: A

Question 43

In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
Statements:
I. All prime are even.
**II. Some even are odd.**
Conclusions:
I. Some odd are prime.
II. All odd are even.
III. No odd is prime.

A Only conclusion III follows

B Both conclusion II and III follows

C Only conclusion II follows

D Either conclusion I or III follows

   Answer: D

Question 44

After interchanging the given two signs, what will be the value of $11 \div 9 - 63 + 7 \times 2$ **?**
$\div \ and +$

A 2

B 5

C -4

D -2

   Answer: A

Question 45

In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

9	11	5	94
7	9	13	?
6	5	14	16

A   50

B   60

C   48

D   44

  Answer: A

Question 46
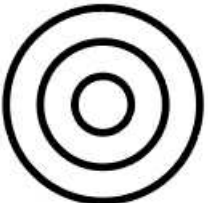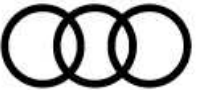
Select the option in which the letters share the same relationship as that shared by the given pair of letters.
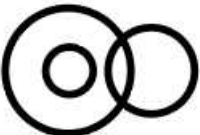TG : SE :: ?

A   MA : LZ

B   LR : KT

C   KB : JZ

D   TP : UN

  Answer: C

Question 47

Identify the Venn diagram that best represents the relationship between the given classes.
Car, Vehicle, Road

A

B

C

D
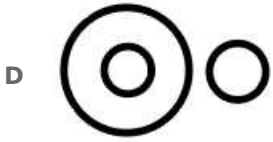
Answer: D

Question 48

Six boys R1, R2, R3, R4, R5 and R6 are sitting in a row facing towards the north (Not necessarily in the same order). There are three boys between R4 and R2. R4 is not at any of the end. Only three boys are between R1 and R5. R3 is towards the left of R6. R1 is at one of the end. R2 is towards the right of R4. Which of the following statement is correct?

A   R1 is towards the right of R4

B   R4 is second to the left of R6

C   R5 is at one of the end

D   R3 is to the immediate right of R6

   Answer: B

Question 49

Six tablets T1, T2, T3, T4, T5 and T6 are placed in a row facing towards North (Notnecessarily in the same order). Two tablets are placed between T1 and T5. T3 is placed second to the right of T6. T2 is placed second to the right of T1. T5 is towards the left of T1. Which of the following pair of tablets represents the tablets to the immediate right of T6 and T5 respectively?

A   T1, T4

B   T4, T1

C   T3, T4

D   T1, T2

   Answer: A

Question 50

Select the number that can replace the question mark (?) in the following series.
13, 40, 121, 364, ?

A   1091

B   1093

C   1092

D   1094

   Answer: B

Explanation:
The pattern is,

$13 \times 3 + 1 = 40$

$40 \times 3 + 1 = 121$

$121 \times 3 + 1 = 364$

$364 \times 3 + 1 = 1093$

Therefore option B 1093 is the answer.

Quant

Instructions

For the following questions answer them individually

Question 51

The ratio of number of boys and girls in a school is 3 : 2. If there are 360 students in the school, then what is the number of girls in the school?

A   144

B   160

C   124

D   142

   Answer: A

Question 52

Pipe D1 can fill 142 an empty tank in 80 minutes and Pipe D2 can empty the same tank in 100 minutes. If pipes are opened simultaneously, then in how much time the tank gets completely filled ?

A   320 minutes

B   400 minutes

C   200 minutes

D   240 minutes

   Answer: B

Question 53

Whatis the averageoffirst 8 multiples of 6 among the natural numbers?

A   24

B   26

C   27

D   28

   Answer: C

Question 54

The table givens below presents rainfall (in mm) in two cities on different days of a week.

Days	Rainfall(in mm)	
	City 1	City 2
D1	82	81.6
D2	78	79.4
D3	76.2	78.3
D4	81.6	77.7
D5	79.4	84
D6	84	83
D7	83.8	82

The rainfall on day D2 in City 1 is how much percent more than the rainfall on day D4 in City 2?

A $\frac{1000}{259}$

B $\frac{1}{260}$

C $\frac{100}{777}$

D $\frac{5}{13}$

Answer: A

Question 55

The speed ofa boatin still water is 30 km/h.Ifthe boat covers 60 km downstream in| hour 30 minutes, then whatis thetime taken by the boat to cover 60 km upstream?

A   3 hours

B   5 hours

C   4 hours

D   1 hours

Answer: A

Question 56

The compound interest (compounded annually) on a sum of money invested for two years is ₹10125. If the rate of interest is 25% per annum, then what is the amount after these two years?

A   ₹28125

B   ₹32275

C   ₹230625

D   ₹26275

Answer: A

Question 57

The average of six observations is 15. The average of first three among them is twice the average of the last three. What is the sum of the last three observations?

A   35

B   20

C   25

D   30

   Answer: D

Question 58

What is the value of $\frac{(49-13)\times18\div9+4\times12\div6+5}{98\div14+7\times4 \, of \, 6\div8+4}$

A $\frac{45}{23}$

B $\frac{37}{18}$

C $\frac{85}{32}$

D $\frac{53}{17}$

   Answer: C

Question 59

A bag contains 5 rupee, 2 rupee, | rupee and 50 paise coins in the proportion 1 : 2 : 3 : 4. If the total amount in the bag is ₹168, then how many 50 paise coins are there?

A   46

B   52

C   56

D   48

   Answer: D

Question 60

A room is in the shape of a cuboid, with dimensions 12 m $\times$ 10 m $\times$ 3 m. What is the cost of painting the four walls of the room at the rate of ₹50 per m^2?

A   ₹15000

B   ₹15600

C   ₹6600

D   ₹7500

   Answer: C

Question 61

What is the value of $\frac{2 \div 3 \times (1+3)+5-6}{2 \ of \ 3 \div 5 \times 4+3-2}$?

A $\frac{36}{89}$

B $\frac{31}{73}$

C $\frac{25}{87}$

D $\frac{27}{92}$

Answer: C

Explanation:

$\frac{2 \div 3 \times (1+3)+5-6}{2 \ of \ 3 \div 5 \times 4+3-2}$

$\frac{\frac{2}{3} \times 4+5-6}{2 \times \frac{3}{5} \times 4+3-2}$

$\frac{\frac{8}{3}+5-6}{\frac{24}{5}+3-2}$

$\frac{\frac{8+15-18}{3}}{\frac{24+15-10}{5}}$

$\frac{8+15-18}{3} \times \frac{5}{24+15-10}$

$\frac{5}{3} \times \frac{5}{29}$

$\frac{25}{87}$

Question 62

Profit earned on a ball is $\frac{3}{5}$ of its selling price. If the selling price of the ball is ₹120, then how much profit is earned on this ball?

A ₹72

B ₹48

C ₹24

D ₹96

Answer: A

Question 63

The Table given below presents the Rainfall (in mm)in two cities on different days of a week.

Days	Rainfall(in mm)	
	City 1	City 2
D1	82	81.6
D2	78	79.4
D3	76.2	78.3
D4	81.6	77.7
D5	79.4	84
D6	84	83
D7	83.8	82

What is the difference (correct up to two decimal places) in average rainfall in two cities per day?

A   0.42 mm

B   0.15 mm

C   0.66 mm

D   0.08 mm

Answer: B

Question 64

A bus covers a distance of 1.8 km in 3 minutes. How much faster(in m/s) is it than a young athlete who runs 200 m in 25 s?

A   1.5

B   1

C   2

D   2.5

Answer: C

Question 65

The table given below presents the rainfall (in mm) in two cities on different days of a week.

Days	Rainfall(in mm)	
	City 1	City 2
D1	82	81.6
D2	78	79.4
D3	76.2	78.3
D4	81.6	77.7
D5	79.4	84
D6	84	83
D7	83.8	82

If the data of Rainfall of City | is represented through a Pie chart, then what will be the central angle (nearest to 0.1 degree) corresponding to D1?

A 50.8

B 53.3

C 51.9

D 52.2

   Answer: D

Question 66

The radius of solid right circular cylinder is 21 cm and its height is 40 cm. What is the cost of painting the curved surface area of the cylinder at the rate of ₹20 per cm^2?(Take $\pi = \frac{22}{7}$)

A ₹108600

B ₹105600

C ₹26400

D ₹5280

   Answer: B

Question 67

If Least Common Multiple of 23 and 24 is A and Highest Common Factor of 23 and 24 is B, then what is the value of A + B?

A 451

B 551

C 553

D 452

   Answer: C

Question 68

A sum of money becomes double of itself in 50 months when invested on simple interest. What is the rate of interest per annum ?

A 26%

B 25%

C 20%

D 24%

   Answer: D

Question 69

After offering a discount of 20% on an article, a trader earned a profit of 20%.If the cost price is ₹300, then what will be the selling price of the article after offering a discount of 25%?

A ₹352.5

B ₹375.5

C ₹432.5

D ₹337.5

   Answer: D

Question 70

In a mixture of 60 litres, the ratio (by volume) of milk and water is 2 : 1. If X litres of water is added in the mixture, the ratio of milk and water becomes 1 : 2, then what is the value of X?

A 40

B 56

C 20

D 60

   Answer: D

Question 71

Piyush alone can complete a work in 8 days and Arun alone can complete the same work in 14 days. If they both get ₹44000 to complete the work, then what is the share of Piyush?

A ₹24000

B ₹16000

C ₹28000

D ₹21000

   Answer: C

Question 72

What is the mode of given data?
4, 3, 7, 13, 16, 23, 3, 4, 7, 4, 3, 3, 9, 6, 9, 6

A 9

B 4

C 3

D 6

   Answer: C

Explanation:
Number 3 is repeated more number of times when compared to other numbers.Therefore 3 is the answer.

Question 73

If A is 200% more than B, then B is how much percentage less than A?

A   33.33%

B   50%

C   100%

D   66.67%

　Answer: D

Explanation:
Let B = 100.

A is 200% more than B. Therefore $B \times \frac{100+200}{100} = A$

$100 \times \frac{300}{100} = 300$

therefore A = 300.

To find how much percent B less than A,

$300 \times \frac{100-x}{100} = 100$

$100 - x = \frac{100}{3}$

$x = 100 - \frac{100}{3}$

$x = \frac{200}{3}$

$x = 66.67$

hence B is 66.67% less than A.

Question 74

The cost price of a cycle is ₹24000. If the profit is 30%, then what will be the selling price?

A   ₹34100

B   ₹33400

C   ₹30800

D   ₹31200

　Answer: D

Explanation:
Given,

The cost price of a cycle is ₹24000 and the profit is 30%

therefore selling price $= 24000 \times \frac{100+30}{100}$

$24000 \times \frac{130}{100}$

31200

Selling price = 31200

Question 75

The area of a rectangle is 180 cm^2 If the ratio of length and breadth of the rectangle is 5 : 4, then what is the length (in cm)of diagonal of the rectangle?

A $\sqrt{423}$

B $\sqrt{317}$

C $\sqrt{369}$

D $\sqrt{371}$

   Answer: C

Explanation:
ratio of length and breadth of the rectangle is 5x : 4x

The area of a rectangle is 180 cm^2

area of the rectangle $= 5x \times 4x = 20x^2$

Solving x = 3

length = 15

breadth = 12
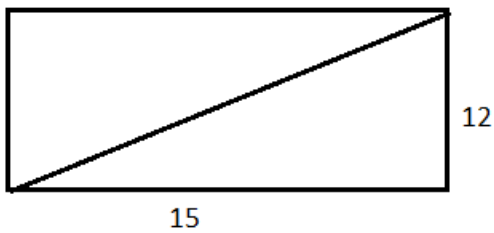
diagonal $= \sqrt{15}^2 + \sqrt{12}^2$

$\quad\quad = \sqrt{3}69$

General knowledge

Instructions

For the following questions answer them individually

Question 76

First cotton mill in India was set up in which city?

A Ahmedabad

B Nashik

C Bombay

D Madras

   Answer: C

Question 77

_____,the code-breaker during World War II has been chosen by Bank of England to feature on Britain's new £50 note.

A Michael Faraday

B Sir Christopher Wren

C Sir John Houblon

D Alan Turing

Answer: D

Question 78

Arrange the following metals in the decreasing order of reactivity:

A Iron > sodium > silver > gold

B Sodium > silver > iron > gold

C Gold > silver > iron > sodium

D Sodium > iron > silver > gold

Answer: D

Question 79

GST council is headed by:

A Union Finance Minister

B CAG

C RBI governor

D Prime minister

Answer: A

Question 80

King Jay Adams is associated with which of the following Sports?

A Horce Racing

B Billards

C Skateboarding

D Golf

Answer: C

Question 81

Which of the following diseases is caused by virus?

A Ringworm

B Cholera

C Measles

D Typhoid

   Answer: C

Question 82

Which of the following institutions is India's National Academy of Letters?

A Sahitya Akademi

B Indira Gandhi National Centre for Arts

C Lalit Kala Akademi

D Centre for Cultural Resources and Training

   Answer: A

Question 83

Which of the following is also called the First Law of Thermodynamics?

A Boyle's Law

B Law of Conservation of Energy

C Charles' Law

D Law of Conservation of Mass

   Answer: B

Question 84

Which of the following Indian cities has got UNESCO World Heritage site tag?

A Ahmedabad

B Mumbai

C Agra

D Bhopal

   Answer: A

Question 85

Ozone gas is present in which layer of atmosphere?

A Stratosphere

B Troposphere

C Ionosphere

D Mesosphere

Answer: A

Question 86

In which country is Hambantota port situated?

A Pakistan

B Maldives

C Bangladesh

D Sri Lanka

Answer: D

Question 87

Which of the following quality marks are NOT correctly matched?

A AGMARK - agricultural products

B HALLMARK - silver jewellery

C FPO - processed food products

D ISI - semi-processed food products

Answer: D

Question 88

How many non-permanent members does UN Security Council have?

A 10

B 12

C 7

D 5

Answer: A

Question 89

Twinkling of stars is mainly due to which phenomena?

A Diffraction

B Refraction

C Reflection

D Advection

Answer: B

Question 90

Who is the author of the book "Neel Darpan"?

A Abanindranath Tagore

B Mumtaz Ali

C Dina Bandhu Mitra

D Ishwar Chandra Vidyasagar

Answer: C

Question 91

Mobile App "cVIGIL" has been launched to?

A enable citizens to file online RTI

B enable citizens to report on violation of election code of conduct

C bring transparency in direct benefit transfer

D enable citizens to file income tax online

Answer: B

Question 92

Andaman and Nicobar jurisdiction comes under which High court?

A Andhra Pradesh

B Calcutta

C Madras

D Odisha

Answer: B

Question 93

Bab-el-Mandeb strait connects which water bodies?

A Persian Gulf and Gulf of Oman

B Baffin Bay and Labrador Sea

C Red sea and Gulf of Aden

D Black sea and sea of Azov

Answer: C

Question 94

Which of the following adjectives is NOT a part of the Preamble?

A Liberty

B Tolerant

C Sovereign

D Secular

  Answer: B

Question 95

Who renounced his Knighthood against the Jallianwala Bagh atrocity?

A Syed Ahmad Khan

B S Subramania Iyer

C Mahatma Gandhi

D Rabindranath Tagore

  Answer: D

Question 96

What is the national game of USA?

A Baseball

B Basketball

C Cricket

D Football

  Answer: A

Question 97

_____ of reservation in government jobs and education granted to the economically backward among the general category as announced in the Interim Budget 2019.

A 0.15

B 0.1

C 0.12

D 0.05

  Answer: B

Question 98

PRASAD Scheme (Pilgrimage rejuvenation and Spiritual, Heritage Augmentation Drive) has been launched under which Ministry?

A   Ministry of External Affairs

B   Ministry of Tourism

C   Ministry of Housing and Urban affairs

D   Ministry of Culture

  Answer: B

Question 99

Which of the following is NOT a primary activity?

A   Agriculture

B   Construction

C   Mining

D   Fishing

  Answer: B

Question 100

What was known as 'Calico' during pre-imperialism period?

A   coal

B   rice

C   iron

D   cotton

  Answer: D