## Reasoning

## Instructions

For the following questions answer them individually

## Question 1

Select the figure that will come next in the following figure series.


A


B


C


D


Answer: D

Question 2
Select the figure in which the given figure is embedded. (Rotation is not allowed)


A


B


C


D


Answer: C

## Question 3

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

A PUYBD
B EJNQS
C TYBEG

D JOSVX
Answer: C

## Question 4

In a code language, SELECTION is written as ESELDITNO. How will NOSTALGIA be written in the same language?

A ONTSBGLAI
B ONTSZGLAI

C NOTSBLGAI
D ONSTBGLAI
Answer: A

## Question 5

The sum of the current ages of Natasha and Krishna is 50 years. 10 years ago, Krishna was twice as old as Natasha. What is Krishna's current age?

A 15 years

B 20 years
C 10 years

D 30 years
Answer: D

## Question 6

Three different positions of the same dice are shown below. Which symbol is on the face opposite the face showing '*' ?


A +

B \%

C \#

D \&
Answer: D

## Question 7

Select the letter cluster that will come nextin the following series.
ADH, XAE, UXB, RUY, ?

A PRV

B ORU
c OSV

D ORV
Answer: D

## Question 8

Arrange the following words in a logical and meaningful order.

1. Kidney
2. Heart
3. Brain
4. Thyroid gland
5. Liver

A $3,4,2,5,1$

B $3,2,4,5,1$

C $3,4,2,1,5$
D 3, 2, 4, 1, 5
Answer: A

## Question 9

Select the correct mirror image of the given figure when a vertical mirror is placed on the right of the figure.


A


B


C


D


Answer: D

Question 10
Two statements are given, followed by three conclusions numbered I, II and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.
Statements:
All squirrels are lizards.
All lizards are goose.
Conclusions:
I. Some squirrels are not goose.
II. Some lizards are squirrels.
III. Some goose are squirrels.

A Conclusions I and II follow

C Conclusions I and III follow

D Conclusions II and ITI follow

## Answer: D

## Question 11

Given below is a transparent sheet of paper with a pattern on the left and right side. How will the pattern appear when the transparent sheet is folded on the dotted line?


A


B


C


D


Answer: B

## Question 12

Select the number that will replace? in the following series.
120, 128, 144, 168, ?, 240

A 216

B 202

C 208

D 200

## Question 13

$A+B$ means ' $A$ is the mother of $B$ '
$A-B$ means ' $A$ is the father of $B$ '
$A \times B$ means ' $A$ is the sister of $B$ '
$A \div B$ means ' $A$ is the daughter of $B$ '
If $\mathbf{P}+\mathbf{R} \times \mathbf{T}-\mathbf{Q} \div \mathbf{S}+\mathbf{U}$, then how is $\mathbf{S}$ related to $\mathbf{T}$ ?

A Daughter

B Sister

C Mother

D Wife
Answer: D

## Question 14

Which two signs should be interchanged to make the given equation correct?
$27 \div 3-18+3 \times 2=18$
$\mathbf{A} \div a n d \times$

B +and:

C + and -

D $\times$ and +
Answer: B

Question 15
Select the word-pair in which the two words are related in the same way as the two words in the following word-pair.
Walnut : Fig

A Almond: Dry fruits
B Turmeric: Spices

C Asafoetida: Cashew nuts

D Raisin: Apricot
Answer: D

## Question 16

How many triangles are there in the figure given below?


A 32
B 36

C 24

D 30
Answer: D

## Question 17

Ina code language, if PICTURE is coded as 16932021185 then how will FUNCTION be coded in the same language?

A 6211432091514
B 6211432091413

C 6211332091513

D 6211432081514
Answer: A

Question 18
Find the missing number from the below options.

| 4 | 6 | 7 |
| :---: | :---: | :---: |
| 5 | 3 | $?$ |
| 41 | 45 | 58 |

A 9
B 51
C 12

D 3
Answer: D

## Question 19

Select the option that is related to the third number in the same way as the second number is related to the first number.
16: 240:: 6:?

A 25

B 30

C 35

D 40
Answer: B

Question 20
Three of the following four words are alike in a certain way and one is different. Pick the odd word out.

A Honesty

B Integrity

C Truthfulness

D Hypocrisy
Answer: D

## Question 21

Select the term that will replace the question mark (?) in the following series.
A, G, L, ?, S, U, V

A 0

B P

C Q

D N
Answer: B

Question 22
In the Venn diagram given below,the circle represents 'Ladies', the triangle represents 'Constables' and the square represents 'Married persons'. The numbers given in the diagram represents number of persons of that particular category.


How many lady constables are NOT married?

A 14
B 12
C 8

D 15
Answer: B

## Question 23

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

A $4: 16$
B 14:196
C $12: 244$

D 2:4
Answer: C

Question 24
'Insulin' is related to 'Hormone' in the same way as 'Pepsin' is related to " $\qquad$ ,

A Digestion
B Vitamins
C Stomach

D Enzymes
Answer: D

Question 25
Find the missing number from the below options.
9
$25 \quad 49$

6
$11 \quad 13$
$9 \quad 16$ ?

A 19

B 20

C 21
D 18
Answer: B

## General knowledge

## Instructions

For the following questions answer them individually

## Question 26

The 'Tanakh' is the sacred text of which religion/sect?

A Taoism

B Confucianism

C Zen Buddhism
D Judaism
Answer: D

## Question 27

In which year was the 'Battle of Goa' fought?

A 1510

B 1502

C 1524

D 1514
Answer: A

## Question 28

The phrase 'Survival of the fittest' as a way of describing the mechanism of natural selection was coined by $\qquad$ -

A Marie Curie

B Charles Babbage
C Herbert Spencer

D Louis Pasteur
Answer: C

Question 29
In which province of China is the Huangguoshu National Park located which houses the world's largest waterfall cluster.

A Yunnan

B Jiangsu

C Guizhou
D Shandon
Answer: C

Question 30
Bhavai' is a traditional dance form of $\qquad$ .

A Punjab

B Maharashtra
C Bihar

D Gujarat
Answer: D

Question 31
DNA is stored majorly in $\qquad$ of the cell.

A plasma membrane
B nucleus

C cytoplasm
D golgi body
Answer: B

## Question 32

The 'Friendship Highway' is a road that connects China to $\qquad$ .

A Pakistan

B Myanmar
C Nepal
D India
Answer: C

## Question 33

The former princely state of Tripura in the north-eastern part of India was ruled by $\qquad$ Dynasty.

A Ahom

B Nagvanshi
C Manikya

D Haihaya
Answer: C

## Question 34

Which of the following was a port city of the Indus Valley Civilization?

A Kalibangan
B Rakhigarhi

C Dholavira
D Lothal
Answer: D

Question 35
Cash Reserve Ratio (CRR) is calculated as a percentage of each bank's $\qquad$ .

A savings of customers
B credit growth
C rate of inflation

D net demand and time liabilities
Answer: D

## Question 36

The Indus Water Treaty was signed between India and $\qquad$ .

A China
B Bangladesh
C Pakistan

D Afghanistan
Answer: C

## Question 37

In which part of the female flower does fertilisation take place?

A Ovary
B Filament
C Style
D Stigma
Answer: A

## Question 38

Who among the following is the only Indian to have won the Amateur World title in both, snooker and billiards?

A Michael Ferreira
B Pankaj Advani

C Subhash Agarwal
D Geet Sethi
Answer: B

## Question 39

World Water Day' is annually celebrated on $\qquad$ .

A $2^{\text {nd }}$ June
B $13^{\text {th }}$ August
C $15^{\text {th }}$ January
D $22^{\text {nd }}$ March
Answer: D

Question 40
When was the Constitution of Pakistan enforced?

A 1965

B 1973

C 1947

D 1952
Answer: B

## Question 41

Harsh Vardhan, the union minister for Environment, Forest and Climate Change launched the India Cooling Action Plan (ICAP). On which day was ICAP released?

A $26^{t h}$ January
B $8^{\text {th }}$ March

C $15^{\text {th }}$ February
D $27^{\text {th }}$ February
Answer: B

## Question 42

Night Blindness is caused by the deficiency of Vitamin $\qquad$ .

A A

B C

C K

D B12
Answer: A

## Question 43

About 70\% of the sun is made up of $\qquad$ .

A Helium

B Hydrogen
C Oxygen

D Carbon
Answer: B

Question 44
Which Indian author wrote the book 'The English Teacher'?

A Ruskin Bond

B R K Narayan
C Khushwant Singh

D Vikram Seth
Answer: B

## Question 45

Which one of the following is the highest altitude lake of Pakistan?

A Satpara Lake
B Paristan Lake

C Attabad Lake
D Rush Lake
Answer: B

## Question 46

The interest rate charged by banks on short-term loans to their largest, most secure and most creditworthy customers is called $\qquad$ .

A Prime Lending Rate
B Variable Rate

C Amortised Rate

D Discount Rate
Answer: A

## Question 47

The Constitution of India was amended for the first time in which year?

A 1954
B 1961

C 1951
D 1960
Answer: C

## Question 48

$\qquad$ assumed the title of 'Gangaikondachola' or the conqueror of the river Ganga.

A Rajaraja Chola I
B Vijjayalay Chola
C Rajendra Chola I
D Rajadhiraja Chola
Answer: C

## Question 49

Which of the following Indian authors is one of the four screenplay writers of the movie 'Kai Po Che'?

A Chetan Bhagat
B Ravinder Singh
C Amish Tripathi
D Durjoy Datta
Answer: A

## Question 50

$\qquad$ became the most successful doubles player in the history of Davis Cup as on 2018.

A Mark Woodforde

B Henri Leconte
C Leander Paes

D Leon Smith
Answer: C

## Quant

## Instructions

For the following questions answer them individually

## Question 51

The value of $\sin ^{2} 48^{\circ}+\sin ^{2} 42^{\circ}-\sec ^{2} 30^{\circ}+\tan ^{2} 60^{\circ}$ is equal to:

A 2
B $\quad \begin{array}{r}7 \\ \hline\end{array}$
C $\quad 8$

D $\quad{ }_{3}^{5}$
Answer: C

## Question 52

For what value of x is the seven digit number $46393 \times 8$ divisible by $11 ?$

A 3

B 2

C 7
D 5
Answer: A

## Question 53

If $a: b=5: 8$ and $c: b=4: 3$, then $a: b: c$ is equal to:

A 15:24:32

B 15: 24: 28
C $5: 6: 8$

D 5:8:6
Answer: A

## Question 54

In $\triangle A B C, P$ is a point on $B C$ such that $B P: P C=1: 2$ and $Q$ is the mid point of $B P$. Then, $\operatorname{ar}(\triangle A B Q): \operatorname{ar}(\triangle$ $A B C$ ) is equal to:

A 1:6
B 1:4

C 1:5
D 1:3
Answer: A

## Question 55

The difference between the compound interest and simple interest on $₹ x$ at $12 \%$ per annum for 2 years is $₹ 18$. What is the value of $x$ ?

A 1,250
B 1,280

C 1,340
D 1,300
Answer: A

## Question 56

If $\mathbf{a}+\mathbf{b}=\mathbf{8}$ and $\mathbf{a b}={ }_{3}^{32}$, then $\left(a^{3}+b^{3}\right)$ is equal to:

A 128
B 256
C 384
D 320
Answer: B

## Question 57

If $\mathbf{a}+\mathbf{b}+\mathbf{c}=\mathbf{4}$ and $\mathbf{a} \mathbf{b}+\mathbf{b} \mathbf{c}+\mathbf{c} \mathbf{a}=\mathbf{2}$, then $a^{3}+b^{3}+c^{3}-3 a b c$ is equal to:

A 32
B 48

C 40
D 36

## Question 58

A is 50\% more efficient than B and C is $40 \%$ less efficient than $B$. Working together, they can complete a task in $\mathbf{1 0}$ days. In how many days will A alone complete $\mathbf{1 5 0 \%}$ of that task?

A 31

B 33

C 28

D 35

## Answer: A

## Question 59

If $\sqrt{x}+\stackrel{1}{x}=\sqrt{7}$, then $x^{3}+\stackrel{1}{3}^{3}$ is equal to:

A 110

B 130

C 120
D 140
Answer: A

## Question 60

If $\sec \theta=\stackrel{13}{5}$, then $\tan \theta-\sin \theta+\cos \theta$ is equal to:

A $\quad \begin{array}{r}23 \\ 13\end{array}$
B $\quad \begin{gathered}118 \\ 65\end{gathered}$

C $\quad 121$

D $\quad 124$
Answer: C

## Question 61

This table shows the number of students studying in various streams in different colleges.

| Streams | Colleges |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E |
| Arts | 580 | 460 | 320 | 470 | 370 |
| Science | 620 | 680 | 540 | 360 | 400 |
| Commerce | 480 | 520 | 350 | 520 | 330 |

What is the ratio of the number of students studying science in colleges $A$ and $B$ together to the number of students studying commerce in colleges $D$ and $E$ together?

A 13:8
B 23:15

C 21:17
D 26:17
Answer: D

Question 62
If $\sin 5 \theta=\cos \left(50^{\circ}-3 \theta\right)$, then $\theta$ is equal to:

A $25^{\circ}$

B $15^{\circ}$

C $20^{\circ}$
D $30^{\circ}$
Answer: C

## Question 63

Ina circle with centre $O, A B$ is the diameter and $C D$ is a chord such that $A B C D$ is a trapezium. If $\angle B A C=$ $24^{\circ}$, then $\angle C A D$ is equal to:

A 48

B 36
C 42

D 24
Answer: C

Question 64
The price of sugar is increased by $21 \%$. A person wants to increase his expenditure by $\mathbf{1 2 \%}$ only. By what percent, correct to one decimalplace, should he reduce his consumption?

A $7.6 \%$

B $7.2 \%$
C $7.8 \%$

D 7.4\%
Answer: D

## Question 65

Two chords $A B$ and $C D$ ofa circle intersect at a point $P$ inside the circle. If $A B=7 \mathrm{~cm}, P C=2 \mathrm{~cm}$ and $A P=$ 4 cm ,then CD is equal to:

A 4 cm

B 6 cm
C 8 cm

D 5 cm
Answer: C

## Question 66

train without stoppage travels with an average speed of $80 \mathrm{~km} / \mathrm{h}$ and with stoppage,it travels with an average speed of $72 \mathrm{~km} / \mathrm{h}$. For how many minutes does the train stop on an average per hour?

A 6
B 8

C 9

D 7
Answer: A

## Question 67

This table shows the number of students studying in various streams in different colleges.

| Streams | Colleges |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E |
| Arts | 580 | 460 | 320 | 470 | 370 |
| Science | 620 | 680 | 540 | 360 | 400 |
| Commerce | 480 | 520 | 350 | 520 | 330 |

The number of students in the science stream of college $C$ is approximately what percentage of students studying in that college?

A $43 \%$

B $42 \%$
C $44 \%$
D $45 \%$
Answer: D

The radii of the two circular faces of the frustum of a cone of height 14 cm are 5 cm and 2 cm . What is its volume in $\mathbf{c m}^{3}$ ( $\pi={ }_{7}^{22}$ )

A 540

B 572
C 520

D 560
Answer: B

Question 69
$\triangle A B C \sim \triangle Q P R$ and $A B=8 \mathrm{~cm}, B C=12 \mathrm{~cm}$ and $A C=6 \mathrm{~cm}$. If $\operatorname{ar}(\triangle A B C): \operatorname{ar}(\triangle P Q R)=16: 25$, then $R Q$ is equal to:

A 10 cm

B $\quad 15 \mathrm{~cm}$

C 7.5 cm

D $\quad 12.5 \mathrm{~cm}$
Answer: C

## Question 70

This table shows the number of students studying in various streams in different colleges.

| Streams | Colleges |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E |
| Arts | 580 | 460 | 320 | 470 | 370 |
| Science | 620 | 680 | 540 | 360 | 400 |
| Commerce | 480 | 520 | 350 | 520 | 330 |

What is the average of the number of students in the arts stream in all the colleges taken together?

A 440
B 460

C 450
D 470
Answer: A

## Question 71

The value of: $5.8+(7.4 \div 3.7 \times 5)-6 \times 2 \div 2.5$

A 12

B 11
C 9

D 10
Answer: B

## Question 72

An article is sold for ₹ 535.50 after two successive discounts of $\mathbf{2 5 \%}$ and $\mathbf{1 5 \%}$. What is the marked price of the article?

A ₹820
B ₹ 800

C ₹ 840

D ₹830
Answer: C

## Question 73

In a class of 50 students, $\mathbf{4 6 \%}$ are girls and the remaining are boys. The average of the boys' marks is 58 and that of the girls is 62. What are the average marks of the whole class?

A 60.38

B 60.65
C 59.84

D $\quad 60.12$
Answer: C

Question 74
This table shows the number of students studying in various streams in different colleges.

| Streams | Colleges |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E |
| Arts | 580 | 460 | 320 | 470 | 370 |
| Science | 620 | 680 | 540 | 360 | 400 |
| Commerce | 480 | 520 | 350 | 520 | 330 |

If the data about students of the commerce stream in all colleges is represented by a pie-chart, what is the central angle of the sector representing college $D$, to the nearest degree?

A $85^{\circ}$

B $88^{\circ}$

C $80^{\circ}$

D $82^{\circ}$
Answer: A

## Question 75

Two articles are sold for ₹ 2508 each. On one, there is a gain of $14 \%$ and on the other, there is a loss of $12 \%$. What is the overall gain or loss percent to nearest one decimal place?

A $0.5 \%$ gain

B $0.7 \%$ loss
C $0.7 \%$ gain
D $0.5 \%$ loss
Answer: B

## English

## Instructions

For the following questions answer them individually

## Question 76

Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement.
She was so tired to work any longer.

A so tired to not work
B so tiring to work

C No improvement
D too tired to work
Answer: D

## Question 77

In the sentence identify the segment which contains the grammatical error.
He is more smarter than his brother though he does not earn much money.

A though he does not earn
B much money
C He is more smarter

D than his brother
Answer: C

## Instructions

Select the most appropriate option to fill in the blank.

## Question 78

The accident victim $\qquad$ to his injuries before he could be taken to the hospital.

A surrendered

B succumbed

C subscribed

D submitted
Answer: B

Question 79
We should never $\qquad$ with the rules of driving.

A temper
B trifle

C reckon

D tamper
Answer: D

## Instructions

For the following questions answer them individually

## Question 80

Select the most appropriate synonym of the given word.
EXALT

A praise

B condemn
C challenge
D extract
Answer: A

## Question 81

Select the correctly spelt word.

A manipulate
B manipulete
C menipulate
D manepulate
Answer: A

## Question 82

Select the correct passive form of the given sentence It is time to serve dinner.

A It is time for dinner to be served.
B It is time that dinner is serve.

C It is dinner serving time.
D It is time so dinner should be served.

## Answer: A

## Question 83

Select the most appropriate antonym of the given word. VIGILANT

A visible

B careless

C careful

D elusive
Answer: B

## Question 84

Select the correct active form of the given sentence. Superstitions are still believed in by people.

A People still believed in superstitions.
B People are still believing in superstitions.
C People have still believed in superstitions.
D People still believe in superstitions.

## Answer: D

## Question 85

Select the word which means the same as the group of words given. The act of looking back on past time

A introspection
B inspection
C circumspection
D retrospection
Answer: D

## Question 86

Select the correctly spelt word.

A arguement
B argeument
C arguemant
D argument
Answer: D

Question 87
Select the most appropriate antonym of the given word.
EXTRAVAGANT

A thrifty

B deficit

C pauper
D generous
Answer: A

## Question 88

In the sentence identify the segment which contains the grammatical error. The child along with his parents were waiting for the programme to begin.

A The child

B along with his parents
C were waiting for the
D programme to begin
Answer: C

Question 89
Given below are four jumbled sentences. Select the option that gives their correct order.
A. The first of these states that the only way to have a friend is to be one.
B. Like all relationships, it is also governed by some well-defined principles.
C. Friendship is one of the most coveted relationships on earth.
D. Thus, one must be reliable as a friend to expect reliability in others.

A BDAC

B CBAD
c ACBD
D CDBA
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 Bhopal gas tragedy has been described as the world's (1) $\qquad$ industrial disaster. Forty two tonnes of methyl isocyanate (2) $\qquad$ from the steel containers (3) $\qquad$ the Union Carbide factory and released a cloud of (4) $\qquad$ gas.It left a legacy of instant and (5) $\qquad$ death.

## Question 90

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

A worse

B bad

C worst

D best
Answer: C

## Question 91

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

A leaked

B flowed

C released

D emitted
Answer: A

## Question 92

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

A beside
B along

C at

D across
Answer: C

## Question 93

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

A
merciless
B deathly
C abominable

D incurable
Answer: B

## Question 94

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

A deferred

B momentary
C averted

D detained
Answer: A

## Instructions

For the following questions answer them individually

## Question 95

Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement.
He made a desperate but also partial successful effort to change the ghastly topic.

A No improvement
B but partially successful effort
C yet also partial successful effort
D though part successful effort
Answer: B

## Question 96

Given below are four jumbled sentences. Select the option that gives their correct order.
A. But that is for an emotional reason.
B. Learning our mother tongue is important and everyone should start there.
C. This is because proficiency in the language can lead to better opportunities.
D. Learning English, however, is important for practical reasons.

A BADC

B DACB

C BDCA

D DBAC
Answer: A

## Question 97

Select the word which means the same as the group of words given.
That which cannot be satisfied

A insatiable

B impossible
C improbable
D incredible
Answer: A

## Question 98

Select the most appropriate synonym of the given word. CONCISE

A detailed

B brief

C lengthy
D complex
Answer: B

## Instructions

Select the most appropriate meaning of the underlined idiom in the given sentence.

## Question 99

One must learn to prioritize in life. It never pays to put the cart before the horse.

A do last things first

B postpone till the last moment
C perform many tasks simultaneously
D do things spontaneously
Answer: A

## Question 100

His success at such a young age speaks volumes for his talent.

A publically announces

B showers praise
C boasts a lot

D gives enough proof

