## SSC CPO 3 July 2017 Morning Shift

## Reasoning

Instructions
For the following questions answer them individually

## Question 1

In the following question, select the related word from the given alternatives.
Smoke : Pollution : : Fire : ?

A Death

B Sound

C Ash

D Cold
Answer: C

## Explanation:

Second arises because of second. Pollution comes from smoke, and ash is the by product of fire.
=> Ans - (C)
Question 2
In the following question, select the related word pair from the given alternatives.
Players:Team::?:?

A Car: Group
B Ship: Fleet

C Airplane: Flight
D Pen: Heap
Answer: B

## Explanation:

The collection of first is called second, a group of players form a team, similarly a group of sheep is called fleet.
=> Ans - (B)
Instructions
In the following question, select the related letters from the given alternatives.
Question 3
GLOR: FJLN : : TWQK :?

A SUNG

B SUMG

C SUGN

D SUGM
Answer: A

Explanation:

Expression = GLOR : FJLN : : TWQK : ?
The pattern followed is:

| $G$ | $L$ | $O$ | $R$ |
| :---: | :---: | :---: | :---: |
| $(-1)$ | $(-2)$ | $(-3)$ | $(-4)$ |
| $F$ | $J$ | $L$ | $N$ |

Similarly, for TWQK : SUNG

| $T$ | $W$ | $Q$ | $K$ |
| :---: | :---: | :---: | :---: |
| $(-1)$ | $(-2)$ | $(-3)$ | $(-4)$ |
| $S$ | $U$ | $N$ | $G$ |

=> Ans - (A)
Question 4
GHI: DFH: LMN: ?

A IMK

B JLM
C ILM

D IKM
Answer: D

## Explanation:

Expression = GHI : DFH : : LMN : ?
The pattern followed is :

| $G$ | $H$ | I |
| :---: | :---: | :---: |
| $(-3)$ | $(-2)$ | $(-1)$ |
| $D$ | $F$ | $H$ |

Similarly, for LMN : IKM

| L | M | N |
| :---: | :---: | :---: |
| $(-3)$ | $(-2)$ | $(-1)$ |
| I | K | M |

=> Ans - (D)

## Instructions

In the following question, select the related number from the given alternatives.

## Question 5

8:512:: 6 :?

A 216

B 312

C 408
D 512

## Explanation:

Expression = $8: 512:: 6$ :?
The pattern followed is $=n: n^{3}$
Eg :- $(8)^{3}=512$
Similarly, $(6)^{3}=216$
=> Ans - (A)
Question 6
In the following question, select the related number from the given alternatives.
122: 145 : : 226 : ?

A 255

B 256

C 257

D 259
Answer: C

## Explanation:

Expression = 122 : 145 : : 226 :?
The pattern followed is $=\left[(n)^{2}+1\right]:\left[(n+1)^{2}+1\right]$
Eg :- $(11)^{2}+1=122$ and $(11+1)^{2}+1=144+1=145$
Similarly, $(15)^{2}+1=226$
=> $(15+1)^{2}+1=256+1=257$
=> Ans - (C)
Instructions
For the following questions answer them individually
Question 7
In the following question, select the odd word from the given alternatives.

A Skin

B Lungs
C Heart

D Kidneys

## Answer: A

## Explanation:

Lungs, heart and kidneys are internal organs of the body, while skin can be seen from outside.
=> Ans - (A)

## Question 8

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

A Ink: Inkpot
B Bottle : Wine
C Tea: Cup
D Water: Jug
Answer: B

## Explanation:

First is kept in second, ink in inkpot, tea in cup and water in jug, but wine is kept in bottle not the other way around, hence it is the odd one out.
=> Ans - (B)
Instructions
In the following question, select the odd letters from the given alternatives.

## Question 9

A GJM
B PSV
C MPR
D KNQ
Answer: C

## Explanation:

(A) : G (+3 letters) $=J(+3$ letters $)=M$
(B) : P (+3 letters) = S (+3 letters) = V
(C) : $M$ (+3 letters $)=P(+2$ letters $)=R$
(D) : $\mathrm{K}(+3$ letters $)=\mathrm{N}(+3$ letters $)=\mathrm{Q}$
=> Ans - (C)

## Question 10

A MT
B CJ

C SZ

D FN
Answer: D

## Explanation:

(A) : M (+7 letters) $=T$
(B) : C (+7 letters) $=J$
(C) : S (+7 letters) $=\mathrm{Z}$
(D) : F (+8 letters) $=\mathrm{N}$
=> Ans - (D)

## Instructions

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

## Question 11

A 11-44

B $12-72$
C 13-52
D 14-48
Answer: D

## Explanation:

Second number is completely divisible by first number apart from the last pair.
(A) $:{ }_{11}^{44}=4$
(B) $:{ }_{12}^{72}=6$
(C) : $:{ }_{13}=4$
(D) $:{ }_{14}^{48}=3.42$
=> Ans - (D)

## Question 12

A $5-30$

B 12-84
C 11-66

D 8-48

## Answer: B

## Explanation:

If we divide the second number by first number, the quotient will be 6 apart from the last pair.
(A) $:{ }_{5}^{30}=6$
(B) $::_{12}^{84}=7$
(C) : $: 11=6$
(D) $:{ }_{8}^{48}=6$
=> Ans - (B)

## Instructions

Arrange the given words in the sequence in which they occur in the dictionary.

## Question 13

1. Rangle
2. Regal
3. Royal
4. Room
5. Rested

A 15432
B 45312

C 12543

D 13542
Answer: C

## Explanation:

As per the order of dictionary,
= Rangle -> Regal -> Rested -> Room -> Royal
$\equiv 12543$
=> Ans - (C)

## Question 14

1. Soul
2. Strain
3. Syrup
4. Sand
5. Strained

A 41253
B 42153

C 54312
D 45312
Answer: A

## Explanation:

As per the order of dictionary,
= Sand -> Soul -> Strain -> Strained -> Syrup
$\equiv 41253$
=> Ans - (A)

## Instructions

A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

## Question 15

GD, DI, AP, XY, ?

A UH
B IU
C ST

D UJ
Answer: D

## Explanation:

Expression : GD, DI, AP, XY, ?
The pattern followed in each letter of the terms is :
1 st letter : G (-3 letters $)=$ D ( -3 letters $)=\mathrm{A}(-3$ letters $)=\mathrm{X}(-3$ letters $)=\mathbf{U}$

2nd letter : D (+5 letters) = I (+7 letters) $=\mathrm{P}$ (+9 letters) $=\mathrm{Y}(+11$ letters $)=\mathrm{J}$
Thus, missing term : UJ
=> Ans - (D)
Question 16
WVU, TSR, QPO, ?

A NML
B LMN

C LMK

D KLM
Answer: A

## Explanation:

Expression : WVU, TSR, QPO, ?
The pattern followed in each letter of the terms is :
1st letter: $\mathrm{W}(-3$ letters $)=\mathrm{T}(-3$ letters $)=\mathrm{Q}(-3$ letters $)=\mathbf{N}$
2nd letter : $\mathrm{V}(-3$ letters $)=\mathrm{S}(-3$ letters $)=P(-3$ letters $)=\mathrm{M}$
3rd letter: $\mathrm{U}(-3$ letters $)=\mathrm{R}(-3$ letters $)=0(-3$ letters $)=\mathbf{L}$
Thus, missing term : NML
=> Ans - (A)

## Instructions

For the following questions answer them individually

## Question 17

In the following question, select the missing number from the given series.
$1,1,3,4,5,9,7,16,9,25,11$, ?

A 17

B 36

C 49
D 37
Answer: B

## Explanation:

Series: $1,1,3,4,5,9,7,16,9,25,11$, ?
It is a combination of 2 series at alternate positions.
Numbers at odd position are consecutive odd numbers, while numbers at even position are squares of consecutive natural numbers.
1st series: 1, 3, 5, 7, 9, 11
2nd series: $1,4,9,16,25,36$
=> Ans - (B)

In the following question, select the missing number from the given series.
?, 5, 15, 45, 113

A 1

B 2

C 3

D 4
Answer: C

## Explanation:

If we reverse the series as : $113,45,15,5$, ?
Then number of the form $=\left(n^{3}+n\right)$ are subtracted, where $n$ is a natural number.
$113-\left(4^{3}+4\right)=45$
$45-\left(3^{3}+3\right)=15$
$15-\left(2^{3}+2\right)=5$
$5-\left(1^{3}+1\right)=3$
=> Ans - (C)

## Question 19

6 people are sitting in a row. $A$ is sitting towards immediate left of $B$ and immediate right of $C$. $C$ is sitting to immediate right of $F$. $D$ is immediate right of $E$ who is to the left of $F$, then which two people are sitting in the center?

A D and B

B A and B

C F and C
D E and D
Answer: C

## Explanation:

$A$ is sitting towards immediate left of $B$ and immediate right of $C,=>C A B$
$C$ is sitting to immediate right of $F,=>$ FCAB
$D$ is immediate right of $E$ who is to the left of $F,=>E D F$
Thus, final arrangement is :

$\therefore \mathrm{F}$ and C are sitting in the center.
=> Ans - (C)

## Question 20

Sunil's position from the left in a row of boys is 20th and Deepak's position from the right is 36 th. After interchanging their position, Sunil becomes 28th from the left. How many boys are there in the row?

A 52
B 63

C 59

D 48
Answer: B

## Explanation:

Deepak's initial position $=36$ th from right and Sunil final position $=28$ th from left
Also, after interchanging Deepak's initial position = Sunil's final position
Thus, number of boys $=(36+28)-1=63$
=> Ans - (B)
Question 21
Vikram started from point $R$ and walked straight 7 km west, then turned left and walked $\mathbf{2} \mathbf{~ k m}$ and again turned left and walked straight 4 km . In which direction is he from $R$ ?

A North-East
B South-West
C South-East

D North-West
Answer: B

## Explanation:

Vikram started from point $R$ and walked straight 7 km west to $X$, then turned left and walked 2 km towards south and again turned left and walked straight 4 km towards east to reach point $Z$.

$\therefore$ He is in south-west direction from R .
=> Ans - (B)
Instructions
In the following question, select the word which cannot be formed using the letters of the given word.
Question 22
Liberation

A Ratio
B Aion
C Bear

D Liberal
Answer: D

## Explanation:

The word LIBERATION does not contain two L's, thus the term Liberal cannot be formed.
=> Ans - (D)

## Question 23

Deliberate

A Dilate
B Tail

C Betray

D Elated
Answer: C

## Explanation:

The word DELIBERATE does not contain any ' $Y$ ', thus the term Betray cannot be formed.
=> Ans - (C)
Instructions
For the following questions answer them individually

## Question 24

In a certain code language, "SATURN" is written as "JVQXWW" and "URANUS" is written as "OYJENY". How is "JUITER" written in that code language?

A NIPMQN
B NIPMYF

C NQMPIN
D FYLMPI
Answer: A

## Explanation:

Expression = "SATURN" is written as "JVQXWW"
The pattern followed is :


Also, "URANUS" is written as "OYJENY"


Similarly, for JUPITER : NIPMQN

=> Ans - (A)
Question 25
In a certain code language, "CAGES" is written as "NADYB" and "SILVER" is written as "LZRIGR". How is "WATER" written in that code language?

A MAQYV

B SGWEB
c QCPVR
D VYQAM
Answer: A

## Explanation:

Expression = "CAGES" is written as "NADYB"
The pattern followed is :


Also, "SILVER" is written as "LZRIGR"


Similarly, for WATER : MAQYV

=> Ans - (A)

## Question 26

If "B" denotes "multiplied by", "C" denotes "subtracted from", "A" denotes "added to" and "D" denotes "divided by", then which of the following equation is true?

A $36 \mathrm{D} 6 \mathrm{~B} 3 \mathrm{~A} 2=74$
B $24 \mathrm{D} 12 \mathrm{~B} 3 \mathrm{~A} 12=18$
C $42 \mathrm{~A} 7 \mathrm{~B} 2 \mathrm{D} 2=35$
D $\quad 56$ D 14 B 2 C $4=12$
Answer: B

## Explanation:

$\equiv 36 \div 6 \times 3+2=74$
L.H.S. $=\left({ }^{36} \times 3\right)+2=20 \neq$ R.H.S.
(B) : 24 D 12 В 3 A $12=18$
$\equiv 24 \div 12 \times 3+12=18$
L.H.S. $=(12 \times 3)+12=18=$ R.H.S.
=> Ans - (B)

## Question 27

If "-" denotes "divided by", "+" denotes "subtracted from", "x" denotes "added to" and " $\div$ " denotes "multiplied by", then $4 \div 16 \times 5+4-2=$ ?

A 2
B 43
C 22
D 67
Answer: D

## Explanation:

Expression : $4 \div 16 \times 5+4-2=$ ?
$\equiv 4 \times 16+5-4 \div 2$
$=(4 \times 16)+5-\binom{4}{2}$
$=64+5-2=67$
=> Ans - (D)

## Question 28

If 38 \# $49=24$ and 96 \# $51=21$, then 87 \# $78=$ ?

A 26

B 21
C 28

D 30
Answer: D

## Explanation:

Given : 38 \# 49 = 24 and 96 \# $51=21$
The pattern followed is that the sum of digits of both the numbers is equal to the number at the right.
Eg :- $(3+8)+(4+9)=24$
and $(9+6)+(5+1)=21$
Similarly, $(8+7)+(7+8)=30$
=> Ans - (D)

## Question 29

A 94
B 107

C 99

D 106
Answer: C

## Explanation:

Given : 27 * $4=77$ and 31 * $9=239$
The pattern followed is : $a * b=a \times(b-1)-b$
Eg :- $27 \times(4-1)-4=(27 \times 3)-4=77$
and $31 \times(9-1)-9=(31 \times 8)-9=239$
Similarly, $21 \times(6-1)-6=(21 \times 5)-6=99$
=> Ans - (C)

## Question 30

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

| 12 | 3 |
| :---: | :---: |
| 4 | 2 |


| 8 | 4 |
| :--- | :--- |
| 1 | 9 |


| 8 | 6 |
| :--- | :--- |
| 3 | $?$ |

A 1

B 2
C 4

D 12
Answer: B

## Question 31

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

| 1 | 4 | 2 | 13 |
| :---: | :---: | :---: | :---: |
| 3 | 6 | 5 | 95 |
| 2 | 4 | 3 | $?$ |

A 12
B 24

C 26
D 29
Answer: D

## Explanation:

In each row, the number at the end is equal to the sum of product of the three numbers and ' 5 '.
Eg :- $(1 \times 4 \times 2)+5=13$
and $(3 \times 6 \times 5)+5=95$
Similarly, $(2 \times 4 \times 3)+5=29$
=> Ans - (D)

## Question 32

How many triangles are there in the given figure?


A 6

B 7

C 8

D 10
Answer: B

## Explanation:



Small triangles $=\mathrm{ABH}, \mathrm{BCI}, \mathrm{DEH}, \mathrm{FIG}, \mathrm{EFJ}$
Big triangles = ACJ, BDG
Thus, total triangles $=7$
=> Ans - (B)
Question 33
How many triangles are there in the given figure?


A 10

B 11

C 12
D 14
Answer: B

## Explanation:



Small triangles $=$ AEJ, AJF, BEK, BKD, CDL, FLC, DEF
Triangles (containing 2 triangles) $=A E F, B D E, C D F$
Big triangles $=A B C$
Thus, total triangles = 11
=> Ans - (B)
Instructions
In each of the following question below are given some statements followed by some conclusions. 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.

## Question 34

Statements:
I. No cups are plate.
II. All plates are spoons.

## Conclusions:

I. Some cups are not spoons.
II. Some spoons are plates.
III. Some plates are spoons.

A Only conclusion (II) follows

B Only conclusion (III) follows
C Only conclusion (I) and (III) follow
D Only conclusion (II) and (III) follow

## Answer: D

## Explanation:

The venn diagram for above statements is:


Conclusions:
I. Some cups are not spoons = falsse
II. Some spoons are plates = true
III. Some plates are spoons = true

Thus, only conclusion (II) and (III) follow.

## Question 35

Statements:
I. All men are hardworking.
II. No advocate is hardworking.
III. Some beautiful are men.

Conclusions:
I. Some beautiful are hardworking.
II. Some advocates are not beautiful.
III. Some beautiful are not advocate.

A Only conclusion (I) follow

B Only conclusion (I) and (III) follow

C Only conclusion (II) and (III) follow

D Only conclusion (I) and (II) follow
Answer: A

Explanation:
The venn diagram for above statements is:


Conclusions:
I. Some beautiful are hardworking = true
II. Some advocates are not beautiful = may or may not be true
III. Some beautiful are not advocate = may or may not be true

Thus, only conclusion (I) follows.
$=>A n s$ - (A)
Instructions
For the following questions answer them individually
Question 36
Two positions of a cube are shown below. What will come opposite to face containing ' 1 '?

A 4 or 5

B 5

C 4

D 3
Answer: B

Three positions of a cube are shown below. What will come opposite to face containing ' $\star$ '?


A $\uparrow$
B \%

C +
D \&
Answer: D

Explanation:
From the first two figures, we can see that the 4 faces that are adjacent to ' $\star$ ' are ' $\uparrow=+\%$ ', thus these can never be opposite to the star.
Thus, the only remaining symbol which will come opposite to face containing ' $\boldsymbol{x}^{\prime}=\&$
=> Ans - (D)

Question 38
In the given figure, which number represents male cricketers who are adults but are not tall?


A 3

B 2
C 8
D 4
Answer: B

Explanation:


Male cricketers who are adults but are not tall = 2
$\Rightarrow$ Ans - (B)
Question 39
In the given figure, which alphabet represents gel pens which are not blue?


A C
B d

C h

D b
Answer: A
Explanation:


Gel pens which are not blue are represented by $=\mathbf{c}$
=> Ans - (A)
Question 40
In the given figure, which number represents steel bottles which are caps ?


A 2

B 4

C 3

D 6
Answer: C

## Explanation:



Steel bottles which are caps are represented by $=\mathbf{3}$

Question 41
Which answer figure will complete the pattern in the question figure?


B


C


D


Answer: A

Explanation:
The question figure will be completed by
=> Ans - (A)

## Question 42

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


A


B


C


D


Answer: A

## Explanation:

The missing figure which is at the top right side of the square must have 3 concentric circles pointing at bottom left, which is only given in the first image. Also, it must contain a square at the bottom left hand side, hence first option fits in the above description.

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


A


B


C


D


Answer: A

## Explanation:

The above figure is represented by 'red' color and is hidden in


## Question 44

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


B


C


D


Answer: A

## Explanation:

The above figure is represented by 'red' color and is hidden in
=> Ans - (A)
Question 45
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: A

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


Answer: A

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


A


B


C


D


Answer: D

## Explanation:

A vertical mirror is placed, so the object on the left will appear right in reverse position and vice-versa.
So the small square (with 2 dots) at top right corner will be reversed and will appear at top left corner, thus the first and third options will be eliminated.

Also, in the question figure, the small circle at bottom left corner is right side of the diagonal, hence it will appear at left side, hence fourth option is the right image.
=> Ans - (D)

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


A


B


C


D


Answer: B

## Explanation:

A vertical mirror is placed, so the object on the left will appear right in reverse position and vice-versa.
So the group of vertical lines at the bottom right side part of the inner square will appear at bottom left side but will still remain vertical, hence second option is the right image.
=> Ans - (B)

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two dasses of alphabets as shown in the given two matrices. The columns and rows of Matrix-l are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9 . A letter from these matrices can be represented first by its row and next by column, for example, ' $D$ ' can be represented by 11,42 etc., and ' $D$ ' can be represented by 68,99 , etc. Similarly, you have to identify the set for the word "NOSE".

Matrix-I

|  | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | L | A | N | O | D |
| 1 | O | D | L | A | N |
| 2 | A | N | O | D | L |
| 3 | D | L | A | N | O |
| 4 | N | O | D | L | A |

Matrix-II

|  | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | E | I | C | P | S |
| 6 | P | S | E | I | C |
| 7 | I | C | P | S | E |
| 8 | S | E | I | C | P |
| 9 | C | P | S | E | I |

A $21,10,78,98$

B $13,22,66,56$

C $02,34,59,68$

D $41,42,85,86$
Answer: A

Explanation:
(A) : 21, 10, 78, 98 : NOSE
(B) : 13, 22, 66, 56 : AOSI
(C) : 02, 34, 59, 68 : NOSI
(D) : 41, 42, 85, 86 : ODSE
=> Ans - (A)

Question 50
A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two dasses of alphabets as shown in the given two matrices. The columns and rows of Matrix-l are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9 . A letter from these matrices can be represented first by its row and next by column, for example, 'S' can be represented by 10, 34 etc., and ' $Y$ ' can be represented by 57,95 , etc. Similarly, you have to identify the set for the word "PARK".

Matrix-I

|  | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | P | T | A | S | E |
| 1 | S | E | P | T | A |
| 2 | T | A | S | E | P |
| 3 | E | P | T | A | S |
| 4 | A | S | E | P | T |

Matrix-II

|  | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | K | I | Y | C | R |
| 6 | C | R | K | I | Y |
| 7 | I | Y | C | R | K |
| 8 | R | K | I | Y | C |
| 9 | Y | C | R | K | I |

A $13,14,85,55$

B $31,02,78,98$

C $23,22,66,67$

D 00, 40, 59, 78
Answer: B

Explanation:
(A) : $13,14,85,55:$ TARK
(B) : 31, 02, 78, 98 : PARK
(C) : 23, 22, 66, 67 : ESRK
(D) : 00, 40, 59, 78 : PARR
=> Ans - (B)

## General Awareness

Instructions
For the following questions answer them individually
Question 51
What is the full form of GNI?

A Gross National Interest
B Gross National Income

C Gross Net Interest
D Gross Net Income
Answer: B

## Question 52

Which among the following is an apex institution in the sphere of Agriculture credit in India?

A NABARD (National Bank for Agriculture and Rural Development)
B SIDBI (Small Industries Development Bank of India)
C EXIM Bank

D NAFED (National Agricultural Cooperative Marketing Federation of India Ltd.)
Answer: A

## Question 53

Which organisation measures Gross Domestic Product in India?

A Reserve Bank of India

B NITI Aayog

C State Bank of India

D Central Statistics Office
Answer: D

## Question 54

Who among the following suggested the 'Rolling Plan'?

A John W. Miller

B D. T. Lakdawala
C Gunnar Myrdal

D Sukhmay Chakarborty
Answer: C

## Question 55

Why was 'Tendulkar Committee' constituted?

A To measure unemployment

B To measure growth rate
C To measure poverty

D To measure agricultural produce
Answer: C

## Question 56

Which of the following is not a branch of federal form of government?

A Judiciary

B Executive

C Legislative
D Media
Answer: D

Question 57
What is meant by 'defection'?

A Changing party after winning election
B Changing party before winning election

C Changing party after losing election
D Changing party before losing election
Answer: B

## Question 58

Who among the following said that 'Democracy is the government of the people, for the people and by the people'?

A Aristotle

B Plato

C Abraham Lincoln
D George Bush
Answer: A

## Explanation:

braham Lincoln

## Question 59

How many types of emergencies can be proclaimed in India?

A Five

B Six

C Two

D Three
Answer: D

## Question 60

## Indian Constitution contains how many Parts?

A Twelve Parts

B Twenty-two Parts

C Eighteen Parts

D Twenty-five Parts
Answer: D

## Question 61

Money bill can be introduced first in which house of Parliament?

A Only in Lok Sabha
B Only in Rajya Sabha

C Both in Lok Sabha and Rajya Sabha
D Either in Lok Sabha or in Rajya Sabha
Answer: A

## Question 62

In how many ways Indian citizenship can be lost?

A One

B Two

C Three

D Four
Answer: C

## Question 63

Who of the following appoints the Prime Minister of India?

A President of India

B Chief Justice of India

C Attorney General of India

D Governor
Answer: A

## Question 64

Who among the following was one of the discoverers of Indus Valley Civilization?

A Lord Wooley

B Daya Ram Sahni

C V.S. Agarwal

D A. L. Basham
Answer: B

## Question 65

When was Delhi declared as the capital of India?

A 1901

B 1911

C 1913

D 1921
Answer: B

## Question 66

Magical charms and spells are given in which of the following Vedas?

A Rig Veda

B Sama Veda

C Yajurveda Veda

D Atharva Veda
Answer: D

## Question 67

In Indus valley civilization, Dholavira is famous for which of the following?

A Rock cut architecture

B Sea port
C Water Conservation

D Pottery
Answer: C

## Question 68

Who was the founder of Arya Samaj?

A Mula Shankar
B Bal Gangadhar Tilak
C Swami Dayanand Saraswati
D Rabindra Nath Tagore
Answer: C

## Question 69

Which of the following pair is CORRECT?

A $23.5^{\circ}$ South - Tropic of Cancer
B $23.5^{\circ}$ South - Tropic of Capricorn

C $23.5^{\circ}$ North - Tropic of Capricorn
D $66^{\circ}$ North - Antarctic Circle

## Answer: B

## Question 70

Which of the following sea has highest salanity?

A Red Sea

B Black Sea

C Dead Sea
D Arabian Sea
Answer: C

## Question 71

Ox-bow lakes are formed when river is $\qquad$ .

A Fast moving
B At steep slope
C At very low gradient
D At near point of origin
Answer: C

## Question 72

In which country Cape Comorin is located?

A India
B Pakistan

D South America
Answer: A

## Question 73

Which among the following is a green house gas?
I. Methane
II. Carbon dioxide
III. Nitrogen dioxide

A I and II

B I and III

C II and III
D All options are correct.
Answer: A

## Question 74

Which of the following cell organelle is present only in plant cell?

A Mitochondria

B Cell wall

C Cell membrane

D Vacuole
Answer: B

## Question 75

Which of the following is a vestigial organ in human body?

A Wisdom teeth

B Spleen
C Thyroid

D Gall bladder
Answer: A

## Question 76

Which of the following enzyme is essential for clotting of blood?

A Amylase

B Thrombin

C Pepsin

D Renin
Answer: B

## Question 77

Which of the following is a genetic disease?

A Down syndrome
B Elephantisis

C Asthama
D Night blindness
Answer: A

## Question 78

Onion is an example of bulb, which is a modified $\qquad$ .

A Stem

B Root

C Leaf
D Flower
Answer: A

## Question 79

Which of the following gives colour to human skin?

A Adenosine
B Thymine
C Melanin
D Guanine
Answer: C

## Question 80

A flying jet possesses $\qquad$ .

A Potential energy
B Kinetic energy
C Wind energy

Both kinetic and potential energy
Answer: D

## Question 81

Direction of heat flow depends on $\qquad$ .

A Density

B Energy

C Mass

D Temperature
Answer: D

## Question 82

Which of the following phenomena is involved in Kaleidoscope?

A Refraction
B Reflection

C Total Internal reflection

D Diffraction
Answer: B

## Question 83

In a magnifying glass $\qquad$ lens is used.

A Convex

B Concave

C Plano concave

D Plano convex
Answer: A

## Question 84

Which of the following is also termed as main memory of computer?

A RAM

B ROM
C Hard disk
D Compact disk
Answer: A

Question 85
BIT is also known as $\qquad$ _.

A Binary language
B Binary digit
C Binary Number
D Gigabyte
Answer: B

Question 86
Match the following.

|  | Nature | Substance |  |
| :---: | :--- | :---: | :--- |
| 1 | Acidic | a | Distil water |
| 2 | Basic | b | Carbonated drink |
| 3 | Neutral | c | Soap |

A 1-a,2-c, 3-b
B 1-b,2-c,3-a
C $1-\mathrm{a}, 2-\mathrm{b}, 3-\mathrm{c}$

D 1-c, 2-a, 3-b
Answer: B

Question 87
Which of the following is radioactive in nature?

A Helium
B Sodium

C Thorium
D Platinum
Answer: C

## Question 88

Which of the following is used as fuel rods in Atomic reactor?

A Sodium

B Uranium

C Graphite

D Boron
Answer: B

## Question 89

Bleaching action of Chlorine is due to which reaction?

A Oxidation

B Hydrolysis

C Redox

D Decomposition
Answer: A

## Question 90

Which of the following is a major component of water pollution in Bengal Basin?

A Chromium

B Arsenic

C Calcium

D Potassium
Answer: B

## Question 91

Identify correct type of food chain:
Dead animal ---> maggots ---> frog ---> snake

A Decomposer food chain
B Detritus food chain

C Grazing food chain

D Parasitic food chain
Answer: B

## Question 92

In which of the following ecosystem pyramid of biomass is upright?

A Pond ecosystem
B Grassland ecosystem
C Fresh water ecosystem

D Forest ecosystem
Answer: B

## Question 93

Ministry of Health and family welfare has launched the 'Test and Treat Policy' for $\qquad$ patients.

A Polio
B HIV

C Malaria
D Cancer
Answer: B

## Question 94

Karl Landsteiner is known for the discovery of which one of the following?

A Cresco graph
B Radioactivity
C Blood group
D X-rays
Answer: C

Question 95
National sport of Malaysia is $\qquad$ ـ.

A Badminton
B Hockey
C Table Tennis

D Chess
Answer: A

## Question 96

Lotus Temple is known for which religion?

A Judaism

B Buddhism
c Bahai

D Taoism
Answer: C

## Question 97

Who is the recipient of Padma Shri for the year 2016 in the field of sports - Cricket along with Virat Kohli?

A Polly Umrigar
B Amit Bhandari

C Shekhar Naik

D Bishan Singh Bedi
Answer: C

## Question 98

Who has written the book named 'The People's President: Dr. A.P.J. Abdul Kalam'?

A S. M. Khan
B Sourabh Duggal
C Tarun Vijay
D Shri Vijay Kumar
Answer: A

## Question 99

Which country has opened its consulate in Chennai on 28 April 2017?

A Kazakhstan

B Uzbekistan

C Iran
D Israel
Answer: A

Question 100
Katchatheevu Island was ceded by India to which country in 1974 ?

A Sri Lanka
B Maldives
C Indonesia

Answer: A

## Quant

## Instructions

For the following questions answer them individually

## Question 101

If $\stackrel{1}{N}=\begin{gathered}(\sqrt{6}+\sqrt{5}) \\ \sqrt{6}-\sqrt{5}\end{gathered}$, then what is the value of $\mathbf{N}$ ?

A $6-\sqrt{30}$

B $6+\sqrt{30}$

C $11-2 \sqrt{30}$

D $11+2 \sqrt{5}$
Answer: C

## Explanation:

Given: ${ }^{N}=\sqrt{6}=\sqrt{6}+\sqrt{5}$
=> $N=\begin{array}{r}\sqrt{6}-\sqrt{5} \\ \sqrt{6}+\sqrt{5}\end{array}$
Rationalizing the denominator, we get :
$\Rightarrow N=\sqrt{\sqrt{6}-\sqrt{5}}+\sqrt{5} \times \sqrt{6}-\sqrt{5}$
$(\sqrt{6}-\sqrt{5})^{2}$
$\Rightarrow N=(\sqrt{6}+\sqrt{5})(\sqrt{6}-\sqrt{5})$
$\Rightarrow N=\underset{6-5}{6+5-2(\sqrt{6})(\sqrt{5})}$
$\Rightarrow N=11-2 \sqrt{30}$
=> Ans - (C)

## Question 102

What is the value of positive square root of $69+28 \sqrt{5}$ ?

A $7+2 \sqrt{5}$
B $7-2 \sqrt{5}$
C $2+7 \sqrt{5}$
D $2-7 \sqrt{5}$

## Answer: A

## Explanation:

Let $x=69+28 \sqrt{5}$
=> $x=69+2(2)(7)(\sqrt{5})$
$\Rightarrow x=(49)+(20)+2(7)(2 \sqrt{5})$
$\Rightarrow>=(7)^{2}+(2 \sqrt{5})^{2}+2(7)(2 \sqrt{5})$
$\Rightarrow x=(7+2 \sqrt{5})^{2}$
=> Positive square root of $x=7+2 \sqrt{5}$
=> Ans - (A)

## Question 103

$3^{11}+3^{12}+3^{13}+3^{14}$ is divisible by $\qquad$ .

A 7

B 8

C 11

D 14

## Answer: B

## Explanation:

Expression: $3^{11}+3^{12}+3^{13}+3^{14}$
$=3^{11}\left(1+3+3^{2}+3^{3}\right)$
$=3^{11} \times(1+3+9+27)$
$=3^{11} \times(40)$
$\because 40$ is divisible by 8 , hence the above expression is also divisible by 8
=> Ans - (B)

## Question 104

A boy added all natural numbers from 1 to 12 , however he added one number twice due to which the sum becomes 80 . What is the number which he
added twice?

A 3
B 2

C 7

D 8
Answer: B

## Explanation:

Sum of first ' $n$ ' natural numbers $=\begin{gathered}n(n+1 \\ 2\end{gathered}$
=> Sum of first 12 natural numbers $=2_{2}^{12(12+1)}=78$
Thus, number that was added twice $=80-78=2$
=> Ans - (B)

## Question 105

A 4
B 9
C 18
D 21
Answer: D

Explanation:
We know that $484<508<529$
=> $(22)^{2}<508<(23)^{2}$
Thus, smallest number to be added $=529-508=21$
=> Ans - (D)

## Question 106

Raman is $25 \%$ more efficient than Aman. If Aman can complete a piece of work in 25 days, then Raman can complete the same work in how many days?

A 12
B 15
C 16
D 20
Answer: D

## Explanation:

Let Aman's efficiency $=1$ unit/day
=> Total work to be done $=1 \times 25=25$ units
Raman is $25 \%$ more efficient than Aman, => Raman's efficiency $=1 \times{ }_{100}^{125}=1.25$ units/day
$\therefore$ Time taken by Raman working alone $={ }_{1.25}^{25}=20$ days
=> Ans - (D)

## Question 107

A and B together can complete a work in 30 day. They started together but after 6 days $A$ left the work and the work is completed by B after 36 more days. A alone can complete the entire work in how many days?

A 45
B 90
C 60

D 120
Answer: B

## Explanation:

Let total work to be done = L.C.M. $(30,36)=180$ units
=> (A+B)'s 1 day's work $={ }^{180}=6$ units/day
Let B's efficiency $=b$ units/day
According to ques, $=>(6 \times 6)+(36 \times b)=180$
=> $36 b=180-36=144$
=> $b={ }_{36}^{144}=4$
Thus, A's efficiency $=6-4=2$ units/day
$\therefore$ Time taken by A working alone $=\begin{gathered}180 \\ 2\end{gathered}=90$ days
=> Ans - (B)

## Question 108

The marked price of an article is $40 \%$ more than its cost price. If $10 \%$ discount is given, then what is the profit percentage?

A 10
B 20
C 26
D 32
Answer: C

## Explanation:

Let cost price of article = Rs. 100
=> Marked price after $40 \%$ markup $=100+(\stackrel{40}{100 \times 100)}$
$=100+40=R s .140$
Discount \% = 10\%
=> Selling price $=140-(100 \times 140)$
$=140-14=R s .126$
$\therefore$ Profit \% $={ }_{100}^{(126-100)} \times 100=26 \%$
=> Ans - (C)

## Question 109

What will be the net discount (in percent) after giving three successive discounts of $10 \%, 20 \%$ and $\mathbf{3 0 \%}$ ?

A 50.4

B 49.6
C 45.3
D 48.4

## Answer: B

## Explanation:

Let marked price = Rs. 100
Selling price after first discount of $10 \%=100-(100 \times 100)$
$=100-10=R s .90$
Similarly, selling price after second discount of $20 \%=90-\left(\begin{array}{c}20 \\ 100 \times 90)\end{array}\right.$
$=90-18=R s .72$
And selling price after third discount of $30 \%=72-(100 \times 72)$
$=72-21.6=R s .50 .4$
$\therefore$ Net discount $=\begin{gathered}(100-50.4) \\ 100\end{gathered} \times 100=49.6 \%$
=> Ans - (B)

## Question 110

The ratio of two numbers is $3: 5$. If both numbers are increased by 8 , the ratio becomes $13: 19$. What is the sum of the two numbers?

A 32
B 48

C 40

D 72
Answer: B

## Explanation:

Let the numbers be $3 x$ and $5 x$
According to ques,
$\begin{array}{r}3 x+8 \\ => \\ 5 x+8\end{array}=13$
=> $57 x+152=65 x+104$
=> $65 x-57 x=152-104$
$\Rightarrow x=\stackrel{48}{8}=6$
$\therefore$ Sum of numbers $=3 x+5 x=8 \times 6=48$
=> Ans - (B)

## Question 111

If $3 A=5 B$, then what is the value of $(A+B) / B$ ?

A $8 / 3$

B $8 / 5$

C $5 / 8$
D 5/3
Answer: A

## Explanation:

Given: $3 A=5 B$
=> ${ }^{A}={ }_{B}^{5}$
Let $A=5$ and $B=3$
To find: ${ }_{B}^{(A+B)}$
$=\stackrel{(5+3)}{3}={ }_{3}^{8}$
=> Ans - (A)
Question 112
What is the average of first 29 even numbers?

A 30
B 31

C 32

D 33
Answer: A

## Explanation:

Sum of first $n$ even numbers $=n(n+1)$
=> Sum of first 29 even numbers $=29(29+1)=29 \times 30$
=> Required average $=\underset{29}{29 \times 30}=30$
=> Ans - (A)

## Question 113

The average of 5 consecutive odd numbers is 27 . What is the product of the first and the last number?

A 621
B 667

C 713

D 725
Answer: C

Explanation:
Average of 5 consecutive odd numbers $=27$
=> Middle number $=27$
Thus, the consecutive odd numbers are $=23,25,27,29,31$
=> Product of first and last numbers $=23 \times 31=713$
=> Ans - (C)

## Question 114

A man bought 9 pens for a rupee. How many pens should he sell for a rupee to gain $50 \%$ ?

A 3
B 6
C 7

D 8
Answer: B

## Explanation:

Cost price of 1 pen = Rs. ${ }_{9}^{1}$
Let he sells $x$ pen, => Selling price of 1 pen $=$ Rs. ${ }^{1}$
$=>$ Profit $\%=\stackrel{(S . P .-C . P .)}{C . P .} \times 100=50 \%$
$=>\left[\left(\begin{array}{r}1 \\ x\end{array}-\frac{1}{9}\right) \div\binom{ 1}{9}\right] \times 100=50$
=> ${ }^{9-x}=\frac{1}{2}$
=> $18-2 x=x$
=> $x+2 x=3 x=18$
"> $x={ }_{3}^{18}=6$
$\therefore$ The man should sell 6 pens to gain $50 \%$
=> Ans - (B)
Question 115
On an article the profit is $210 \%$ of the cost price. If the cost price increase by $40 \%$ but the selling price remains constant, then approximately what percentage of selling price will be the profit?

A 55
B 62

C 74

D 85
Answer: A

## Explanation:

Let cost price = Rs. 100
=> Profit $={ }_{100}^{210} \times 100=$ Rs. 210
=> Selling price $=210+100=$ Rs. 310
Now new cost price $=100+(100 \times 100)=R s .140$
Thus, new profit $=310-140=R s .170$
=> Required $\%={ }_{310}^{170} \times 100 \approx 55 \%$
=> Ans - (A)

## Question 116

If the price of apple increases from Rs $80 / \mathrm{kg}$ to $\mathrm{Rs} 100 / \mathrm{kg}$, then by what percentage a person should decrease the consumption of apple so that his expenditure remains same?

A 25

B 22

C 20

D 18

## Answer: C

## Explanation:

Let a person initially consumes 10 kg apples
Expenditure on original price $=80 \times 10=R s .800$
New price $=$ Rs. 100/kg
=> New consumption $=100=8 \mathrm{~kg}$
$\therefore \%$ decrease in consumption $={ }^{(10-8)} \times 100=20 \%$
=> Ans - (C)

## Question 117

If $25 \%$ of a number is 6 , then what is the number which is $50 \%$ more than the initial number?

A 36

B 24

C 30

D 18
Answer: A

## Explanation:

Let the number be $x$
According to ques,
$=>\begin{gathered}25 \\ 100\end{gathered} \times(x)=6$
$\Rightarrow>=6 \times 4=24$
$\therefore$ Number which is $50 \%$ more than the initial number $=24+\left(\begin{array}{c}50 \\ 100 \times 24)\end{array}\right.$
$=24+12=36$
=> Ans - (A)

## Question 118

A boat travels 60 kilometers downstream and 20 kilometers upstream in 4 hours. The same boat travels 40 kilometers downstream and 40 kilometers upstream in 6 hours. What is the speed (in $\mathrm{km} / \mathrm{hr}$ ) of the stream?

A 24

B 16
C 18
D 20
Answer: B

## Explanation:

Let speed of boat $=x \mathrm{~km} / \mathrm{hr}$ and speed of stream $=y \mathrm{~km} / \mathrm{hr}$
Thus, downstream speed $=(x+y) \mathrm{km} / \mathrm{hr}$ and upstream speed $=(x-y) \mathrm{km} / \mathrm{hr}$
Using, time = distance/speed
$=\binom{60}{x+y}+\left({ }_{(x-y)}^{20}\right)=4$
$\begin{gathered}15 \\ = \\ x+y\end{gathered} \stackrel{5}{x-y}=1$
Similarly, $\left({ }^{40}+y\right)+\left({ }^{40}-y\right)=6$
=> $\begin{gathered}1 \\ x+y\end{gathered} \stackrel{1}{x-y}=\stackrel{3}{20}$
Solving equations (i) and (ii), we get : $x=24$ and $y=16$
$\therefore$ Speed of stream $=16 \mathrm{~km} / \mathrm{hr}$
=> Ans - (B)
Question 119
50 trees are standing in a line such that distance between any two consecutive trees is same. A car takes 18 seconds to travel from 13th tree to 34th tree. How much time (in seconds) will it take to reach from 1st tree to 50th tree?

A 42

B 42.85

C 45

D 49
Answer: A

Explanation:
Let the distance between each tree $=d$ metres
Thus, distance between 1st and 50th tree $=49 \mathrm{~d}$ metres
Distance covered by car from 13th to 34th tree $=21 \mathrm{~d}$
=> Speed of car $=x=\begin{gathered}21 d \\ 18\end{gathered}$ $\qquad$
$\therefore$ Time taken to reach from 1 st tree to 50 th tree $=49 \mathrm{~d}$
$={ }_{18}^{\substack{49 d \\ 218}}=49 \times{ }_{21}^{18}=42$ seconds
=> Ans - (A)

## Question 120

What will be the amount on Rs 12500 at the rate of $20 \%$ per annum compounded yearly for 3 years?

A 21080
B 21560
C 20600

D 21600
Answer: D

## Explanation:

Principal sum = Rs. 12,500
Rate of interest $=20 \%$ and time period $=3$ years
Amount after compound interest $=P(1+\underset{100}{r})^{T}$
$=12500\left(1+{ }_{100}^{20}\right)^{3}$
$=12500 \times\left({ }_{5}^{6}\right)^{3}$
$=100 \times 216=R s .21,600$
=> Ans - (D)

## Question 121

A certain sum becomes 7 times in 8 years, at simple interest, then in how many years it will become 19 times?

B

C 28

D 24

## Answer: D

## Explanation:

Let principal sum $=$ Rs. $P$ and rate of interest $=r \%$
Amount under simple interest after 8 years $=P+\begin{gathered}P \times R \times T \\ 100\end{gathered}$
$=>P+\binom{P \times r \times 8}{100}=7 P$
=> $\begin{aligned} 8 r \\ 100\end{aligned}=7-1=6$
$\Rightarrow r={ }_{8}^{600}=75 \%$
Let after $t$ years it becomes 19 times
$=P+\binom{P \times 75 \times t}{100}=19 P$
=> ${ }^{75} \mathbf{1 0 0}=19-1=18$
$\Rightarrow t={ }^{1800}=24$
$\therefore$ After 24 years, the sum becomes 19 times.
=> Ans - (D)
Instructions
The table given below shows the runs scored by 5 players in four matches.

| Player | Match |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | I | II | III | IV |
| A | 70 | 105 | 55 | 135 |
| B | 40 | 35 | 95 | 72 |
| C | 60 | 68 | 75 | 85 |
| D | 95 | 45 | 55 | 60 |
| E | 105 | 110 | 125 | 122 |

## Question 122

What is the difference between total runs scored by $A$ and $B$ in four matches?

A 111

B 123

C 98
D 135
Answer: B

Total runs scored by A in four matches $=70+105+55+135=365$
Total runs scored by B in four matches $=40+35+95+72=242$
=> Required difference $=365-242=123$
=> Ans - (B)

## Question 123

Runs scored by C in match II is how much percent more than the runs scored by C in match I?

A 11.76

B 16.66

C 17.12

D 13.33
Answer: D

## Explanation:

Runs scored by C in match $\mathrm{I}=60$
Runs scored by C in match II = 68
=> Required \% $=\frac{(68-60)}{60} \times 100$
$={ }_{60}^{800}=13.33 \%$
=> Ans - (D)

## Question 124

Runs scored by A in match II is what percent of the total runs scored by these five players in match II?

A 71.07

B 35.14

C 28.92

D 55.13
Answer: C

## Explanation:

Runs scored by A in match II $=105$
Total runs scored by these five players in match II $=105+35+68+45+110=363$
=> Required $\%={ }_{363}^{105} \times 100=28.92 \%$
=> Ans - (C)

## Question 125

What is the correct order of averages of the given players in the 4 matches?

A $\mathrm{E}>\mathrm{A}>\mathrm{C}>\mathrm{D}>\mathrm{B}$

B $\mathrm{E}>\mathrm{A}>\mathrm{D}>\mathrm{C}>\mathrm{B}$

C $\mathrm{A}>\mathrm{E}>\mathrm{C}>$ D $>$ B

```
A>E>B>C>D
```

Answer: A

## Explanation:

Decreasing order of average = Decreasing order of total runs scored.
Runs scored by :
$A=70+105+55+135=365$
$B=40+35+95+72=242$
$C=60+68+75+85=288$
D $=95+45+55+60=255$
$E=105+110+125+122=462$
$\therefore$ Decreasing order $=\mathrm{E}>\mathrm{A}>\mathrm{C}>\mathrm{D}>\mathrm{B}$
=> Ans - (A)

## Instructions

For the following questions answer them individually

## Question 126

A solid metallic sphere of radius 21 cm is melted and recast into a cone with diameter of the base as 21 cm . What is the height (in cm) of the cone?

A 336
B 112

C 224

D 66
Answer: A

## Explanation:

Radius of sphere, $R=21 \mathrm{~cm}$
Let height of cone $=h \mathrm{~cm}$ and radius of cone $=r=\underset{2}{21} \mathrm{~cm}$
According to ques, Volume of cone $=$ Volume of sphere
=> ${ }_{3}^{1} \pi r^{2} h={ }_{3}^{4} \pi R^{3}$
$=>\binom{21}{2}^{2} \times h=4 \times(21)^{3}$
=> $h=4 \times 4 \times(21)^{3}$
=> $h=16 \times 21=336 \mathrm{~cm}$
=> Ans - (A)

## Question 127

The radius of a wheel is 3.5 cm . What is the distance (in cm ) travelled by the wheel in 20 revolutions?

A 220

B 440

C 880

D
1320
Answer: B

## Explanation:

Circumference of wheel $(r=3.5)=2 \pi r$
$=2 \times{ }_{7}^{22} \times 3.5=22 \mathrm{~cm}$
Distance covered in 1 revolution $=$ Circumference of wheel $=22 \mathrm{~cm}$
=> Distance covered in 20 revolutions $=22 \times 20=440 \mathrm{~cm}$
=> Ans - (B)
Question 128
If the perimeter of a square is 44 cm , then what is the diagonal (in cm ) of the square?

A $11 \sqrt{2}$
B $2 \sqrt{11}$

C 11
D $44 \sqrt{2}$
Answer: A

## Explanation:

Let side of square $=s \mathrm{~cm}$
=> Perimeter $=4 s=44$
=> $s={ }_{4}^{44}=11 \mathrm{~cm}$
Thus, diagonal $=d=\sqrt{s^{2}+s^{2}}$
$\Rightarrow d=s \sqrt{2}$
$\Rightarrow>d=11 \sqrt{2} \mathrm{~cm}$
=> Ans - (A)

## Question 129

What is the curved surface area (in $\mathrm{cm}^{2}$ ) of a cylinder having radius of base as 14 cm and height as 10 cm ?

A 440
B 880

C 220

D 1320
Answer: B

## Explanation:

Radius of cylinder $=r=14 \mathrm{~cm}$ and height $=h=10 \mathrm{~cm}$
=> Curved surface area $=2 \pi r h$
$=2 \times{ }_{7}^{22} \times 14 \times 10$
$=44 \times 20=880 \mathrm{~cm}^{2}$
=> Ans - (B)
Question 130
Three circles of radius 63 cm are placed in such a way that each circle touches the other two. What is the area of the portion enclosed by the three circles?

A $7938 \sqrt{3}-4158$
B $3969 \sqrt{3}-4158$
C $7938 \sqrt{3}-6237$
D $3969 \sqrt{3}-6237$
Answer: D

## Explanation:



Radius of each circle $=r=63 \mathrm{~cm}$
$\Rightarrow \mathrm{AC}=r+r=126 \mathrm{~cm}$
Similarly, $A B=126 \mathrm{~cm}$ and $B C=126 \mathrm{~cm}$
=> $\triangle \mathrm{ABC}$ is an equilateral triangle having $\angle A=\angle B=\angle C=60^{\circ}$
Thus, area of shaded portion $=($ Area of $\triangle \mathrm{ABC})-(3 \times$ Area of each sector $)$
$=\left(\begin{array}{c}\sqrt{3} \\ 4\end{array} \times s^{2}\right)-\left(3 \times \stackrel{\theta}{360^{\circ}} \times \pi r^{2}\right)$
$=\binom{\sqrt{3}}{4 \times 126 \times 126}-\left(3 \times 360^{\circ} \times{ }^{\circ} \times 22 \times 63 \times 63\right)$
$=(3969 \sqrt{3})-(11 \times 9 \times 63)$
$=(3969 \sqrt{3}-6237) \mathrm{cm}^{2}$
=> Ans - (D)
Question 131
If $(x / y)^{5 a-3}=(y / x)^{17-3 a}$, then what is the value of $\mathbf{a}$ ?

A - 7
B -5

C 0
D 3
Answer: A

## Explanation:

Given: $(x / y)^{5 a-3}=(y / x)^{17-3 a}$
=> $(x / y)^{5 a-3}=(x / y)^{3 a-17}$
=> $5 a-3=3 a-17$
=> $5 a-3 a=-17+3$
=> $2 a=-14$
"> $a={ }_{2}^{-14}=-7$
=> Ans - (A)

## Question 132

What is the value of $\left.\begin{array}{c}x^{2}-x-6 \\ x^{2}+x-12\end{array}\right) \div\binom{ x^{2}+5 x+6}{x^{2}+7 x+12}$ ?

A 1
B $(x-3) /(x+3)$
C $(x+4) /(x-3)$
D $(x-3)(x+4)$
Answer: A

## Explanation:

Expression $=\binom{x^{2}-x-6}{x^{2}+x-12} \div\binom{ x^{2}+5 x+6}{x^{2}+7 x+12}$
$=\binom{x^{2}-x-6}{x^{2}+x-12} \times\binom{ x^{2}+7 x+12}{x^{2}+5 x+6}$
$=(\stackrel{(x-3)(x+2)}{(x+4)(x-3)}) \times\binom{(x+4)(x+3)}{(x+3)(x+2)}$
$=1$
=> Ans - (A)

## Question 133

If $x^{2}+\stackrel{1}{x^{2}}=\stackrel{7}{4}$ for $\mathbf{x}>\mathbf{0}$, then what is the value of $x^{3}+\stackrel{1}{x^{3}}$

A $\begin{array}{r}3 \sqrt{3} \\ \sqrt{5}\end{array}$

B $\quad \begin{gathered}3 \sqrt{15} \\ 5\end{gathered}$
C $\quad \begin{aligned} & 3 \sqrt{15} \\ & 8\end{aligned}$

D $\begin{gathered}3 \sqrt{5} \\ 8\end{gathered}$

## Answer: C

## Explanation:

Given : $x^{2}+{ }_{x^{2}}=\stackrel{7}{4}$
=> $\left(x+{ }_{x}^{x}\right)^{2}-2(x)\left({ }_{x}^{x}\right)=\stackrel{7}{4}$
=> $\left(x+{ }_{x}^{x}\right)^{2}=\stackrel{7}{4}+2={ }_{4}^{15}$
=> $x+{ }_{x}^{1}=\frac{\sqrt{15}}{2}$
Cubing both sides, we get :
$=>x^{3}+\stackrel{1}{x^{3}}+3(x)\binom{x}{x}(x+\stackrel{1}{x})=\binom{\sqrt{15}}{2}^{3}$
$=>x^{3}+{ }_{x^{3}}^{1}+3\binom{\sqrt{15}}{2}=\begin{gathered}15 \sqrt{15} \\ 8\end{gathered}$
=> $x^{3}+x^{1}=\stackrel{15 \sqrt{15}}{8}-\begin{gathered}3 \sqrt{15} \\ 2\end{gathered}$
$\Rightarrow x^{3}+{ }_{x^{3}}=\stackrel{3 \sqrt{15}}{8}$
=> Ans - (C)

## Question 134

If $x^{2}-8 x+1=0$, then what is the value of $x^{2}+\stackrel{1}{x^{2}}$ ?

A 18

B 34
C 40
D 62
Answer: D

## Explanation:

Given : $x^{2}-8 x+1=0$
Dividing both sides by ' $x$ '
=> $x+{ }_{x}=8$
Squaring both sides, we get :
=> $x^{2}+\stackrel{1}{x^{2}}+2(x)(\stackrel{1}{x})=64$
$\Rightarrow x^{2}+\stackrel{1}{x^{2}}=64-2=62$
=> Ans - (D)

## Question 135

What is the simplified value of $\left(x^{32}+\stackrel{1}{x^{32}}\right)\left(x^{8}+\stackrel{1}{x^{8}}\right)\left(x-{ }_{x}^{x}\right)\left(x^{16}+\stackrel{1}{x^{16}}\right)\left(x+{ }_{x}^{x}\right)\left(x^{4}+\stackrel{1}{x^{4}}\right)$ ?

A $\left(x^{64}+x^{1}\right)$
B $\begin{gathered}\left(x^{64}-\frac{1}{1}+x_{1}^{4}\right) \\ \left(x^{2}+x^{2}\right)\end{gathered}$
B $\left(x^{2}+x^{2}\right)$

C $\begin{gathered}\left.\begin{array}{c}\left(x^{64}-{ }^{1}{ }^{64}\right) \\ \left(x+x_{x}^{1}\right)\end{array}\right)\end{gathered}$
D $\begin{gathered}\left(x^{32}-{ }^{1}{ }^{32}\right) \\ \left(x+x_{x}^{1}\right)\end{gathered}$

## Answer: B

## Explanation:

Expression $=\left(x^{32}+{ }_{x^{32}}^{1}\right)\left(x^{8}+\stackrel{1}{x^{8}}\right)\left(x-{ }_{x}^{x}\right)\left(x^{16}+{ }_{x^{16}}^{1}\right)\left(x+{ }_{x}^{x}\right)\left(x^{4}+\stackrel{1}{x^{4}}\right)$
$=\left(x^{32}+\stackrel{1}{x^{32}}\right)\left(x^{8}+\stackrel{1}{x^{8}}\right)\left(x^{2}-\stackrel{1}{x^{2}}\right)\left(x^{16}+{ }_{x^{16}}^{1}\right)\left(x^{4}+{ }^{1} x^{4}\right)$
Multiply and divide by $\left(x^{2}+\stackrel{1}{x^{2}}\right)$, we get :

$$
\begin{aligned}
& =\stackrel{\stackrel{1}{1}}{x^{2}+x^{2}} \times\left(x^{32}+\stackrel{1}{x^{32}}\right)\left(x^{8}+\stackrel{1}{x^{8}}\right)\left(x^{2}-\stackrel{1}{x^{2}}\right)\left(x^{2}+\stackrel{1}{x^{2}}\right)\left(x^{16}+{ }_{x^{16}}^{16}\right)\left(x^{4}+{ }_{x^{4}}^{1}\right) \\
& =\stackrel{1_{1}^{1}}{x^{2}+x^{2}} \times\left(x^{32}+\stackrel{1}{x^{32}}\right)\left(x^{8}+\stackrel{1}{x^{8}}\right)\left(x^{16}+\stackrel{1}{x^{16}}\right)\left(x^{4}+\stackrel{1}{x^{4}}\right)\left(x^{4}-\stackrel{1}{x^{4}}\right) \\
& =\stackrel{1_{1}}{x^{2}+x^{2}} \times\left(x^{32}+\stackrel{1}{x^{32}}\right)\left(x^{8}+\stackrel{1}{x^{8}}\right)\left(x^{16}+{ }_{x^{16}}^{16}\right)\left(x^{8}-\stackrel{1}{x^{8}}\right) \\
& =\stackrel{x^{1}{ }_{1}^{1}}{x^{2}} \times\left(x^{32}+{ }^{1} x^{32}\right)\left(x^{16}+{ }^{1}{ }^{16}\right)\left(x^{16}-x^{16}\right) \\
& =\stackrel{1}{x_{1}}{ }^{2}+x^{2} \times\left(x^{32}+{ }^{\frac{1}{32}}\right)\left(x^{32}-{ }^{\frac{1}{32}}\right) \\
& =\stackrel{1_{1}^{1}}{x^{2}+x^{2}} \times\left(x^{64}-x^{164}\right) \\
& \text { => Ans - (B) }
\end{aligned}
$$

## Question 136

If $P$ is the circum-center in $\triangle A B C, \angle B P C=130^{\circ}$, then what is the value (in degrees) of $\angle B A C$ ?

A 30
B 60

C 65

D 105
Answer: C

## Explanation:



Given : $P$ is the circum-center in $\triangle A B C$ and $\angle B P C=30^{\circ}$
To find: $\angle \mathrm{BAC}=$ ?
Solution : In a circle, angle subtended by an arc at the centre is double the angle subtended by the same arc on any other point on the circle
$\Rightarrow \angle B P C=2 \times \angle B A C$
$=>\mathrm{BAC}=\begin{gathered}130^{\circ} \\ 2\end{gathered}=65^{\circ}$
=> Ans - (C)

## Question 137

In $\triangle P Q R, \angle P Q R=90^{\circ}, P Q=5 \mathrm{~cm}$ and $Q R=12$. What is the radius (in cm ) of the circum-circle of $\triangle P Q R$ ?

A 6.5
B 7.5
C 13

Answer: A

## Explanation:



Given : In $\triangle P Q R, \angle P Q R=90^{\circ}, \mathrm{PQ}=5 \mathrm{~cm}$ and $\mathrm{QR}=12 \mathrm{~cm}$
To find: $\mathrm{OR}=$ ?
Solution : In $\triangle \mathrm{PQR}$,
$=>(P R)^{2}=(P Q)^{2}+(Q R)^{2}$
=> $(P R)^{2}=(5)^{2}+(12)^{2}$
=> $(P R)^{2}=25+144=169$
=> $P R=\sqrt{169}=13 \mathrm{~cm}$
Also, in a right angled triangle, circumradius is half the hypotenuse of the triangle.
$\therefore \mathrm{OR}=r={ }_{2}^{13}=6.5 \mathrm{~cm}$
=> Ans - (A)

## Question 138

 value (in degrees) of \$\$\angle\$\$POR?

A 150

B 110

C 160

D 130
Answer: A

Question 139
In the given figure, 0 is the centre of the circle, $0 Q$ is perpendicular to RS and $\$ \$ \mathbf{a n g l e \$ \$ S R T = \$ \$ 3 0 ^ { \wedge } \backslash c i r c \backslash \$ \$ \text { . If } R S = 1 0 \$ \$ \backslash s u r d 2 \$ \$ , ~}$ then what is the value of PR\$\$^2\}\$\$?

A $200(1+\sqrt{ } 3)$

B $300(2+\sqrt{ } 3)$

C $200(2+\sqrt{ } 3)$

D $100(3+2 \sqrt{3})$
Answer: C

Question 140
If $\triangle A B C$ is right angled at $B, A B=30$ and $\angle A C B=60^{\circ}$, then what is the value of $A C$ ?

A $\$ 20 \$ \$$
B \$\$20\sqrt\{3\}\$\$
C $\$ \$ 40 \$ \$$
D $\$ \$ 60 \$$
Answer: B

## Explanation:



It is given that \$\$\triangle\$\$ ABC is a right angled at $\mathrm{B}, \mathrm{AB}=30 \mathrm{~cm}$ and \$\$\angle $\mathrm{C}=60^{\wedge} \backslash \mathrm{circ} \$ \mathbf{\$}$
Now, in right \$\$|triangle\$ ABC ,
=> \$\$sin(langle C)=\frac\{AB\}\{AC\}\$\$
=> \$\$sin(60^\circ)=\frac\{30\}\{AC\}\$\$
=> \$\$\frac\{\sqrt3\}\{2\}=\frac\{30\}\{AC\}\$\$
=> \$\$AC=\frac\{2\}\{\sqrt3\}\times30=20\sqrt3\$\$ cm
=> Ans - (B)

## Question 141

If $\$ \$ \backslash \sin \backslash$ theta+\cos $\backslash$ theta=\sqrt $\{3\} \backslash \cos (90-\backslash t h e t a) \$ \$$, then what is the value of $\$ \$ \backslash t a n \backslash t h e t a \$ \$ ?$

A $\$ \$ \backslash \mathrm{sqrt}\{3\}-1 \$ \$$
B \$\$\sqrt\{3\}+1\$\$
C $\$ \$ \backslash f r a c\{(\backslash s q r t\{3\}+1)\}\{2\} \$ \$$
D \$\$\frac\{(\sqrt\{3\}-1)\}\{2\}\$\$
Answer: C

## Explanation:

Given : \$\$sin\theta+cos\theta=\sqrt3cos(90^\circ-\theta)\$\$
=> \$\$sin\theta+cos\theta=\sqrt3sin\theta\$\$
=> \$\$cos\theta=sin\theta(\sqrt3-1)\$\$
=> \$\$\frac\{sin\theta\}\{cos\theta\}=\frac\{1\}<br>sqrt3-1\}\$\$
=> \$\$tan\theta=\frac\{1\}\{\sqrt3-1\}\times \frac\{\sqrt3+1\}\{\sqrt3+1\}\$\$
=> \$\$tan\theta=\frac\{\sqrt3+1\}\{3-1\}\$\$
=> \$\$tan\theta=\frac\{\sqrt3+1\}\{2\}\$\$
=> Ans - (C)

## Question 142

If $\tan A=\$ \$ \backslash f r a c\{1\}\{3\} \backslash \$ \$$ and $\tan B=\$ \$ \backslash f r a c\{2\}\{5\} \$ \$$, then what is the value of $\tan (2 A+B)$ ?

A $8 / 15$

B $6 / 13$

C $37 / 115$

D 23/14
Answer: D

## Explanation:

Given : \$\$tanA=\frac\{1\}\{3\}\$\$ and \$\$tanB=\frac\{2\}\{5\}\$\$
=> \$\$tan2A=\frac\{2tanA\}\{1-tan^2A\}\$\$
=> \$\$tan2A=\frac\{2\times \frac\{1\}\{3\}\}\{1-(\frac\{1\}\{3\})^2\}\$\$
=> \$\$tan2A=\frac\{\frac\{2\}\{3\}\}<br>frac\{8\}\{9\}\}\$\$
=> \$\$tan2A=\frac\{2\}\{3\}\times \frac\{9\}\{8\}=\frac\{3\}\{4\}\$\$
To find : \$\$tan $(2 A+B) \$ \$$
$=\$ \$ \backslash \operatorname{rrac}\{\tan (2 \mathrm{~A})+\tan (\mathrm{B})\}\{1-\tan (2 \mathrm{~A}) \tan (\mathrm{B})\} \$ \$$
$=\$ \$ \backslash f r a c\{\backslash f r a c\{3\}\{4\}+\backslash f r a c\{2\}\{5\}\}\{1-(\backslash f r a c\{3\}\{4\})(\backslash f r a c\{2\}\{5\})\} \$ \$$
$=\$ \$ \backslash f r a c\{\backslash$ frac $\{(15+8)\}\{20\}\}\{1-\backslash f r a c\{3\}\{10\}\} \$ \$$
= \$\$\frac\{23\}\{20\}\times\frac\{10\}\{7\}\$\$
$=\$ \$ \backslash f r a c\{23\}\{14\} \$ \$$
=> Ans - (D)
Question 143
What is the simplified value of [(1 + sec 20) \$\$tan^\{2\}\$\$ $\boldsymbol{\theta}]+1$ ?

A $\cos 2 \theta$

B 1

C $\sec 2 \theta$

D $\operatorname{cosec} \theta$
Answer: C

## Question 144

What is the simplified value of $\left[1+\$ \$ \cos ^{\wedge}\{2\} \$ \$ \boldsymbol{\theta} \$ \operatorname{cosec}^{\wedge}\{2\} \$ \$ \theta\right]-\$ \$ \cot ^{\wedge}\{2\} \$ \boldsymbol{\theta}$ ?

A - 1

B 0

C 1

D 3
Answer: C

## Explanation:

Expression : \$\$[1+ $\cos ^{\wedge} 2 \backslash$ theta $\operatorname{cosec}^{\wedge} 2 \backslash$ theta]-cot^2\theta\$\$
$=\$ \$\left[1+\backslash f r a c\left\{\cos ^{\wedge} 2 \backslash\right.\right.$ theta $\}\left\{\sin ^{\wedge} 2 \backslash\right.$ theta $\left.\}\right]-\cot ^{\wedge} 2 \backslash$ theta\$ $\$$
$=\$ \$ 1+\cot ^{\wedge} 2 \backslash$ theta $-\cot ^{\wedge} 2 \backslash$ theta $=1 \$ \$$
=> Ans - (C)

## Question 145

## If $\$ \$\left(\backslash \cos \backslash t h e t a+31^{\wedge} \backslash c i r c\right)=\backslash \sin 47^{\wedge} \backslash c i r c \$ \$$, then what is the value of $\$ \$ \backslash \sin 5 \backslash$ theta $\$ \$$ ?

A \$\$\frac\{1\}\{2\}\$\$
B $\$ \$ \backslash f r a c\{1\}\{\backslash$ sqrt $\{2\}\} \$ \$$

C \$\$\frac\{\sqrt\{3\}\}\{2\}\$\$
D $\$ \$ 0 \$$

## Answer: C

## Explanation:

Given : \$\$cos(\theta+31^\circ)=sin(47^\circ)\$\$
$=>\$ \$ \cos \left(\backslash\right.$ theta $\left.+31^{\wedge} \backslash c i r c\right)=\sin \left(90^{\wedge} \backslash c i r c-43^{\wedge} \backslash \operatorname{circ}\right) \$ \$$
Using, \$\$sin(90^\circ-x)=cos(x)\$\$
$=>\$ \$ \cos \left(\backslash\right.$ theta $\left.+31^{\wedge} \backslash \operatorname{circ}\right)=\cos \left(43^{\wedge} \backslash\right.$ circ $) \$ \$$
=> \$\$\theta+31^\circ=43^\circ\$\$
=> \$\$\theta=43^\circ-31^\circ\$\$
=> \$\$\theta=12^\circ\$\$
\$\$\therefore\$\$ \$\$sin(5\theta)=sin(5\times12^\circ)\$\$
$=\$ \$ \sin \left(60^{\wedge} \backslash c i r c\right)=\backslash f r a c\{\backslash s q r t 3\}\{2\} \$ \$$
=> Ans - (C)

## Instructions

The following pie chart shows the expenditure (in percentage) of five companies $P, Q, R, S$ and $T$ in the year 2016. Total Expenditure $=48$ crores.


## Question 146

## What was the total expenditure (in Rs crores) of the company $\mathrm{Q}, \mathrm{R}$ and T together?

A 19.2

B 28.8

C 24.3

D 31.4
Answer: B

## Explanation:

Total expenditure (in Rs crores) $=48$
$\%$ expenditure of the company $\mathrm{Q}, \mathrm{R}$ and T together $=(22+18+20)=60 \%$
=> Total expenditure (in Rs crores) of the company $Q, R$ and $T$ together $=\$ \$ \backslash f r a c\{60\}\{100\} \backslash$ times $48 \$ \$$
$=\$ \$ \mid f r a c\{144\}\{5\}=28.8 \$ \$$
=> Ans - (B)

## Question 147

By how much percent expenditure of company Q and R together greater than that of company P ?

A 33.33
B 60

C 66.67

D 75
Answer: C

## Explanation:

\% amount spent by company $\mathrm{P}=24 \%$
$\%$ amount spent by company Q and $\mathrm{R}=(22+18)=40 \%$
=> Required percent $=\$ \$ \backslash f r a c\{(40-24)\}\{24\} \backslash t i m e s 100 \$ \$$
$=\$ \$ \backslash f r a c\{2\}\{3\} \backslash$ times $100=66.67 \backslash \% \$$
=> Ans - (C)
Question 148
What is the respective ratio between the total expenditure of company $\mathrm{P}, \mathrm{Q}$ and S together to the total expenditure?

A 31:60

B $50: 31$

C 60:31

D 31:50

## Answer: D

## Explanation:

Total expenditure of company P, Q and S together (in \%) = \$\$(24+22+16)=62<br>%\$
Total expenditure of all companies (in \%) = \$ $100 \backslash \% \$$
=> Required ratio = \$\$\frac\{62\}\{100\}=31:50\$\$
=> Ans - (D)
Question 149
Total amount spent by company $S$ is what percent of total amount spent by company T and R ?

A 42.1

B 43

C 39.68

D 41
Answer: A

## Explanation:

$\%$ amount spent by company $S=16 \%$
$\%$ amount spent by company $T$ and $R=(20+18)=38 \%$
=> Required percent spent by company $S=\$ \$ \backslash f r a c\{16\}\{38\} \backslash$ times $100 \$ \$$
$=\$ \$ \backslash f r a c\{800\}\{19\}=42.1 \backslash \% \$$
=> Ans - (A)

## Question 150

The profit earned by company $R$ is equal to the $1 / 4$ th of the expenditure of company $Q$. What is the profit (in Rs crores) of company $R$ ?

B 4.84

C 2.64

D 5.66
Answer: C

## Explanation:

Total expenditure (in Rs crores) $=48$
Expenditure of company $\mathrm{Q}=\$ \$ \backslash \mathrm{frac}\{22\}\{100\} \backslash$ times $48 \$ \$$
Also, Profit earned by company R = \$\$\frac\{1\}\{4\}^\{th\}\$\$ Expenditure of company Q
=> Profit earned by company $R=\$ \$ \backslash f r a c\{1\}\{4\} \backslash$ times $\backslash f r a c\{22\}\{100\} \backslash$ times $48 \$ \$$
$=\$ \$ \backslash f r a c\{22 \backslash$ times 12$\}\{100\}=2.64 \$ \$$
=> Ans - (C)

## English

## Instructions

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

Question 151
Three summons have been (a:/ issued by the district court (b:/ but he has not turned up yet. (c:/ No Error (d:

A 1
B 2

C 3

D 4
Answer: A

## Question 152

Her aunt didn't (a:/ give me (b:/ a minute of peace. (c:/ No Error (d:

A 1
B 2

C 3
D 4
Answer: C

## Question 153

Aayushi has come (a:/ here to do a master (b:/ degree in Social Work. (c:/ No Error (d:

A 1
B 2
C 3

D 4
Answer: B

## Question 154

There is no money in (a:/ the bank in Rajesh's and (b:/ Reena's joint account. (c:/ No Error (d:

A 1
B 2
C 3

D 4
Answer: D

## Question 155

This master book concludes with pages (a:/ that contain lists of all (b:/ MBA colleges across India. (c:/ No Error (d:

A 1
B 2

C 3
D 4
Answer: B

## Instructions

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

Question 156
The man felt $\qquad$ when he got to know that he had been cheated.

A worried
B horrified

C humiliated
D disgraced
Answer: C

## Question 157

The chairman $\qquad$ the company's funds, so he was dismissed.

A pirated
B misplaced
C misappropriated
D enticed
Answer: C

## Question 158

Rohan yelled $\qquad$ her and she hastily retreated.

A towards
B to

C on
D at
Answer: D

## Question 159

He stood Ankita, but could not utter a single word for quite some time.

A to

B for
C before
D towards
Answer: C

## Question 160

We are all accountable $\qquad$ team leader for our work on this project.

A of
B with
C for

D to
Answer: D

## Instructions

In the following question, out of the four alternatives, select the word similar in meaning to the word given.

## Question 161

## Malevolent

A confused

B despiteful

C frugal
D sedate
Answer: B

Question 162
Querulous

A grouchy
B delusion

C belittle

D indecent
Answer: A

Question 163
Meander

A sanctify
B barren

C wander

D futile
Answer: C

Question 164
Fraternise

A regulate
B luxuriate

C appreciate

D associate
Answer: D

Question 165

## Ensconce

A unveil
B praise

C reveal

D conceal
Answer: D

## Instructions

In the following question, out of the four alternatives, select the word opposite in meaning to the word given.
Question 166

## Obstinate

A brighten
B degrade
C flexible
D repel
Answer: C

Question 167
Decry

A convict
B reject
C synthesis
D praise
Answer: D

Question 168
Hoarse

A scanty
B smooth
C disperse
D accept

## Answer: B

## Question 169

## Debonair

A cheerless
B rational
C inadequate
D nigged
Answer: A

## Question 170

## Suavity

A pleasant

B politeness
C misbehavior
D stupidity
Answer: C

## Instructions

In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.
Question 171
By fair means or foul

A By any means
B To make sense
C Undecided controversial
D To get puzzled
Answer: A

## Question 172

## Sword of Damocles

A Life full of quarrels
B Imminent danger
C In a state of suspense and anxiety
D Remain faithful to the cause
Answer: D

Out of elbows

A By all means

B Old

C Poor

D Forever
Answer: C

## Question 174

## Pandora's box

A Arguments for and against

B To act dubiously

C Popular

D A prolific source of trouble
Answer: D

Question 175

## A nig-nog

A Watchful

B Very old

C A fool

D Rich
Answer: C

Instructions
Improve the bracketed part of the sentence.
Question 176
Hardly had I finished cooking dinner (before) Rajesh arrived.

A when

B then

C while

D no improvement
Answer: A

## Question 177

I met the two boys, (whom I believe are) twins.

A who I believe to be

B who I believe are

C who to my belief, are
D no improvement
Answer: B

## Question 178

Let's buy a new phone with the annual bonus, (can we)?

A shall we

B can't we

C don't we

D no improvement
Answer: B

## Question 179

I have not written any letter to her since my brother (had died).

A was died
B died

C has died

D no improvement
Answer: C

## Question 180

Reyansh (gave) most of his time to music.

A devoted

B spent

C lent

D no improvement
Answer: A

## Instructions

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

## Question 181

That which is morally dangerous

A cadaverous

B defalcation

C sinecure

D pestiferous
Answer: D

## Question 182

## A temple dedicated to all the gods

A pantheon

B kiln

C scullery

D cellar
Answer: A

Question 183
That which cannot be satisfied

A camouflage
B insatiable

C undecipherable

D tenacious
Answer: B

Question 184
Free from punishment

A posterity
B stoicism

C impunity
D wrath
Answer: C

## Question 185

## Fear of foreigners

A stenophobia

B clinophobia

C ballistophobia

D xenophobia
Answer: D

## Instructions

In the following question, four words are given out of which one word is incorrectly spelt. Select the incorrectly spelt word.
Question 186

A accessory

B accelerate

C accesion

D accompany
Answer: C

Question 187

A chracteristic
B chancellor

C chauffeur

D chocolate
Answer: A

## Question 188

A etiquette

B espoinage
C expedient

D enthusiasm
Answer: B

## Question 189

A haemoglobin

B gyneacologist
c haematite

D inquietude
Answer: B

Question 190

A deliquescence

B pertinacious

C pisiculture

D renaissance
Answer: C

## Instructions

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

Man and his $\qquad$ are two distinct things, whereas a good deed should call forth approbation and a $\qquad$ deed, disapprobation, the doer of the deed whether good or $\qquad$ always deserves $\qquad$ or pity as the case may be. Hate the sin and not the sinner is a precept which, though easy enough to understand, is rarely $\qquad$ and that is why the poison of hatred spreads in the world.

## Question 191

Man and his $\qquad$ are two distinct things,

A working
B deeds

C knowledge

D altitude
Answer: B

## Question 192

Whereas a good deed should call forth approbation and a $\qquad$ deed, disapprobation,

A wicked

B useless

C violent

D sharp
Answer: A

## Question 193

The doer of the deed whether good or $\qquad$

A reliable

C bad

D evil
Answer: C

## Question 194

Always deserves $\qquad$ or pity as the case may be.

A punishment

B accolade

C applaud
D respect
Answer: D

## Question 195

Is rarely ___ and that is why the poison of hatred spreads in the world.

A followed
B practised

C justified
D acknowledged

## Answer: B

## Instructions

A passage is given with five questions following it. Read the passage carefully and select the best answer to each question out of the given four alternatives.

Superstitions are a universal phenomena having their own peculiar place in the cultural ethos and milieu of a people. They epitomize man's fear of the unknown, fear of evil, blind faith in omens and portents. Superstitions are inter-woven with myth, legend, unnatural phenomena and disaster, customs and traditions, and are mainly the outcome of ignorance. They are unreasoned and irrational beliefs that gradually become matters of faith. When certain things and happenings are rationally inexplicable people tend to assign mysterious and supernatural reasons for their operation. Thus a natural disaster is explained in terms of God's wrath and the failure of one's project is assigned to the black cat which crossed the path just as one set out on the errand. The primitive human beings were mainly governed by superstitions. Superstitions were widespread before the dawn of civilization when science had not advanced. Thus, ignorance of the primitive people and the resultant growth of superstitions were the direct outcome of the lack of scientific advancement. Unenlightened people always tend to be superstitious. The belief in the sanctity of time and old traditions of the ancestors bind the people into knots of superstitious thought.
Besides, the unscrupulous priests and religious officials exercise a dominating, unhealthy effect upon the people believing in religious orthodoxy. They encourage superstitions for their own ulterior motives. Superstitions are not only universally prevalent but even have strikingly common features whether believed in India or in as far off a place as Canada. There are some common superstitions which are shared by people all over the world. Beliefs in spirits, ghosts and witches and reincarnation are quite common among all the peoples of the world. Belief in witches still prevails in India, France, Scotland, England and many other countries. In countries of the East, especially in India, belief in ghosts and spirits still exists. The cries of certain birds like owls and ravens and the howl of cats are regarded with superstition as portents of evil throughout the world. Then there is a very common belief that the sighting of comets portends the death of kings or great men or some unforeseen catastrophe. Shakespeare refers to such a superstition in his Julius Ceaser, Halley's Comet in the twentieth century evoked a similar response in many a mind.

## Question 196

What is the main reason behind once superstitions?

A ignorance

B customs and traditions

C fear of the unknown

D blind faith in omens and portents
Answer: A

## Question 197

Who were mainly governed by superstitions?

A unenlightened people

B religious officials
C primitive human beings

D unscrupulous priests
Answer: C

Question 198
Which of the following is INCORRECT with respect to passage?

A superstitions is also prevailing in Canada
B superstitions are a universal phenomena
C superstitions are unreasoned and rational beliefs

D a natural disaster is regarded as a god's wrath by the superstitious people
Answer: C

## Question 199

According to passage which of the following is not regarded as a superstition by the people?

A howl of cats
B cries of children

C crossing of path by black cat

D sighting of comets
Answer: B

## Question 200

What can only be the effective counter of superstition?

A belief in the sanctity of time

B awareness through plays like Julius Ceaser by Shakespeare

C explaining the theory of reincarnation
D a broad light of scientific discovery
Answer: D

