

SSC CPO 2 July 2017 Afternoon Shift

Reasoning

Instructions

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

Question 1

Punjab : Bhangra :: Gujarat : ?

- A Bihu
- B Garba
- C Ghumar
- D Kathak

Answer: B

Explanation:

Second is the folk dance of first state, bhangra is the dance of Punjab, similarly **Garba** is performed in Gujarat.

=> Ans - (B)

Question 2

Weak : Feeble :: Large : ?

- A Strong
- B Insignificant
- C Colossal
- D Teeny

Answer: C

Explanation:

Expression = Weak : Feeble :: Large : ?

The given pairs are synonyms, feeble means weak, similarly synonym of large is **colossal**.

=> Ans - (C)

Instructions

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

Question 3

INQV : JPTZ :: HNSG : ?

- A IPVK
- B PIVK
- C IPKV
- D IRVK

Answer: A

Explanation:

Expression = INQV : JPTZ :: HNSG : ?

The pattern followed is :

I	N	Q	V
(+1)	(+2)	(+3)	(+4)
J	P	T	Z

Similarly, for HNSG : **IPVK**

H	N	S	G
(+1)	(+2)	(+3)	(+4)
I	P	V	K

=> Ans - (A)

Question 4

GHIJ : HJJL :: NOPQ : ?

A OQQS

B OSSQ

C PPRS

D OQSQ

Answer: A

Explanation:

Expression = GHIJ : HJJL :: NOPQ : ?

The pattern followed is :

G	H	I	J
(+1)	(+2)	(+1)	(+2)
H	J	J	L

Similarly, for NOPQ : **OQQS**

N	O	P	Q
(+1)	(+2)	(+1)	(+2)
O	Q	Q	S

=> Ans - (A)

Instructions

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

Question 5

6 : 216 :: 5 : ?

A 125

B 50

C 75

D 150

Answer: A

Explanation:

Expression = $6 : 216 :: 5 : ?$

The pattern followed is = $n : n^3$

Eg :- $(6)^3 = 216$

Similarly, $(5)^3 = 125$

=> Ans - (A)

Question 6

107 : 11449 :: 106 : ?

A 10636

B 11206

C 11236

D 11272

Answer: C

Explanation:

Expression = $107 : 11449 :: 106 : ?$

The pattern followed is = $n : n^2$

Eg :- $(107)^2 = 11449$

Similarly, $(106)^2 = 11236$

=> 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 Walls

B Doors

C Floor

D Foundation

Answer: D

Explanation:

Foundation is the main part or the first thing after that rest are made, hence it is the odd one out.

=> Ans - (D)

Question 8

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

A Clouds : Rain

B Injury : Pain

C Boiling : Evaporation

D Freezing : Cold

Answer: D

Explanation:

Second occurs due to first, rain comes from clouds, pain occurs due to injury and evaporation due to boiling, but **Freezing : Cold** is in reverse order, hence it is the odd one out.

=> Ans - (D)

Instructions

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

Question 9

A DU

B KP

C JQ

D GT

Answer: A

Explanation:

The pattern followed is that each letter is replaced by the letter at its position, when the alphabets are reversed, i.e. first is replaced by last, second by second last and so on.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
↓ ↓ ... ↓ ... ↓
Z Y X W V U T S R Q P O N M L K J I H G F E D C B A

D -> W, K -> P, J -> Q, G -> T

=> Ans - (A)

Question 10

A IM

B DH

C MS

D UY

Answer: C

Explanation:

(A) : I (+4 letters) = M

(B) : D (+4 letters) = H

(C) : M (+6 letters) = S

(D) : U (+4 letters) = Y

=> Ans - (C)

Instructions

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

Question 11

A 121 - 196

B 441 - 484

C 25 - 36

D 169 - 196

Answer: A

Explanation:

Apart from the first option, rest of the numbers are square of consecutive integers.

(A) : $(11)^2 = 121$ and $(14)^2 = 196$

(B) : $(21)^2 = 441$ and $(22)^2 = 484$

(C) : $(5)^2 = 25$ and $(6)^2 = 36$

(D) : $(13)^2 = 169$ and $(14)^2 = 196$

=> Ans - (A)

Question 12

A 47 - 74

B 49 - 96

C 63 - 36

D 97 - 79

Answer: B

Explanation:

The given numbers are reverse of each other, i.e. the ten's digit and unit's digits are interchanged.

But reverse of 49 is 94, hence **49 - 96** is the odd one out.

=> Ans - (B)

Instructions

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

Question 13

1. Prayer

2. Plane

3. Prey

4. Predate

5. Picture

A 51234

B 51243

C 52143

D 52134

Answer: C

Explanation:

As per the order of dictionary,

= Picture -> Plane -> Prayer -> Predate -> Prey

≡ 52143

=> Ans - (C)

Question 14

1. Temple
2. Trained
3. Training
4. Troupe
5. Tented

A 15234

B 15243

C 15432

D 14532

Answer: A

Explanation:

As per the order of dictionary,

= Temple -> Tented -> Trained -> Training -> Troupe

≡ 15234

=> 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

BD, CE, DF, EG, ?

A FG

B DH

C FH

D EH

Answer: C

Explanation:

Expression = BD, CE, DF, EG, ?

The pattern followed in each letter of the terms is :

1st letter : B (+1 letter) = C (+1 letter) = D (+1 letter) = E (+1 letter) = **F**

2nd letter : D (+1 letter) = E (+1 letter) = F (+1 letter) = G (+1 letter) = **H**

Thus, missing term = **FH**

=> Ans - (C)

Question 16

AVA, BUC, CTE, ?

A DVG

B DSF

C DSG

D GSD

Answer: C

Explanation:

Expression = AVA, BUC, CTE, ?

The pattern followed in each letter of the terms is :

1st letter : A (+1 letter) = B (+1 letter) = C (+1 letter) = **D**

2nd letter : V (-1 letter) = U (-1 letter) = T (-1 letter) = **S**

3rd letter : A (+2 letters) = C (+2 letters) = E (+2 letters) = **G**

Thus, missing term = **DSG**

=> Ans - (C)

Instructions

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

Question 17

84, 42, 28, 21, ?

A 10.5

B 16.8

C 18.4

D 19.6

Answer: B

Explanation:

The pattern followed is :

$$84 \div \left(1 + \frac{1}{1}\right) = 42$$

$$42 \div \left(1 + \frac{1}{2}\right) = 28$$

$$28 \div \left(1 + \frac{1}{3}\right) = 21$$

$$21 \div \left(1 + \frac{1}{4}\right) = \mathbf{16.8}$$

=> Ans - (B)

Question 18

2.2, 14.8, 40, 90.4, ?

A 191.2

B 194.4

C 196.2

D 208.4

Answer: A

Explanation:

Numbers of the form : $12.6 \times (2)^n$ are added, where n is a whole number.

$$2.2 + 12.6 \times (2)^0 = 14.8$$

$$14.8 + 12.6 \times (2)^1 = 40$$

$$40 + 12.6 \times (2)^2 = 90.4$$

$$90.4 + 12.6 \times (2)^3 = 191.2$$

=> Ans - (A)

Instructions

For the following questions answer them individually

Question 19

Raman remembers that the examination is after 15th May but before 18th May, while Deep remembers that the examination is before 21st May but after 16th May. On which date of May is the examination?

A 17

B 18

C 19

D 20

Answer: A

Explanation:

Examination date according to Raman (in May) = 16 or 17

According to Deep, exam date (in May) = 17, 18, 19, 20

Thus, common date in both = **17 May**

=> Ans - (A)

Question 20

In a class of 42 students, Swati's rank is 19th from the bottom. Purshottam is 6 ranks below Swati. What is Purshottam's rank from the top?

A 30th

B 32nd

C 33rd

D 34th

Answer: A

Explanation:

Swati's rank from bottom = 19th

$$\Rightarrow \text{Swati's rank from top in class of 42 students} = (42 + 1) - 19 = 24$$

Purshottam is 6 ranks below Swati, => Purshottam's rank from the top = $24 + 6 = 30$

=> Ans - (A)

Question 21

Pointing to a lady in the photograph Amit said, " She is the mother of the only grandson of my mother ". How is the lady related to Amit?

- A Mother
- B Daughter
- C Niece
- D Wife

Answer: D

Explanation:

Only grandson of Amit's mother = Amit's son

Now, the lady is mother of Amit's son, => Amit is her husband.

Thus, the lady is Amit's **wife**.

=> Ans - (D)

Instructions

In the following question, select the word which cannot be formed using the letters of the given word.

Question 22

CAPABILITIES

- A PLATE
- B ABILITIES
- C PALATE
- D PAYABLE

Answer: D

Explanation:

The word CAPABILITIES does not contain any 'Y', thus the term **Payable** cannot be formed.

=> Ans - (D)

Question 23

CARBONATE

- A CARBON
- B BORN
- C EARN
- D BOSE

Answer: D

Explanation:

The word CARBONATE does not contain any 'S', thus the term **Bose** cannot be formed.

=> Ans - (D)

Instructions

For the following questions answer them individually

Question 24

In a certain code language, "SOULFUL" is written as "ORIIXLV" and "GATHER" is written as "OHEWXJ". How is "TIDAL" written in that code language?

- A IDALQ
- B WFGXO
- C OXGFW
- D QLADI

Answer: C

Explanation:

Expression = "SOULFUL" is written as "ORIIXLV"

The pattern followed is that when the letters are reversed, we get :



Also, "GATHER" is written as "OHEWXJ"



Similarly, for TIDAL : OXGFW



=> Ans - (C)

Question 25

In a certain code language, "PLATE" is written as "32876" and "BLEND" is written as "52694". How is "DENTED" written in that code language?

- A 869768
- B 295329
- C 469764
- D 538635

Answer: C

Explanation:

The code for each letter is given :

- D -> 4
- E -> 6
- N -> 9
- T -> 7
- E -> 6

D → 4

Thus, **DENTED : 469764**

⇒ Ans - (C)

Instructions

In the following question, by using which mathematical operators will the expression become correct?

Question 26

69 ? 3 ? 2 ? 9 ? 3

A ÷, -, > and ×

B ÷, +, < and ×

C ÷, -, = and ×

D ×, +, < and ×

Answer: B

Explanation:

Expression = 69 ? 3 ? 2 ? 9 ? 3

(A) ÷, -, > and ×

$$\equiv 69 \div 3 - 2 > 9 \times 3$$

$$\text{L.H.S.} = \frac{69}{3} - 2 = 21$$

$$\text{R.H.S.} = 9 \times 3 = 27$$

But L.H.S. < R.H.S.

(B) ÷, +, < and ×

$$\equiv 69 \div 3 + 2 < 9 \times 3$$

$$\text{L.H.S.} = \frac{69}{3} + 2 = 25$$

$$\text{R.H.S.} = 9 \times 3 = 27$$

It is correct because **L.H.S. < R.H.S.**

⇒ Ans - (B)

Question 27

9 ? 3 ? 6 ? 8 ? 4

A +, ×, < and ×

B ÷, +, > and +

C -, ×, = and ×

D ×, +, < and ×

Answer: A

Explanation:

Expression : 9 ? 3 ? 6 ? 8 ? 4

(A) +, ×, < and ×

$$\equiv 9 + 3 \times 6 < 8 \times 4$$

$$\text{L.H.S.} = 9 + (3 \times 6) = 27$$

$$\text{R.H.S.} = 8 \times 4 = 32$$

It is correct because L.H.S. < R.H.S.

=> Ans - (A)

Instructions

For the following questions answer them individually

Question 28

If $1 \$ 9 \& 5 = 14$ and $2 \& 4 \$ 3 = 14$, then $7 \$ 9 \& 9 = ?$

A 72

B 70

C 68

D 64

Answer: A

Explanation:

Expression : $1 \$ 9 \& 5 = 14$ and $2 \& 4 \$ 3 = 14$

If we replace '\$' by ' \times ' and '&' by '+', we get the desired result.

$$\text{Eg :- } 1 \times 9 + 5 = 9 + 5 = 14$$

$$\text{and } 2 + 4 \times 3 = 2 + 12 = 14$$

$$\text{Similarly, } 7 \times 9 + 9 = 63 + 9 = 72$$

=> Ans - (A)

Question 29

If $8 * 9 \# 3 = 51$ and $12 * 6 \# 4 = 72$, then $13 * 11 \# 6 = ?$

A 156

B 128

C 136

D 144

Answer: D

Explanation:

Given = $8 * 9 \# 3 = 51$ and $12 * 6 \# 4 = 72$

If we replace '*' by '+' and '#' by 'x' and perform the add operation first, we get the desired result

$$\text{Eg :- } (8 + 9) \times 3 = 17 \times 3 = 51$$

$$\text{and } (12 + 6) \times 4 = 18 \times 4 = 72$$

$$\text{Similarly, } (13 + 11) \times 6 = 24 \times 6 = 144$$

=> Ans - (D)

Question 30

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

3	4	2
7	5	1
8	6	3
?	54	9

A 60

B 70

C 75

D 80

Answer: D

Explanation:

The last number in each column is equal to the product of sum of first two numbers to the third number.

Eg :- $(5 + 4) \times 6 = 9 \times 6 = 54$

and $(2 + 1) \times 3 = 3 \times 3 = 9$

Similarly, $(3 + 7) \times 8 = 10 \times 8 = 80$

=> Ans - (D)

Question 31

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

5	1	3	7
6	2	4	4
1	?	2	7

A 3

B 4

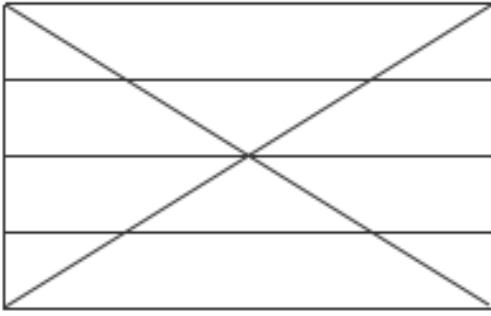
C 5

D 6

Answer: D

Question 32

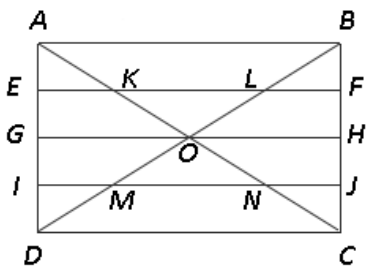
How many triangles are there in the given figure ?



- A 18
- B 20
- C 22
- D 24

Answer: C

Explanation:



Small triangles = AKE, BLF, IMD, NJC, KOL, MNO

Triangles (containing 2 figures) = AGO, GOD, BOH, COH, AOB, COD

Triangles (containing 4 figures) = AOD, BOC, BMJ, ANI, CKF, DEL

Big triangles = ADC, BCD, ABD, ABC

Thus, total triangles = 22

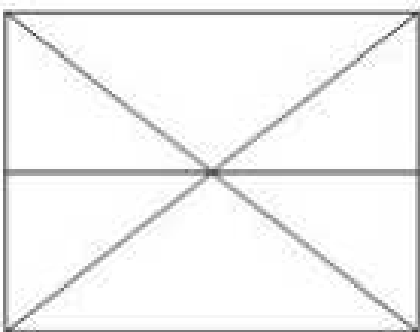
=> Ans - (C)

Instructions

How many triangles are there in the given figure ?

Question 33

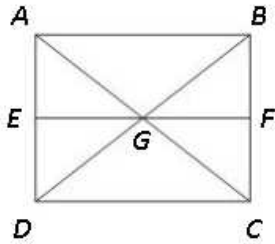
How many triangles are there in the given figure ?



- A 8
- B 10
- C 12
- D 16

Answer: C

Explanation:



Small triangles = ABG, CGD, AEG, DEG, FCG, BGF

Triangles (containing 2 triangles) = ADG, BGC

Big triangles (containing 3 triangles) = ADC, BCD, ABD, ABC

Thus, total triangles = 12

=> Ans - (C)

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. Some knives are spoons.
- II. Some forks are knives.
- III. No fork is a green.

Conclusions:

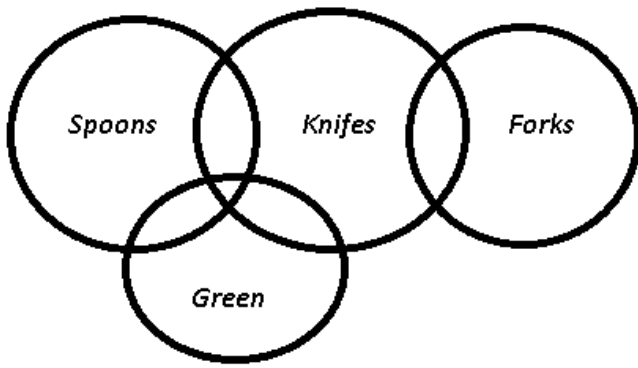
- I. Some spoons are forks.
- II. Some knives are green.
- III. Some green are not knives.
- IV. Some forks are not green.

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

Answer: A

Explanation:

The venn diagram for above statements is :



Conclusions:

- I. Some spoons are forks = false
- II. Some knives are green = may or may not be true
- III. Some green are not knives = may or may not be true
- IV. Some forks are not green = true

Thus, only conclusion (IV) follows.

=> Ans - (A)

Question 35

Statements:

- I. Some mangoes are not red.
- II. All red are raw.
- III. Some raw are mangoes.

Conclusions:

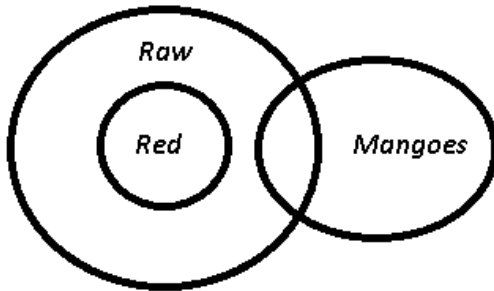
- I. Some mangoes are not raw.
- II. Some red are not mangoes.
- III. All raw are red.

- A Only conclusion (I) follows
- B Only conclusion (II) and (III) follow
- C Only conclusion (I) and (III) follow
- D No conclusion follows

Answer: D

Explanation:

The venn diagram for above statements is :



Conclusions:

- I. Some mangoes are not raw = false
- II. Some red are not mangoes = true
- III. All raw are red = false

Thus, no conclusion follows.

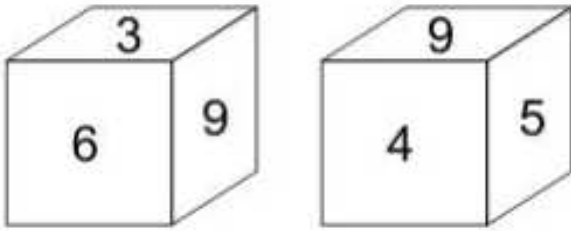
=> Ans - (D)

Instructions

For the following questions answer them individually

Question 36

Two position of a cube are shown below. What will come opposite to face containing '5' ?

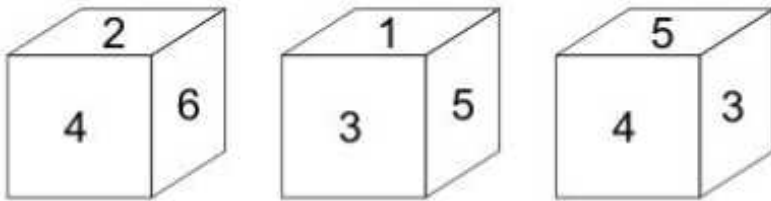


- A 6
- B 4
- C 6 or 3
- D 3

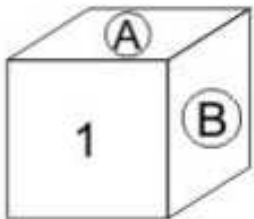
Answer: A

Question 37

Three position of a cube are shown below.



Which numbers will come on two faces marked 'A and B'?

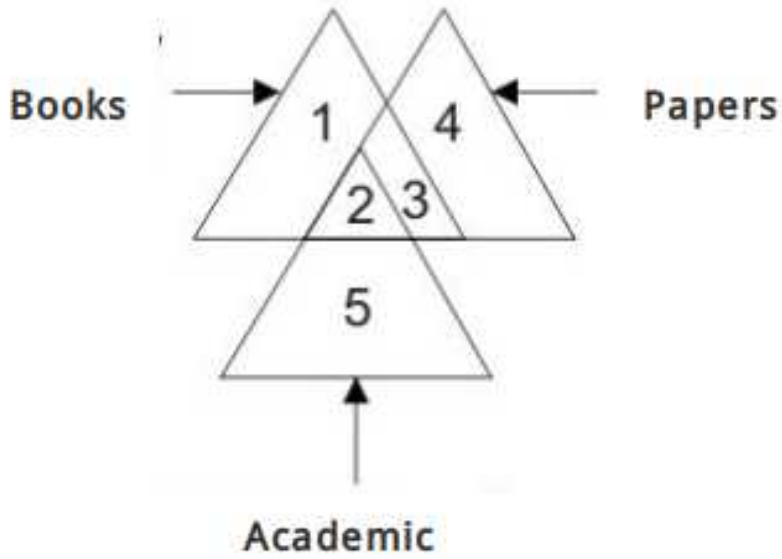


- A 4 and 3
- B 4 and 5
- C 2 and 5
- D 2 and 4

Answer: C

Question 38

In the given figure, which number/numbered represent papers which are books?



A 2 and 3

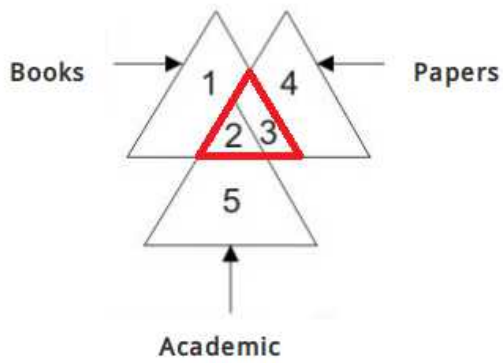
B 2 and 5

C 3 and 4

D Only 2

Answer: A

Explanation:

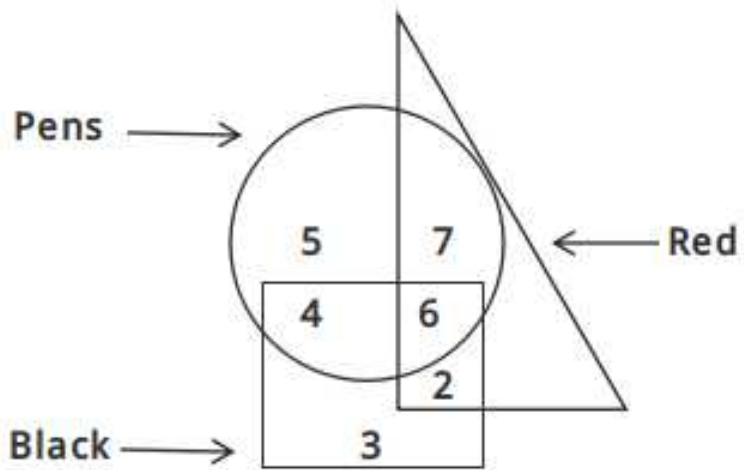


Papers which are books are represented by = 2 and 3

=> Ans - (A)

Question 39

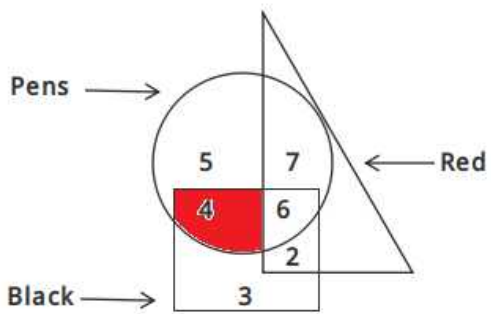
In the given figure, which number represents pens which are black but not red ?



- A 4
- B 5
- C 6
- D 3

Answer: A

Explanation:

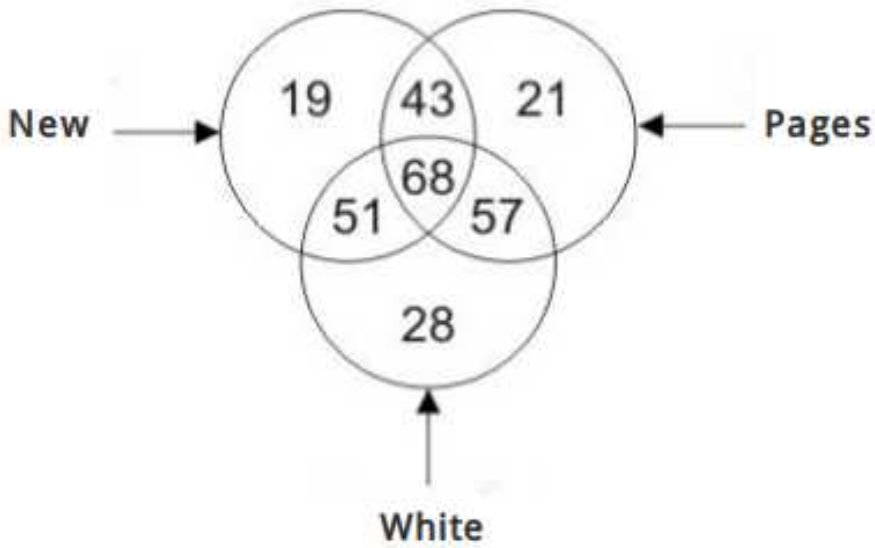


Pens which are black but not red are represented by = 4

=> Ans - (A)

Question 40

In the given figure, how many pages are either new or white but not both ?



A 111

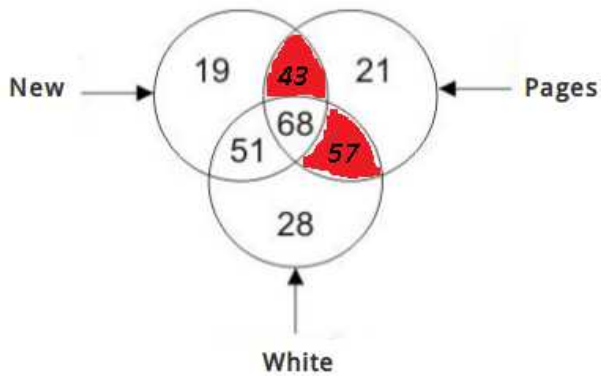
B 100

C 125

D 168

Answer: B

Explanation:

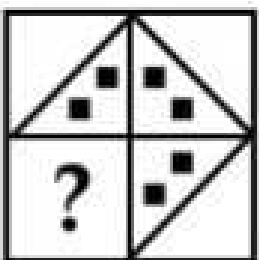


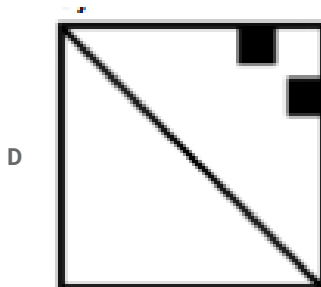
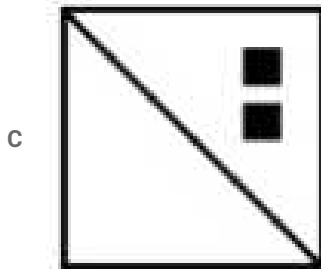
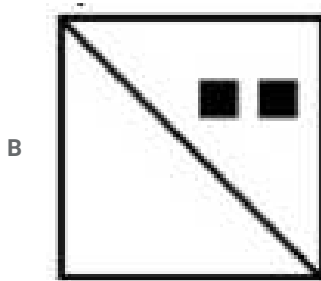
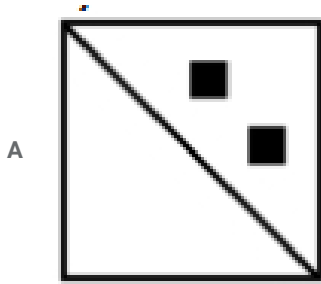
Pages which are either new or white but not both are = $43 + 57 = 100$

=> Ans - (B)

Question 41

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





Answer: A

Explanation:

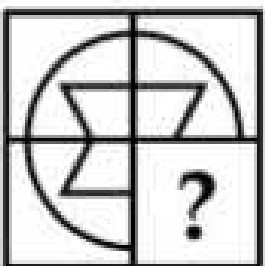
The question figure will be completed by :

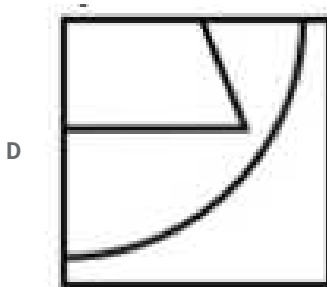
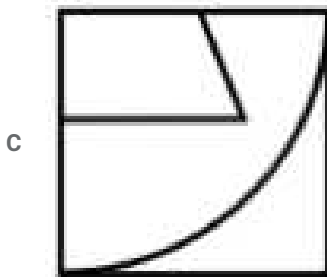
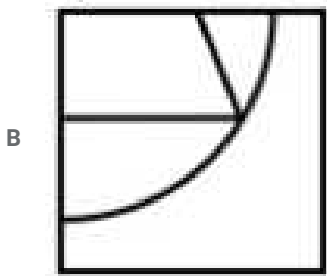
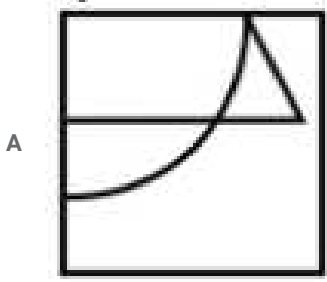


=> Ans - (A)

Question 42

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





Answer: D

Explanation:

The question figure will be completed by :

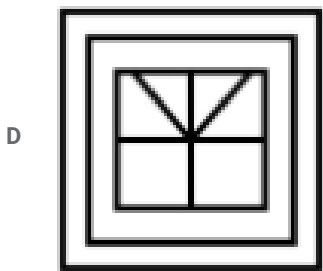
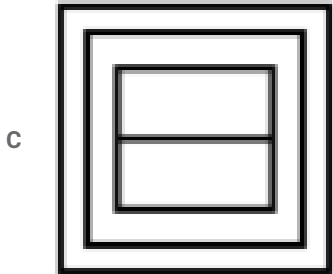
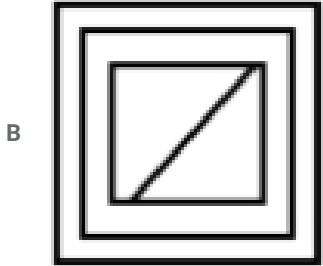
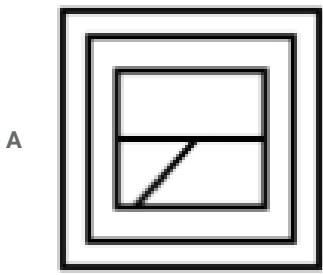


=> Ans - (D)

Question 43

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





Answer: D

Explanation:

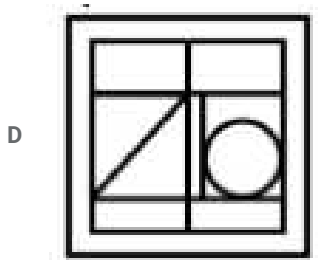
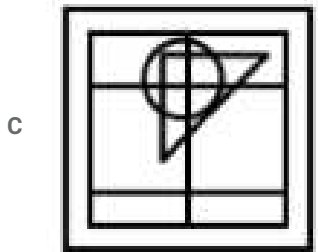
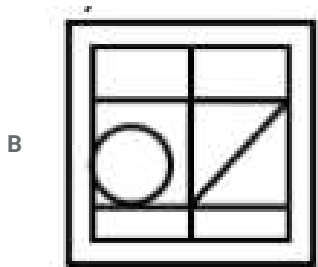
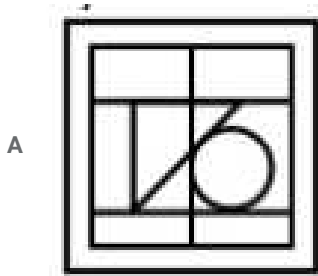
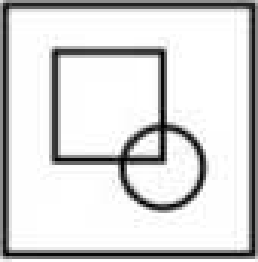
The above figure is represented by 'red' color and is hidden in :



=> Ans - (D)

Question 44

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



Answer: C

Explanation:

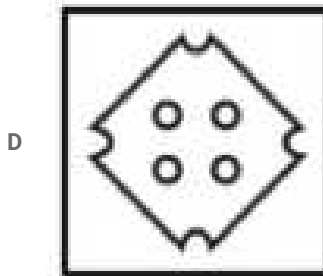
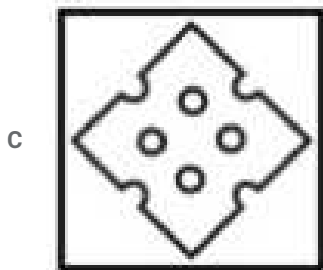
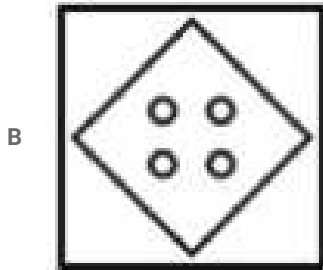
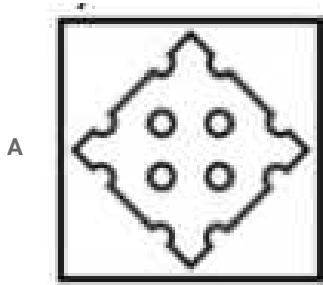
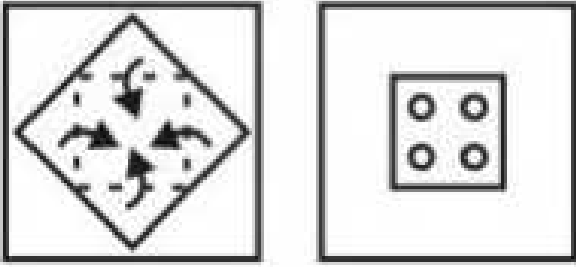
If we rotate the question figure upside down, it is represented by 'red' color and is hidden in :



=> Ans - (C)

Question 45

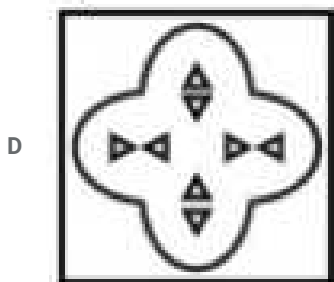
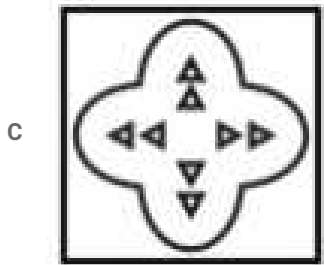
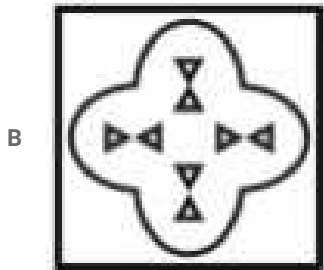
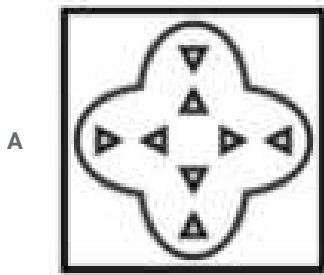
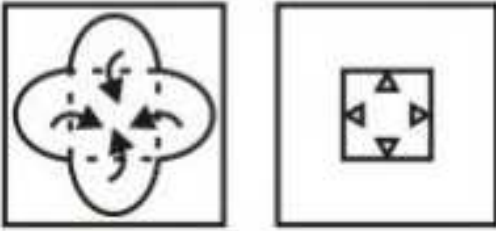
A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how will appear when opened ?



Answer: A

Question 46

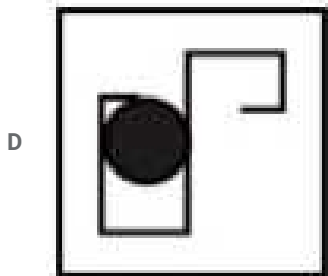
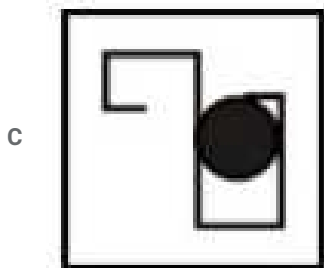
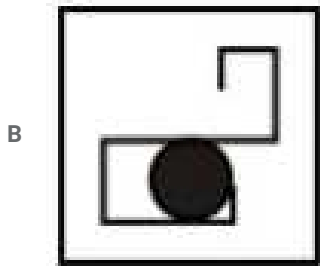
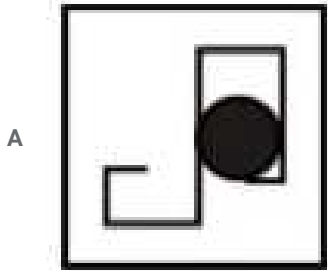
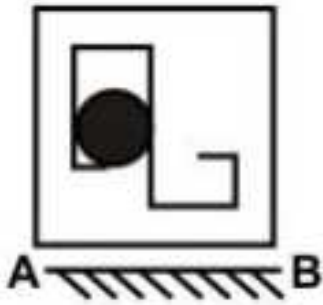
A piece of paper is folded and punched as shown below in the question figures. From the given answer figure, indicate how it will appear when opened ?



Answer: B

Question 47

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



Answer: D

Explanation:

A horizontal mirror is placed, so the object on the top will appear at the bottom in reverse position and vice-versa.

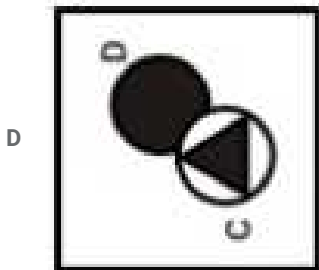
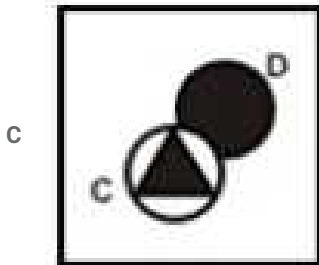
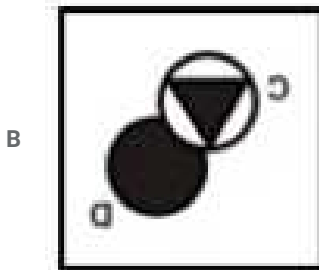
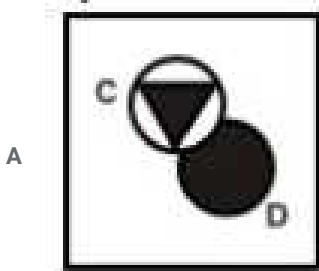
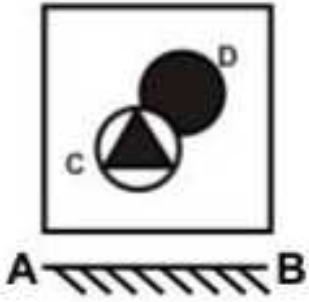
So the black circle at left side will still stay at left side, thus the first and third options will be eliminated.

Also, in the question figure, the horizontal line at the bottom right facing left will appear at top right, hence fourth option is the right image.

=> Ans - (D)

Question 48

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



Answer: A

Explanation:

A horizontal mirror is placed, so the object on the top will appear at the bottom in reverse position and vice-versa.

So the black triangle inside the circle appearing at bottom left side of the picture will appear at top left side in the mirror image, hence first option is the right image.

=> Ans - (A)

Question 49

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The column and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example, 'H' can be represented by 00, 44, etc., and 'L' can be represented by 56, 98, etc., Similarly, you have to identify the set for the word "HALT".

Matrix-I

	0	1	2	3	4
0	H	G	T	I	N
1	I	N	H	G	T
2	G	T	I	N	H
3	N	H	G	T	I
4	T	I	N	H	G

Matrix-II

	5	6	7	8	9
5	E	L	X	B	A
6	A	E	L	X	B
7	L	B	E	A	X
8	X	A	B	E	L
9	B	X	A	L	E

- A 31, 59, 68, 21
- B 43, 86, 99, 40
- C 24, 78, 56, 02
- D 12, 97, 88, 33

Answer: C

Explanation:

(A) : 31, 59, 68, 21 : HAXT

(B) : 43, 86, 99, 40 : HAET

(C) : 24, 78, 56, 02 : **HALT**

(D) : 12, 97, 88, 33 : HAET

=> Ans - (C)

Question 50

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The column and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example, 'K' can be represented by 10, 41, etc., and 'N' can be represented by 56, 97, etc., Similarly, you have to identify the set for the word "TREND".

Matrix-I

	0	1	2	3	4
0	A	R	T	E	K
1	K	A	E	R	T
2	R	T	A	K	E
3	T	E	K	A	R
4	E	K	R	T	A

Matrix-II

	5	6	7	8	9
5	S	N	D	L	I
6	N	L	S	I	D
7	D	I	L	N	S
8	L	S	I	D	N
9	I	D	N	S	L

- A 14, 13, 12, 65, 76
- B 43, 42, 40, 78, 88
- C 21, 34, 24, 57, 95
- D 30, 01, 31, 97, 59

Answer: B

Explanation:

(A) : 14, 13, 12, 65, 76 : TRENI

(B) : 43, 42, 40, 78, 88 : **TREND**

(C) : 21, 34, 24, 57, 95 : TREDI

(D) : 30, 01, 31, 97, 59 : TRENI

=> Ans - (B)

General Awareness

Instructions

For the following questions answer them individually

Question 51

Offloading of government shares to private companies is known as ____.

- A Investment
- B Disinvestment
- C Centralization
- D Decentralization

Answer: B

Question 52

Which among the following comes under primary sector of Indian Economy?

- A Sugar Industry
- B Dairy
- C Banking
- D Transport of Goods

Answer: B

Question 53

What is moderate degree of controlled inflation called as?

- A Reflation
- B Stagflation
- C Hyper-inflation
- D Disinflation

Answer: A

Question 54

What is the full form of 'CARE', the third credit rating agency in India?

- A Credit Analysis and Rating Enterprise
- B Credit Agency of Rating Equities
- C Credit Agency of Rating Enterprise
- D Credit Analysis and Research

Answer: D

Question 55

What is difference of Revenue expenditure and Revenue receipts called as?

- A Revenue
- B Total expenditure
- C Revenue Deficit
- D Total revenue

Answer: C

Question 56

What is the main objective of Marxism?

- A Dictatorship
- B Stateless society
- C To establish strong centre
- D Protection of weaker sections

Answer: B

Question 57

In ____ government each adult citizen must have one vote and each vote must have one value.

- A Democratic
- B Autocratic
- C Monarchic
- D Authoritarian

Answer: A

Question 58

Who among the following gave the concept of 'Distributive Justice'?

- A Aristotle
- B Plato
- C Hegel
- D Ritchie

Answer: A

Question 59

Vice-President of India is also ex-officio chairman of ____.

- A Lok Sabha
- B Rajya Sabha
- C Parliament
- D Union Public Service Commission

Answer: B

Question 60

What are the maximum number of seats fixed for Rajya Sabha in India?

- A 245 seats

- B** 252 seats
- C** 260 seats
- D** 250 seats

Answer: D

Question 61

Who appoints the Chief Minister of any of the state in India?

- A** President of India
- B** Governor of the state
- C** Judge of High Court
- D** Attorney General of India

Answer: B

Question 62

High Court of Andaman and Nicobar Islands is located in which state of India?

- A** Tamil Nadu
- B** West Bengal
- C** Andhra Pradesh
- D** Karnataka

Answer: B

Question 63

In how many ways Indian citizenship can be acquired?

- A** Three
- B** Four
- C** Five
- D** Six

Answer: C

Question 64

Which of the following Vedas is not a part of Vedatrayi?

- A** Rig Veda
- B** Yajur Veda

C Sama Veda

D Atharva Veda

Answer: D

Question 65

Who among the following is known as 'Bismarck of India'?

A Sardar Vallabhbhai Patel

B Bhagat Singh

C Swami Vivekanand

D Lala Lajpat Rai

Answer: A

Question 66

In Indus valley civilization, Lothal was famous for which of the following?

A The Rock cut architecture

B Dockyard

C Cotton cultivation

D Pottery

Answer: B

Question 67

Who among the following built the Sanchi Stupa?

A Ashoka

B Gautam Buddha

C Cholas

D Pallavas

Answer: A

Question 68

Lord Macaulay is generally associated for bringing _____ in India.

A Unity in Army

B Economic reforms

C English Education

D Modern Technologies

Answer: C

Question 69

Which of the following pair is INCORRECT?

- A 0° longitude - Prime Meridian
- B 0° longitude - Equator
- C 0° latitude - Equator
- D 23.5° North - Tropic of Cancer

Answer: B

Question 70

What is an isthmus?

- A A water body separating two land masses
- B A narrow strip of land separating two water bodies
- C Deep penetration of a water body in land
- D None of these

Answer: B

Question 71

'Red Indians' are natives of which of the following country?

- A India
- B Pakistan
- C North America
- D West Africa

Answer: C

Question 72

What is the time difference between Indian Standard Time [IST] and Greenwich Mean Time [GMT]?

- A 7 hours 30 minutes
- B 6 hours 30 minutes
- C 5 hours 30 minutes
- D 4 hours 30 minutes

Answer: C

Question 73

Which of the following is also known as 'Doctor winds'?

- I. Foehn
- II. Harmattan
- III. Chinook

- A I and III
- B Only II
- C Only III
- D I and II Both

Answer: B

Question 74

Which of the following drug is used to get pain relief in muscles?

- A Analgesics
- B Antibiotic
- C Antiseptics
- D Antidotes

Answer: A

Question 75

Which of the following protein is found in hair?

- A Histone
- B Keratin
- C Elastin
- D Actin

Answer: B

Question 76

Which among the following is an example of dicot seed?

- A Rice
- B Wheat
- C Pulses
- D Maize

Answer: C

Question 77

Which liquid is contained inside the nucleus of a cell?

- A Cytoplasm
- B Protoplasm
- C Nucleoplasm
- D Nucleosome

Answer: C

Question 78

Which of the following is a communicable disease?

- I. Malaria
- II. Tuberculosis
- III. Measles

- A Only II
- B Both I and III
- C Both II and III
- D Only III

Answer: C

Question 79

The chicory powder which is mixed with coffee powder is obtained from which of the following part of plant?

- A Stem
- B Fruit
- C Flower
- D Root

Answer: D

Question 80

Match the following.

	Quantity		SI Unit
1	Frequency	a.	Ohm
2	Force	b.	Hertz
3	Resistance	c.	Newton

- A 1 - b, 2 - c, 3 - a
- B 1 - a, 2 - c, 3 - b
- C 1 - c, 2 - b, 3 - a
- D 1 - b, 2 - a, 3 - c

Answer: A

Question 81

Energy in the foods can be measured in which units?

- A Kelvin
- B Joule
- C Calorie
- D Celsius

Answer: C

Question 82

Ability to distinguish two closely placed objects is _____.

- A Resolving power
- B Video power
- C Distinguish power
- D Magnifying power

Answer: A

Question 83

_____ are used for communication in artificial satellites.

- A Infrared waves
- B Radio waves
- C Ultraviolet (UV) rays
- D Amplitude Modulation (A.M.) waves

Answer: B

Question 84

Multicasting is _____.

- A sending a frame to a group of stations
- B sending a frame to a single station
- C sending a frame to minimum 100 group of stations
- D not sending a frame to any group of station

Answer: A

Question 85

Which of the following pair is INCORRECT?

- I. Touch Pad - Locator device**
- II. Microphone - Output device**
- III. Monitor - Output device**

- A** I and II
- B** I and III
- C** Only II
- D** All options are correct.

Answer: C

Question 86

Which among the following is used in fire extinguisher?

- I. Carbon dioxide**
- II. Oxygen**
- III. Sulphur dioxide**

- A** Only I
- B** Only II
- C** Only III
- D** All options are correct.

Answer: A

Question 87

Which of the following is used as coolant in Atomic reactor?

- A** Water
- B** Uranium
- C** Graphite
- D** Boron

Answer: A

Question 88

Which of the following metal is the heaviest?

- A** Iron
- B** Silver
- C** Nickel
- D** Osmium

Answer: D

Question 89

Which of the following is an example of sublimation?

- I. Dry ice
- II. Camphor
- III. Ice

- A I and II
- B I, II and III
- C Only I
- D Only II

Answer: A

Question 90

Which of the following is an artificial ecosystem?

- A Aquarium
- B Zoo
- C Sanctuary
- D National Park

Answer: A

Question 91

Which of the following primarily causes Mercury Pollution?

- A CFL Lamp
- B Automobile Battery
- C Polymer
- D Diesel Engine

Answer: A

Question 92

Dodo is a bird categorized under ____.

- A Extinct
- B Endangered
- C Critically endangered
- D Rare

Answer: A

Question 93

The first UDAN flight under 'Regional Connectivity Scheme' was flagged off between which of the following two cities?

- A Guntoor-Chennai
- B Shimla-Hyderabad
- C Nanded-Mumbai
- D Kadapa-Chennai

Answer: B

Question 94

Who invented electric motor?

- A Michael Faraday
- B Guglielmo Marconi
- C James Watt
- D Isaac Newton

Answer: A

Question 95

Winter Olympics 2018 will be hosted by which country?

- A Japan
- B Vietnam
- C China
- D South Korea

Answer: D

Question 96

Match the following.

	Monument		Country
i.	Great pyramid of Giza	1	Mexico
ii.	Great wall of china	2	Italy
iii.	Colosseum	3	Egypt
iv.	Chichen Itza	4	China

- A 1-b, 2-d, 3-a, 4-c
- B 1-c, 2-d, 3-b, 4-a
- C 1-a, 2-d, 3-b, 4-c
- D 1-b, 2-a, 3-d, 4-c

Answer: B

Question 97

Who among the following is a recipient of Nobel Prize 2016 in the field of Physiology or medicine?

- A Bengt Holmstrom
- B Bob Dylan
- C Yoshinori Ohsumi
- D Juan Manuel Santos

Answer: C

Question 98

Which Lok Sabha speaker has authored the book 'Matoshree'?

- A Sumitra Mahajan
- B Meira Kumar
- C Somnath Chatterjee
- D Manohar Joshi

Answer: A

Question 99

How many agreements have been signed by India and Cyprus on 28 April 2017?

- A 3
- B 4
- C 5
- D 6

Answer: B

Question 100

Farraka barrage is a major reason for contention between India and _____.

- A Bangladesh
- B Pakistan
- C China
- D Nepal

Answer: A

For the following questions answer them individually

Question 101

If $P = (\sqrt{7} - \sqrt{6})/(\sqrt{7} + \sqrt{6})$, then what is the value of $P + (1/P)$?

- A 12
- B 13
- C 24
- D 26

Answer: D

Explanation:

$$\text{Given : } P = \frac{\sqrt{7}-\sqrt{6}}{\sqrt{7}+\sqrt{6}} \text{ -----(i)}$$

$$\Rightarrow \frac{1}{P} = \frac{\sqrt{7}+\sqrt{6}}{\sqrt{7}-\sqrt{6}} \text{ -----(ii)}$$

Adding equations (i) and (ii),

$$\Rightarrow P + \frac{1}{P} = \left(\frac{\sqrt{7}-\sqrt{6}}{\sqrt{7}+\sqrt{6}} \right) + \left(\frac{\sqrt{7}+\sqrt{6}}{\sqrt{7}-\sqrt{6}} \right)$$

$$= \frac{(\sqrt{7}-\sqrt{6})^2 + (\sqrt{7}+\sqrt{6})^2}{(\sqrt{7}+\sqrt{6})(\sqrt{7}-\sqrt{6})}$$

$$= \frac{(13-2\sqrt{42}) + (13+2\sqrt{42})}{7-6}$$

$$= 13 + 13 = 26$$

\Rightarrow Ans - (D)

Question 102

Which value among 3^{200} , 2^{300} and 7^{100} is the largest?

- A 3^{200}
- B 2^{300}
- C 7^{100}
- D All are equal

Answer: A

Explanation:

Terms = 3^{200} , 2^{300} and 7^{100}

Dividing all the exponents by 100, we get :

$$\equiv 3^2, 2^3, 7^1$$

$$= 9, 8, 7$$

Thus, the largest number = $9 \equiv 3^{200}$

\Rightarrow Ans - (A)

Question 103

What is the value of $3^2 + 7^2 + 13^2 + 17^2 - 1^2 - 5^2 - 9^2 - 11^2 - 15^2$?

- A 5
- B 72
- C 92
- D 63

Answer: D

Explanation:

$$\begin{aligned} \text{Expression} &= 3^2 + 7^2 + 13^2 + 17^2 - 1^2 - 5^2 - 9^2 - 11^2 - 15^2 \\ &= (9 + 49 + 169 + 289) - (1 + 25 + 81 + 121 + 225) \\ &= 516 - 453 = 63 \\ &\Rightarrow \text{Ans - (D)} \end{aligned}$$

Question 104

What is the value of $\frac{(0.7)^3 - (0.4)^3}{(0.7)^2 + 0.7 \times 0.4 + (0.4)^2}$?

- A 0.3
- B 0.4
- C 0.7
- D 1.1

Answer: A

Explanation:

$$\text{Expression} = \frac{(0.7)^3 - (0.4)^3}{(0.7)^2 + 0.7 \times 0.4 + (0.4)^2}$$

Let $x = 0.7$ and $y = 0.4$

$$\begin{aligned} &= \frac{x^3 - y^3}{x^2 + xy + y^2} \\ &= \frac{(x-y)(x^2 + xy + y^2)}{x^2 + xy + y^2} \\ &= x - y = 0.7 - 0.4 = 0.3 \\ &\Rightarrow \text{Ans - (A)} \end{aligned}$$

Question 105

How many positive factors of 40 are there?

- A 3
- B 4
- C 6
- D 8

Answer: D

Explanation:

$$\text{Prime factorization of } 40 = (2)^3 \times (5)^1$$

$$\Rightarrow \text{Number of factors} = (3 + 1) \times (1 + 1)$$

$$= 4 \times 2 = 8$$

\Rightarrow Ans - (D)

Question 106

A is 20% more efficient than B. If B alone can complete a piece of work in 12 days, then A alone can complete the same work in how many days?

A 10

B 12

C 14

D 16

Answer: A

Explanation:

Let B's efficiency = 1 unit/day

$$\Rightarrow \text{Total work to be done} = 1 \times 12 = 12 \text{ units}$$

$$\text{A is 20\% more efficient than B, } \Rightarrow \text{A's efficiency} = 1 \times \frac{120}{100} = 1.2 \text{ units/day}$$

$$\therefore \text{Time taken by A working alone} = \frac{12}{1.2} = 10 \text{ days}$$

\Rightarrow Ans - (A)

Question 107

A and B together can complete a work in 10 days. They started together but A left after 2 days and the remaining work was completed by B in 12 days. In how many days can A complete the entire work while working alone?

A 15

B 20

C 30

D 45

Answer: C

Explanation:

Let total work to be done = L.C.M. (10,12) = 60 units

$$\Rightarrow \text{(A+B)'s 1 day's work} = \frac{60}{10} = 6 \text{ units/day}$$

Let B's efficiency = b units/day

$$\text{According to ques, } \Rightarrow (2 \times 6) + (12 \times b) = 60$$

$$\Rightarrow 12b = 60 - 12 = 48$$

$$\Rightarrow b = \frac{48}{12} = 4$$

Thus, A's efficiency = $6 - 4 = 2$ units/day

$$\therefore \text{Time taken by A working alone} = \frac{60}{2} = 30 \text{ days}$$

\Rightarrow Ans - (C)

Question 108

What will be the net discount (in percentage) after two successive discounts of 50% and 50%?

- A 85
- B 75
- C 100
- D 95

Answer: B

Explanation:

Let marked price = Rs. 100

$$\begin{aligned}\text{Selling price after first discount of 50\%} &= 100 - \left(\frac{50}{100} \times 100\right) \\ &= 100 - 50 = \text{Rs. } 50\end{aligned}$$

$$\begin{aligned}\text{Similarly, selling price after second discount of 50\%} &= 50 - \left(\frac{50}{100} \times 50\right) \\ &= 50 - 25 = \text{Rs. } 25\end{aligned}$$

$$\therefore \text{Net discount} = \frac{(100-25)}{100} \times 100 = 75\%$$

=> Ans - (B)

Question 109

An article is sold for Rs 5330 after a discount of 18%. What is the marked price (in Rs) of the article?

- A 6250
- B 6450
- C 6800
- D 6500

Answer: D

Explanation:

Selling price = Rs. 5330

Discount % = 18%

$$\Rightarrow \text{Marked price} = \frac{5330}{(100-18)} \times 100$$

$$= \frac{5330}{0.82} = \text{Rs. } 6500$$

=> Ans - (D)

Question 110

Raman, Rohit and Raja are partners and invest in a business. Raman invests 1/4th of total and Rohit invest 1/3th of the total. What is the ratio of profit of Raman, Rohit and Raja respectively?

- A 4 : 3 : 1
- B 3 : 4 : 4
- C 3 : 4 : 5
- D 4 : 3 : 5

Answer: C

Explanation:

Raman invests $\frac{1}{4}$ th of total and Rohit invest $\frac{1}{3}$ th of the total

$$\Rightarrow \text{Raja's investment} = 1 - \frac{1}{4} - \frac{1}{3} = \frac{12-3-4}{12} = \frac{5}{12}$$

$$\text{Thus, ratio of profit} = \left(\frac{1}{4}\right) : \left(\frac{1}{3}\right) : \left(\frac{5}{12}\right)$$

$$= 3 : 4 : 5$$

\Rightarrow Ans - (C)

Question 111

If $a - b : b - c : c - d = 1 : 2 : 3$, then what is the value of $(a + d) : c$?

A 1 : 2

B 2 : 1

C 4 : 1

D 3 : 1

Answer: B

Explanation:

$$\text{Given} = (a - b) : (b - c) : (c - d) = 1 : 2 : 3$$

$$\Rightarrow \frac{a-b}{b-c} = \frac{1}{2}$$

$$\Rightarrow 2a - 2b = b - c$$

$$\Rightarrow 2a + c = 3b \text{ -----(i)}$$

$$\text{Similarly, } \frac{b-c}{c-d} = \frac{2}{3}$$

$$\Rightarrow 3b - 3c = 2c - 2d$$

$$\Rightarrow 3b = 5c - 2d \text{ -----(ii)}$$

Substituting above value in equation (i), we get :

$$\Rightarrow 2a + c = 5c - 2d$$

$$\Rightarrow 2a + 2d = 5c - c$$

$$\Rightarrow 2(a + d) = 4c$$

$$\Rightarrow \frac{a+d}{c} = \frac{4}{2} = 2$$

$$\therefore (a + d) : c = 2 : 1$$

\Rightarrow Ans - (B)

Question 112

The average age of Rustam and Preetam is 39 years. The average age of Preetam and Geetam is 28 years. The average age of Rustam and Geetam is 34 years. What will be the age (in years) of the youngest of the three after 10 years?

A 13

B 23

C 33

D 43

Answer: C

Explanation:

Let respective ages of Rustam, Preetam and Geetam be r, p, g years

Average age of Rustam and Preetam = 39 years

$$\Rightarrow \frac{r+p}{2} = 39$$

$$\Rightarrow r + p = 78 \text{ -----(i)}$$

$$\text{Similarly, } p + g = 56 \text{ -----(ii)}$$

$$\text{and } r + g = 68 \text{ -----(iii)}$$

Adding all the equations, we get :

$$\Rightarrow 2(r + p + g) = 78 + 56 + 68$$

$$\Rightarrow r + p + g = \frac{202}{2} = 101 \text{ -----(iv)}$$

Substituting value from equation (i) in equation (iv),

$$\Rightarrow 78 + g = 101$$

$$\Rightarrow g = 101 - 78 = 23 \text{ years}$$

Similarly, $r = 45$ years and $p = 33$ years

\therefore Age (in years) of the youngest, i.e. **Gautam** after 10 years = $23 + 10 = 33$ years

\Rightarrow Ans - (C)

Question 113

The average age of 6 members of a family is 25 years. If the youngest member of the family is 15 years old, then what was the average age (in years) of the family at the time of the birth of the youngest member?

A 9

B 12

C 18

D 24

Answer: B

Explanation:

Average age of 6 members of a family = 25 years

$$\Rightarrow \text{Total age of the 6 members} = 25 \times 6 = 150 \text{ years}$$

Age of youngest member = 15 years

$$\text{Total age of 5 members at the time of the birth of the youngest member} = 150 - (15 \times 6) = 150 - 90 = 60 \text{ years}$$

$$\Rightarrow \text{Required average age} = \frac{60}{5} = 12 \text{ years}$$

\Rightarrow Ans - (B)

Question 114

On an article the profit is 230% of the cost price. If the cost price increases by 50% but the selling price remains constant, then what is the new profit percentage?

A 54.54

- B** 80
C 120
D 150

Answer: C

Explanation:

Let cost price = Rs. 100

$$\Rightarrow \text{Profit} = \frac{230}{100} \times 100 = \text{Rs. } 230$$

$$\Rightarrow \text{Selling price} = 230 + 100 = \text{Rs. } 330$$

$$\text{Now new cost price} = 100 + \left(\frac{50}{100} \times 100\right) = \text{Rs. } 150$$

$$\text{Thus, new profit \%} = \frac{(330-150)}{150} \times 100$$

$$= \frac{180}{150} = 120\%$$

\Rightarrow Ans - (C)

Question 115

A trader buys two articles for Rs 4000 each. While selling if he gains 12.5% on one and losses 20% on the other, then what will be the overall loss percentage?

- A** 2.5
B 3.75
C 5
D 5.25

Answer: B

Explanation:

Cost price of each article = Rs. 4000

Profit % on one article = 12.5%

$$\Rightarrow \text{Selling price of first article} = 4000 + \left(\frac{12.5}{100} \times 4000\right)$$

$$= 4000 + 500 = \text{Rs. } 4500$$

$$\text{Similarly, selling price of second article} = 4000 - \left(\frac{20}{100} \times 4000\right)$$

$$= 4000 - 800 = \text{Rs. } 3200$$

$$\text{Thus, total cost price} = 4000 + 4000 = \text{Rs. } 8000$$

$$\text{Total selling price} = 4500 + 3200 = \text{Rs. } 7700$$

$$\therefore \text{Overall loss \%} = \frac{(8000-7700)}{8000} \times 100$$

$$= \frac{300}{8000} = 3.75\%$$

\Rightarrow Ans - (B)

Question 116

X is 30% more than Y and 25% less than Z. If value of Y is Rs 300, then what is the value (in Rs) of Z ?

- A** 390
B 400

C 470

D 520

Answer: D

Explanation:

Given : $Y = 300$

Also, X is 30% more than Y

$$\Rightarrow X = 300 + \left(\frac{30}{100} \times 300\right)$$

$$= 300 + 90 = 390$$

And, X is 25% less than Z

$$\Rightarrow Z = \left(\frac{390}{100-25}\right) \times 100$$

$$= \frac{390}{3} \times 4 = 520$$

\Rightarrow Ans - (D)

Question 117

The price of motor cycle depreciates every year by 10%. If the value of the motor cycle after 3 years will be Rs 36450, then what is the present value (in Rs) of the motor cycle?

A 45000

B 50000

C 48000

D 51000

Answer: B

Explanation:

Let the present value of motor cycle = Rs. x

Rate of depreciation = 10%

$$\Rightarrow \text{Value of the motor cycle after 3 years} = x \times \left(1 - \frac{10}{100}\right) \times \left(1 - \frac{10}{100}\right) \left(1 - \frac{10}{100}\right)$$

$$\Rightarrow x \times \left(\frac{90}{100}\right)^3 = 36450$$

$$\Rightarrow x = 36450 \times \frac{100^3}{90^3}$$

$$\Rightarrow x = 0.05 \times 1000000 = 50000$$

\therefore The present value (in Rs) of the motor cycle = **Rs. 50,000**

\Rightarrow Ans - (B)

Question 118

Two boat are travelling with speed of 36 km/hr and 54 km/hr respectively towards each other. What is the distance (in metres) between the two boats one second before they collide?

A 10

B 15

C 25

D 5

Answer: C

Explanation:

Relative speed of boats (since they are travelling towards each other = $36 + 54 = 90$ km/hr

$$= (90 \times \frac{5}{18}) \text{ m/s} = 25 \text{ m/s}$$

Distance between them one second before they collide = Distance covered in 1 second = **25 m**

=> Ans - (C)

Question 119

A car left 3 minutes early than the scheduled time and in order to reach the destination 126 km away in time, it has to slow its speed by 6 km/h from the usual. What is the usual speed (in km/hr) of the car?

A 56

B 63

C 94.5

D 126

Answer: D

Explanation:

Let usual speed of car = x km/hr, speed on that day = $(x - 6)$ km/hr

Let usual time = t hours, time on that day = $(t - \frac{3}{60})$ hours

Using, time = distance/speed,

$$\Rightarrow \left(\frac{126}{x-6}\right) - \left(\frac{126}{x}\right) = \frac{3}{60}$$

$$\Rightarrow 126\left(\frac{1}{x-6} - \frac{1}{x}\right) = \frac{1}{20}$$

$$\Rightarrow \frac{x-(x-6)}{x(x-6)} = \frac{1}{2520}$$

$$\Rightarrow x^2 - 6x - 15120 = 0$$

$$\Rightarrow x^2 - 126x + 120x - 15120 = 0$$

$$\Rightarrow x(x - 126) + 120(x - 126) = 0$$

$$\Rightarrow (x - 126)(x + 120) = 0$$

$$\Rightarrow x = 126, -120$$

$\therefore x$ cannot be negative, hence usual speed of car = **126 km/hr**

=> Ans - (D)

Question 120

If a certain sum becomes 3 times in 6 years at compound interest, then in how many years, it will become 81 times?

A 81

B 162

C 27

D 24

Answer: D

Explanation:

Let principal sum = Rs. P and rate of interest = $r\%$

Amount under compound interest = $P(1 + \frac{r}{100})^T$

Thus, after 6 years

$$\Rightarrow P(1 + \frac{r}{100})^6 = 3P$$

$$\Rightarrow (1 + \frac{r}{100})^6 = 3$$

$$\Rightarrow (1 + \frac{r}{100}) = (3)^{\frac{1}{6}} \text{-----(i)}$$

Now, Let after t years sum becomes 81 times

$$\Rightarrow P(1 + \frac{r}{100})^t = 81P$$

$$\Rightarrow (3)^{\frac{t}{6}} = (3)^4$$

Comparing the exponents, we get :

$$\Rightarrow \frac{t}{6} = 4$$

$$\Rightarrow t = 4 \times 6 = 24 \text{ years}$$

\Rightarrow Ans - (D)

Question 121

What is the simple interest on Rs 5400 in 5 years at the rate of 12% per annum?

A 2700

B 2950

C 3120

D 3240

Answer: D

Explanation:

Principal sum = Rs. 5400

Rate of interest = 12% and time period = 5 years

$$\text{Simple interest} = \frac{P \times R \times T}{100}$$

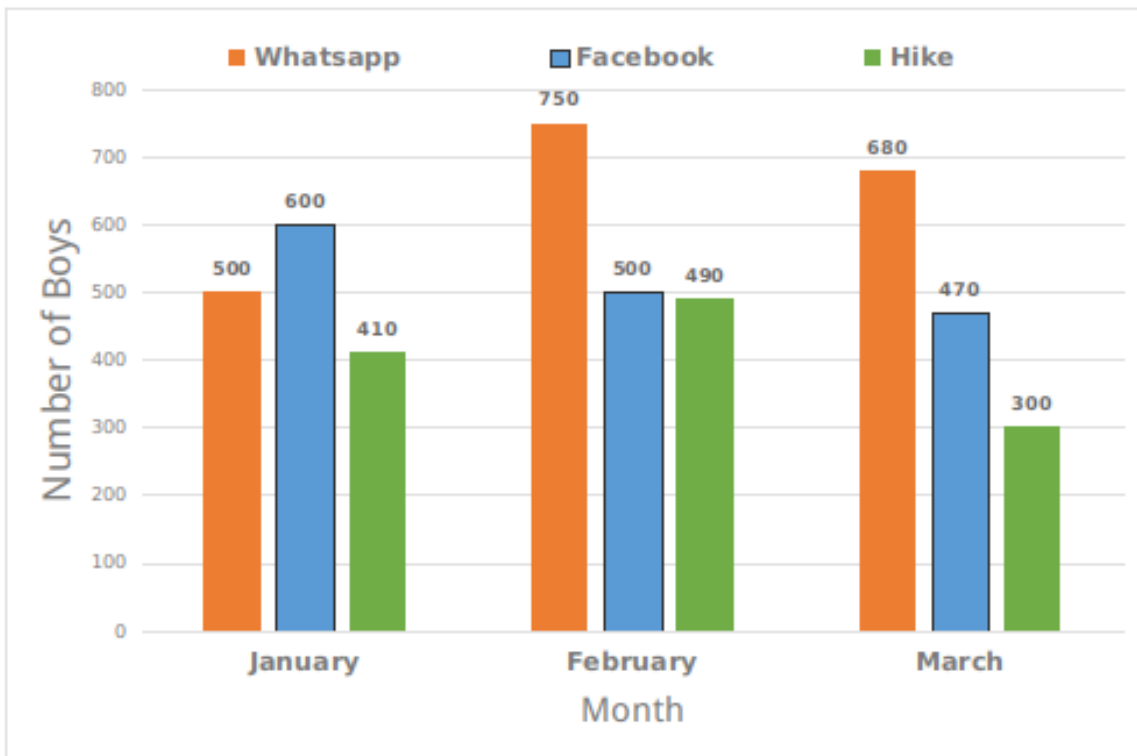
$$= \frac{5400 \times 12 \times 5}{100}$$

$$= 54 \times 60 = \text{Rs. } 3240$$

\Rightarrow Ans - (D)

Instructions

The bar graph given below represents the number of boys in a school using three apps for three months.



Question 122

What is the total number of boys using the three apps in month of March?

- A 1420
- B 1480
- C 1450
- D 1500

Answer: C

Explanation:

Total number of boys using the three apps in month of March

$$= 680 + 470 + 300 = 1450$$

=> Ans - (C)

Question 123

Number of boys using Whatsapp in February is how much percent more than the number of boys using Facebook in February?

- A 50
- B 33.33
- C 66.66
- D 44.22

Answer: A

Explanation:

Number of boys using Whatsapp in February = 750

Number of boys using Facebook in February = 500

$$\Rightarrow \text{Required \%} = \frac{(750-500)}{500} \times 100$$

$$= \frac{250}{5} = 50\%$$

\Rightarrow Ans - (A)

Question 124

What is the percentage decrease in number of boys using Facebook from January to February?

A 26.66

B 20

C 21.33

D 16.66

Answer: D

Explanation:

Number of boys using Facebook in January = 600

Number of boys using Facebook in February = 500

$$\Rightarrow \text{Required \%} = \frac{(600-500)}{600} \times 100$$

$$= \frac{100}{6} = 16.66\%$$

\Rightarrow Ans - (D)

Question 125

Number of boys using Whatsapp in March is what percent of number of boys using Facebook in February?

A 126.47

B 136

C 128

D 131.3

Answer: B

Explanation:

Number of boys using Whatsapp in March = 680

Number of boys using Facebook in February = 500

$$\Rightarrow \text{Required \%} = \frac{(680)}{500} \times 100$$

$$= \frac{680}{5} = 136\%$$

\Rightarrow Ans - (B)

Instructions

For the following questions answer them individually

Question 126

The perimeter of base of a right circular cone is 132 cm. If the height of the cone is 72 cm, then what is the total surface area (in cm^2) of the cone?

A 6600

B 6336

C 4224

D 5784

Answer: B

Explanation:

Let radius of cone = r cm and height = 72 cm

Perimeter of base = $2\pi r$

$$\Rightarrow 2 \times \frac{22}{7} \times r = 132$$

$$\Rightarrow r = 132 \times \frac{7}{44}$$

$$= r = 3 \times 7 = 21 \text{ cm}$$

Now, slant height of cone, $l = \sqrt{h^2 + r^2}$

$$\Rightarrow l = \sqrt{(72)^2 + (21)^2}$$

$$\Rightarrow l = \sqrt{5184 + 441} = \sqrt{5625}$$

$$\Rightarrow l = 75 \text{ cm}$$

\therefore Total surface area of the cone = $\pi r(l + r)$

$$= \left(\frac{22}{7} \times 21\right)(75 + 21)$$

$$= 66 \times 96 = 6336 \text{ cm}^2$$

\Rightarrow Ans - (B)

Question 127

A solid metallic sphere of radius 14 cm is melted and recast into a cone with diameter of the base as 14 cm. What is the height (in cm) of the cone?

A 236

B 64

C 112

D 224

Answer: D

Explanation:

Radius of sphere, $R = 14$ cm

Let height of cone = h cm and radius of cone = $r = \frac{14}{2} = 7$ cm

According to ques, Volume of cone = Volume of sphere

$$\Rightarrow \frac{1}{3} \pi r^2 h = \frac{4}{3} \pi R^3$$

$$\Rightarrow (7)^2 \times h = 4 \times (14)^3$$

$$\Rightarrow h = 4 \times 14 \times \frac{196}{49}$$

$$\Rightarrow h = 56 \times 4 = 224 \text{ cm}$$

\Rightarrow Ans - (D)

Question 128

The radius of a wheel is 21 cm what is the distance (in cm) travelled by the wheel in 10 revolutions?

- A 660
- B 1320
- C 1980
- D 2640

Answer: B

Explanation:

Circumference of wheel ($r = 21$) = $2\pi r$

$$= 2 \times \frac{22}{7} \times 21 = 132 \text{ cm}$$

Distance covered in 1 revolution = Circumference of wheel = 132 cm

=> Distance covered in 10 revolutions = $132 \times 10 = 1320$ cm

=> Ans - (B)

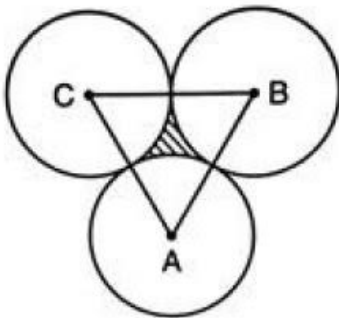
Question 129

Three circles of radius 21 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 $4413 - 693$
- B $882\sqrt{3} - 693$
- C $882\sqrt{3} - 462$
- D $441\sqrt{3} - 462$

Answer: A

Explanation:



Radius of each circle = $r = 21$ cm

=> $AC = r + r = 42$ cm

Similarly, $AB = 42$ cm and $BC = 42$ cm

=> $\triangle ABC$ is an equilateral triangle having $\angle A = \angle B = \angle C = 60^\circ$

Thus, area of shaded portion = (Area of $\triangle ABC$) - ($3 \times$ Area of each sector)

$$= \left(\frac{\sqrt{3}}{4} \times s^2 \right) - \left(3 \times \frac{\theta}{360^\circ} \times \pi r^2 \right)$$

$$= \left(\frac{\sqrt{3}}{4} \times 42 \times 42 \right) - \left(3 \times \frac{60^\circ}{360^\circ} \times \frac{22}{7} \times 21 \times 21 \right)$$

$$= (441\sqrt{3}) - (11 \times 3 \times 21)$$

$$= (441\sqrt{3} - 693) \text{ cm}^2$$

=> Ans - (A)

Question 130

If the perimeter of a square is 80 cm, then what is the diagonal of the square (in cm)?

- A $20\sqrt{2}$
- B $40\sqrt{2}$
- C $80\sqrt{2}$
- D 20

Answer: A

Explanation:

Let side of square = s cm

=> Perimeter = $4s = 80$

=> $s = \frac{80}{4} = 20$ cm

Thus, diagonal = $d = \sqrt{s^2 + s^2}$

=> $d = s\sqrt{2}$

=> $d = 20\sqrt{2}$ cm

=> Ans - (A)

Question 131

If $(1/x) + (1/y) + (1/z) = 0$ and $x + y + z = 11$, then what is the value of $x^3 + y^3 + z^3 - 3xyz$?

- A 1331
- B 2662
- C 3993
- D 14641

Answer: A

Explanation:

Given : $\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = 0$

=> $\frac{yz+zx+xy}{xyz} = 0$

=> $xy + yz + zx = 0$ -----(i)

Also, $x + y + z = 11$ -----(ii)

Squaring both sides, we get :

=> $(x + y + z)^2 = (11)^2$

=> $(x^2 + y^2 + z^2) + 2(xy + yz + zx) = 121$

Substituting value from equation (i),

=> $x^2 + y^2 + z^2 = 121$ -----(iii)

To find : $x^3 + y^3 + z^3 - 3xyz$

$$= (x + y + z)[(x^2 + y^2 + z^2) - (xy + yz + zx)]$$

Substituting values from equations (i), (ii) and (iii),

$$= (11)(121 - 0)$$

$$= 11 \times 121 = 1331$$

=> Ans - (A)

Question 132

What is the simplified value of $\left[\frac{(1+x^3)}{(x^2-1)} \div \frac{(x^2+1-x)}{(x+1)} \right] \times (x-1)$?

A 1

B x

C $x + 1$

D $\frac{1}{x-1}$

Answer: C

Explanation:

$$\text{Expression} = \left[\frac{(1+x^3)}{(x^2-1)} \div \frac{(x^2+1-x)}{(x+1)} \right] \times (x-1)$$

$$= \left[\frac{1+x^3}{(x-1)(x+1)} \times \frac{x+1}{x^2+1-x} \right] (x-1)$$

$$= \left[\frac{(x+1)(x^2+1-x)}{(x-1)} \times \frac{1}{(x^2+1-x)} \right] (x-1)$$

$$= \frac{(x+1)}{(x-1)} \times (x-1) = (x+1)$$

=> Ans - (C)

Question 133

If $\frac{x+\sqrt{x^2-1}}{x-\sqrt{x^2-1}} + \frac{x-\sqrt{x^2-1}}{x+\sqrt{x^2-1}} = 62$, then what is the value of x ($x < 0$)?

A -4

B 0

C -3

D -16

Answer: A

Explanation:

$$\text{Expression} : \frac{x+\sqrt{x^2-1}}{x-\sqrt{x^2-1}} + \frac{x-\sqrt{x^2-1}}{x+\sqrt{x^2-1}} = 62$$

$$\Rightarrow \frac{(x+\sqrt{x^2-1})^2 + (x-\sqrt{x^2-1})^2}{(x-\sqrt{x^2-1})(x+\sqrt{x^2-1})} = 62$$

$$\Rightarrow \frac{(x^2+x^2-1+2x\sqrt{x^2-1}) + (x^2+x^2-1-2x\sqrt{x^2-1})}{(x^2)-(x^2-1)} = 62$$

$$\Rightarrow \frac{4x^2-2}{1} = 62$$

$$\Rightarrow 4x^2 - 2 = 62$$

$$\Rightarrow 4x^2 = 62 + 2 = 64$$

$$\Rightarrow x^2 = \frac{64}{4} = 16$$

$$\Rightarrow x = \sqrt{16} = \pm 4$$

$$\because x < 0, \Rightarrow x = -4$$

$$\Rightarrow \text{Ans - (A)}$$

Question 134

If $x^2 - 3x + 1 = 0$, then what is the value of $x^2 + \frac{1}{x^2}$?

A 3

B 7

C 9

D 11

Answer: B

Explanation:

$$\text{Given: } x^2 - 3x + 1 = 0$$

Dividing both sides by 'x'

$$\Rightarrow x + \frac{1}{x} = 3$$

Squaring both sides, we get :

$$\Rightarrow x^2 + \frac{1}{x^2} + 2(x)\left(\frac{1}{x}\right) = 9$$

$$\Rightarrow x^2 + \frac{1}{x^2} = 9 - 2 = 7$$

$$\Rightarrow \text{Ans - (B)}$$

Question 135

If $x^4 + \frac{1}{x^4} = 98$ and $x > 1$, then what is the value of $x - \frac{1}{x}$?

A 2

B $2\sqrt{2}$

C $\sqrt{5}$

D $\sqrt{3}$

Answer: B

Explanation:

$$\text{Given: } x^4 + \frac{1}{x^4} = 98$$

$$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 - 2\left(x^2\right)\left(\frac{1}{x^2}\right) = 98$$

$$\Rightarrow \left(x^2 + \frac{1}{x^2}\right)^2 = 98 + 2 = 100$$

$$\Rightarrow x^2 + \frac{1}{x^2} = \sqrt{100} = 10$$

$$\Rightarrow \left(x - \frac{1}{x}\right)^2 + 2\left(x\right)\left(\frac{1}{x}\right) = 10$$

$$\Rightarrow (x - \frac{1}{x})^2 = 10 - 2 = 8$$

$$\Rightarrow x - \frac{1}{x} = \sqrt{8} = 2\sqrt{2}$$

\Rightarrow Ans - (B)

Question 136

In $\triangle ABC$, $\angle BCA = 90^\circ$, $AC = 24$ cm and $BC = 10$ cm. What is the radius (in cm) of the circum-circle of $\triangle ABC$?

A 12.5

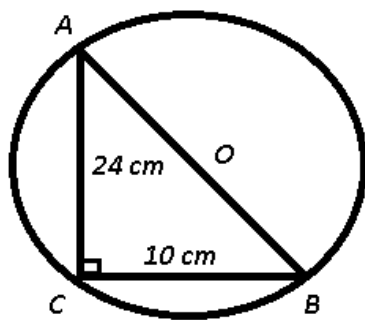
B 13

C 25

D 26

Answer: B

Explanation:



Given : In $\triangle ABC$, $\angle BCA = 90^\circ$, $AC = 24$ cm and $BC = 10$ cm

To find : $OB = ?$

Solution : In $\triangle ABC$,

$$\Rightarrow (AB)^2 = (AC)^2 + (BC)^2$$

$$\Rightarrow (AB)^2 = (24)^2 + (10)^2$$

$$\Rightarrow (AB)^2 = 576 + 100 = 676$$

$$\Rightarrow AB = \sqrt{676} = 26 \text{ cm}$$

Also, in a right angled triangle, circumradius is half the hypotenuse of the triangle.

$$\therefore OB = r = \frac{26}{2} = 13 \text{ cm}$$

\Rightarrow Ans - (B)

Question 137

A chord of length 7 cm subtends an angle of 60° at the centre of a circle. What is the radius (in cm) of the circle?

A $7\sqrt{2}$

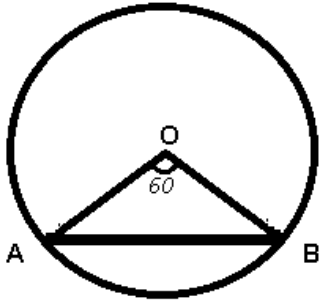
B $7\sqrt{3}$

C 7

D 14

Answer: C

Explanation:



Given : $AB = 7 \text{ cm}$ and $\angle O = 60^\circ$

To find : $OA = OB = r = ?$

Solution : In *triangle* OAB , we have $OA = OB = r$

$$\Rightarrow \angle A = \angle B$$

$$\Rightarrow \angle A + \angle B + \angle O = 180^\circ$$

$$\Rightarrow 2\angle A = 180^\circ - 60^\circ = 120^\circ$$

$$\Rightarrow \angle A = \frac{120^\circ}{2} = 60^\circ$$

$\therefore \triangle OAB$ is equilateral triangle and $OA = OB = r = 7 \text{ cm}$

\Rightarrow Ans - (C)

Question 138

If $\triangle PQR$ is right angled at Q , $PQ = 12$ and $\angle PRQ = 30^\circ$, then what is the value of QR ?

A $12\sqrt{3}$

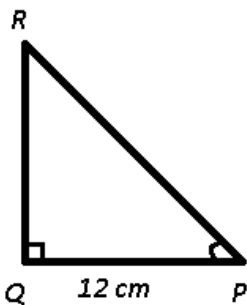
B $12\sqrt{2}$

C 12

D 24

Answer: A

Explanation:



Given : $\triangle PQR$ is right angled at Q , $PQ = 12$ and $\angle PRQ = 30^\circ$

To find : $QR = ?$

Solution : $\tan(\angle R) = \frac{PQ}{QR}$

$$\Rightarrow \tan(30^\circ) = \frac{12}{QR}$$

$$\Rightarrow \frac{1}{\sqrt{3}} = \frac{12}{QR}$$

$$\Rightarrow QR = 12\sqrt{3} \text{ cm}$$

\Rightarrow Ans - (A)

Question 139

In the given figure, area of isosceles triangle ABE is 72 cm^2 and $BE = AB$ and $AB = 2 AD$, $AE \parallel DC$, then what is the area (in cm^2) of the trapezium ABCD ?

A 108

B 124

C 136

D 144

Answer: D

Question 140

In the given figure, AC and DE are perpendicular to tangent CB. AB passes through centre O of the circle whose radius is 20 cm. If AC = 36 cm, what is the length (in cm) of DE ?

A 4

B 6

C 2

D 8

Answer: A

Question 141

If $4\sin^2 2\theta - 3 = 0$ and θ is acute, then what is the value of $(\cot^2 \theta + \tan^2 \theta)$?

A 2

B 0

C $10/3$

D 6

Answer: C

Explanation:

$$\text{Given : } 4\sin^2 2\theta - 3 = 0$$

$$\Rightarrow \sin^2 2\theta = \frac{3}{4}$$

$$\Rightarrow \sin 2\theta = \sqrt{\frac{3}{4}} = \frac{\sqrt{3}}{2}$$

$$\Rightarrow \sin 2\theta = \sin(60^\circ)$$

$$\Rightarrow 2\theta = 60$$

$$\Rightarrow \theta = \frac{60}{2} = 30^\circ$$

$$\begin{aligned} &\therefore \cot^2\theta + \tan^2\theta \\ &= \cot^2(30^\circ) + \tan^2(30^\circ) \\ &= (\sqrt{3})^2 + \left(\frac{1}{\sqrt{3}}\right)^2 \\ &= 3 + \frac{1}{3} = \frac{10}{3} \\ &\Rightarrow \text{Ans - (C)} \end{aligned}$$

Question 142

If $\frac{\cos\theta}{1+\sin\theta} + \frac{\cos\theta}{1-\sin\theta} = 4$ and θ is acute, then what is the value of (in degrees) of θ ?

- A 30
- B 45
- C 60
- D 90

Answer: C

Explanation:

$$\text{Expression: } \frac{\cos\theta}{1+\sin\theta} + \frac{\cos\theta}{1-\sin\theta} = 4$$

$$\Rightarrow \cos\theta \left(\frac{1}{1+\sin\theta} + \frac{1}{1-\sin\theta} \right) = 4$$

$$\Rightarrow \cos\theta \left(\frac{(1-\sin\theta)+(1+\sin\theta)}{(1+\sin\theta)(1-\sin\theta)} \right) = 4$$

$$\Rightarrow \cos\theta \times \frac{2}{1-\sin^2\theta} = 4$$

$$\Rightarrow \cos\theta \times \frac{1}{\cos^2\theta} = \frac{4}{2}$$

$$\Rightarrow \frac{1}{\cos\theta} = 2$$

$$\Rightarrow \cos\theta = \frac{1}{2}$$

$$\Rightarrow \theta = \cos^{-1}\left(\frac{1}{2}\right) = 60^\circ$$

\Rightarrow Ans - (C)

Question 143

if $\sin\theta + \operatorname{cosec}\theta = \frac{1}{2}$, then what is the value of $\sin^{100}\theta + \operatorname{cosec}^{100}\theta$?

- A -1
- B 0
- C 1
- D 2

Answer: D

Explanation:

$$\text{Given: } \sin\theta + \operatorname{cosec}\theta = \frac{1}{2}$$

$$\Rightarrow \sin\theta + \frac{1}{\sin\theta} = \frac{1}{2}$$

$$\Rightarrow \frac{\sin\theta}{\sin^2\theta+1} = \frac{1}{2}$$

$$\Rightarrow \sin^2\theta + 1 - 2\sin\theta = 0$$

$$\Rightarrow (\sin\theta - 1)^2 = 0$$

$$\Rightarrow \sin\theta = 1$$

$$\text{Also, } \operatorname{cosec}\theta = \frac{1}{\sin\theta} = 1$$

$$\therefore \sin^{100}\theta + \operatorname{cosec}^{100}\theta$$

$$= (1)^{100} + (1)^{100} = 1 + 1 = 2$$

\Rightarrow Ans - (D)

Question 144

What is the value of $\frac{\tan^2 25^\circ}{\operatorname{cosec}^2 65^\circ} + \frac{\cot^2 25^\circ}{\sec^2 65^\circ} + 2\tan 20^\circ \tan 45^\circ \tan 70^\circ$?

A 1

B 2

C 3

D 4

Answer: C

Explanation:

$$\text{Expression} = \frac{\tan^2 25^\circ}{\operatorname{cosec}^2 65^\circ} + \frac{\cot^2 25^\circ}{\sec^2 65^\circ} + 2\tan 20^\circ \tan 45^\circ \tan 70^\circ$$

$$= \frac{\tan^2 25^\circ}{\operatorname{cosec}^2(90^\circ - 25^\circ)} + \frac{\cot^2 25^\circ}{\sec^2(90^\circ - 25^\circ)} + 2\tan 20^\circ \tan 45^\circ \tan(90^\circ - 20^\circ)$$

Using, $\operatorname{cosec}(90^\circ - \theta) = \sec\theta$

$$= \frac{\tan^2 25^\circ}{\sec^2 25^\circ} + \frac{\cot^2 25^\circ}{\operatorname{cosec}^2 25^\circ} + 2\tan 20^\circ \tan 45^\circ \cot 20^\circ$$

$$= (\frac{\sin^2 25^\circ}{\cos^2 25^\circ} \times \cos^2 25^\circ) + (\frac{\cos^2 25^\circ}{\sin^2 25^\circ} \times \sin^2 25^\circ) + (2\tan 20^\circ \cdot \cot 20^\circ \cdot \tan 45^\circ)$$

$$\because \tan\theta \cdot \cot\theta = 1$$

$$= (\sin^2 25^\circ + \cos^2 25^\circ) + (2 \times 1)$$

$$= 1 + 2 = 3$$

\Rightarrow Ans - (C)

Question 145

If $\operatorname{cosec}\theta + \operatorname{cosec}^2\theta = 1$, then what is the value of $(\cot^{12}\theta - 3\cot^{10}\theta + 3\cot^8\theta - \cot^6\theta)$?

A -2

B -1

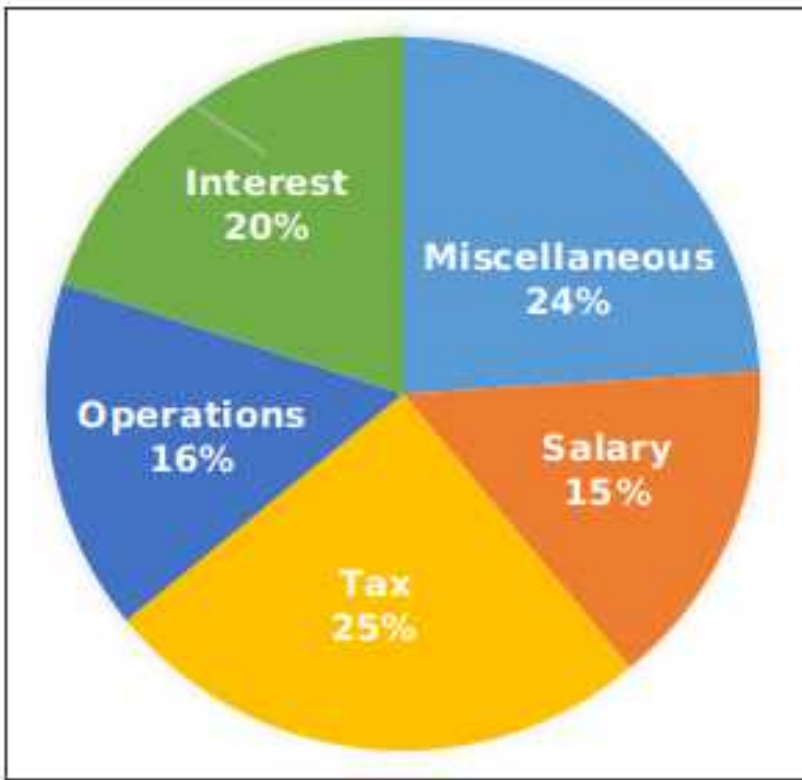
C 0

D 1

Answer: D

Instructions

The pie chart given below shows the percentage distribution of annual expenditure on various items of a company. The annual expenditure of the company is Rs. 70 Crores.



Question 146

How much is the expenditure (in Rs crores) on Operations annually?

- A 10.2
- B 7.14
- C 11.2
- D 112

Answer: C

Explanation:

Total expenditure = Rs. 70 crores

$$\Rightarrow \text{Expenditure (in Rs crores) on Operations annually} = \frac{16}{100} \times 70 = 11.2$$

\Rightarrow Ans - (C)

Question 147

What is the monthly expenditure (in Rs crores) on Miscellaneous by the company?

- A 14.4
- B 1.4
- C 1.21
- D 1.69

Answer: B

Explanation:

Annual expenditure of the company = Rs. 70 crores

% expenditure on miscellaneous = 24%

=> **Monthly** expenditure (in Rs crores) on Miscellaneous by the company = $\frac{24}{100} \times 70 \times \frac{1}{12}$

= $2 \times 0.7 = 1.4$

=> Ans - (B)

Question 148

If 5% of Miscellaneous is spent on research of nanotubes, then how much is spent (in Rs crores) on research of nanotubes annually?

A 0.84

B 0.32

C 0.54

D 0.92

Answer: A

Explanation:

Annual expenditure of the company = Rs. 70 crores

% expenditure on research of nanotubes of miscellaneous = 5%

=> Annual expenditure (in Rs crores) on research of nanotubes by the company = $\frac{5}{100} \times \frac{24}{100} \times 70$

= $1.2 \times 0.7 = 0.84$

=> Ans - (A)

Question 149

By what percentage is the total expenditure on Interest and Miscellaneous more than the total expenditure on Tax and Salary?

A 20

B 15

C 8

D 10

Answer: D

Explanation:

% expenditure on Interest and Miscellaneous = $20 + 24 = 44\%$

% expenditure on Tax and Salary = $25 + 15 = 40\%$

=> Required % = $\frac{(44-40)}{40} \times 100$

= $\frac{40}{40} = 10\%$

=> Ans - (D)

Question 150

Total amount spent on Raw material is 50% of the total amount spent on Interest. If the ratio of amount of expenditure on Rent and Raw material is 1 : 2 respectively, then what will be the amount (in Rs) spent on Rent annually?

A 28000000

B 35000000

C 40000000

D 32000000

Answer: B

Explanation:

Total amount spent on Interest = $\frac{20}{100} \times 70 = Rs. 14$ crores

=> Total amount spent on raw materials = $\frac{50}{100} \times 14 = Rs. 7$ crores

Ratio of amount of expenditure on Rent and Raw material = 1 : 2

=> Amount (in Rs) spent on Rent annually = $\frac{1}{2} \times 7 = Rs. 3.5$ crores

=> Ans - (B)

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

He commanded me (a:/ as if he was (b:/ my husband. (c:/ No Error (d:

A 1

B 2

C 3

D 4

Answer: B

Question 152

The English is a very (a:/ popular language (b:/ amongst south Indians. (c:/ No Error (d:

A 1

B 2

C 3

D 4

Answer: A

Question 153

This container is full with water (a:/ so I can't carry it for a (b:/ long distance at one go. (c:/ No Error (d:

A 1

B 2

C 3

D 4

Answer: A

Question 154

If you will finish your homework I (a:/ will give you (b:/ an ice-cream. (c:/ No Error (d:

A 1

B 2

C 3

D 4

Answer: A

Question 155

Had she not known (a:/ about it she should (b:/ have stayed longer. (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

I do not agree ____ my colleagues in this matter.

A to

B of

C with

D on

Answer: C

Question 157

Rita is more beautiful than ____ of her sisters.

A any other

- B any
- C some
- D all

Answer: D

Question 158

When my mother entered the house, I ____ sleeping.

- A had been
- B should be
- C was
- D would be

Answer: C

Question 159

Hearing of her grandmother's illness, she at once started ____ Mumbai.

- A for
- B upto
- C to
- D towards

Answer: A

Question 160

He ____ from the crowd because of his height.

- A stood out
- B stood by
- C stood off
- D stood up

Answer: A

Instructions

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

Question 161

Vie

- A compete
- B cheerful
- C conceal
- D confuse

Answer: A

Question 162

Cavort

- A climb
- B crawl
- C jump
- D drag

Answer: C

Question 163

Brittle

- A fragile
- B dry
- C risky
- D demolish

Answer: A

Question 164

Illuminate

- A desirous
- B seizure
- C solitary
- D brighten

Answer: D

Question 165

Embroil

- A curse
- B confuse

C craggy

D censure

Answer: B

Instructions

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

Question 166

Crestfallen

A authentic

B antique

C triumphant

D discordant

Answer: C

Question 167

Balmy

A obscene

B hard

C noble

D pleasing

Answer: B

Question 168

Docile

A cheerful

B willful

C fertile

D harmless

Answer: B

Question 169

Slothful

A lively

B sinful

C lazy

D unnatural

Answer: A

Question 170

Furtive

A hollow

B wide

C straight

D narrow

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

In deep water

A To die

B In great difficulty

C To fail completely

D To surrender

Answer: B

Question 172

In the egg

A In an untidy state

B In a dilemma

C In an early stage

D In bodily form

Answer: C

Question 173

Cut in on

A Acknowledge

B Interrupt

C Evade

D Produce

Answer: B

Question 174

Draw a blank

A Absent minded

B To be unsuccessful

C Come to an end

D To fall a victim

Answer: B

Question 175

Give up ghost

A To feel superior

B To overcome one's fear

C To give encouragement

D To die

Answer: D

Instructions

Improve the bracketed part of the sentence.

Question 176

She did not like the phone, (nor I did).

A nor I like it

B nor I liked it

C nor did I

D no improvement

Answer: C

Question 177

You (will have to) return my Mac book whenever I ask for it.

A should

B will have

C would have to

D no improvement

Answer: D

Question 178

My father asked me when (would I) have a cup of coffee.

A I would

B I shall

C I will

D no improvement

Answer: A

Question 179

Rohan is (as fast as) or perhaps faster than Suresh.

A almost as fast

B as fast

C equally fast

D no improvement

Answer: B

Question 180

When Rahul was just thirteen he (sat) the entrance examination for senior secondary school.

A sat in

B sat at

C sat for

D no improvement

Answer: C

Instructions

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

Question 181

Property inherited from one's father

A vale

B patrimony

C legacy

D trench

Answer: B

Question 182

Government by person of highest social order

- A bureaucracy
- B plutocracy
- C democracy
- D aristocracy

Answer: D

Question 183

Study of ancient things like tombs, buried towns

- A paleontology
- B nomology
- C archaeology
- D genealogy

Answer: C

Question 184

To banish or turn out of society and fellowship

- A acrobat
- B diatribe
- C ostracise
- D jurist

Answer: C

Question 185

Rebellious or opposing the authority

- A insurgent
- B intransigent
- C indigenous
- D innuendo

Answer: A

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 conscience
- B continuity
- C councillor
- D conceit

Answer: C

Question 187

- A distillation
- B discusion
- C dysentery
- D diesel

Answer: B

Question 188

- A triumph
- B torchure
- C tyrant
- D thesaurus

Answer: B

Question 189

- A mediteranean
- B miscellaneous
- C municipality
- D missionary

Answer: A

Question 190

- A psychiatrist
- B proclamation
- C legitimacy

D tranquility

Answer: B

Instructions

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

For better or for worse, we are living in a ____ which is based physically on western science and technology. This has ____ consequences for the scientist. Initially he was an ____ force in the unfolding of human _____. This he can no longer be. As Neils Bohr has said, scientists must become ____ of the fact that they are not merely observers, but also actors on the stage of life.

Question 191

For better or for worse, we are living in a ____ which is based physically

A world

B society

C environment

D locality

Answer: B

Question 192

This has ____ consequences for the scientist.

A inescapable

B mere

C sharp

D evitable

Answer: A

Question 193

Initially he was an ____ force

A accidental

B incidental

C initial

D interesting

Answer: A

Question 194

in the unfolding of human _____.

- A deeds
- B culture
- C destiny
- D needs

Answer: C

Question 195

scientists must become _____ of the fact that they are not merely observers

- A active
- B gauge
- C conscious
- D sure

Answer: C

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.

The size of the workforce in Brazil, the number of kids at home and parents to sustain will obviously have a great impact on the extent of poverty in Brazilian households. In fact, the demographic transition that has been ongoing in Brazil for the past few decades has helped a lot in reducing poverty. Less children were born in poorer families and that's less children that ended up involved in street violence, drugs, gangs and so on. More parents were then able to push their kids to go to school and get an education. Of course, the situation is still pretty bad in Brazilian slums (favelas), but it's estimated that the demographic transition had an impact equivalent to + 0.5% in GDP growth, which is not bad at all considering that the average GDP growth (per capita) was about 3% per year at the time. And since this transition happened over 30 years, its impact on the economy is equal to around 15% of growth in GDP (over three decades). Overall, the change in the family structure and in Brazilians' lifestyle has had a much greater impact on reducing poverty than the speed of the demographic transition itself. On the other hand, the transition did have an influence on wages (e.g. supply of labor) and interest rates in a way that worsened poverty in Brazil (less overall income).

Question 196

According to the passage, which of the following doesn't have an impact on the extent of poverty in Brazilian households?

- A number of kids at home
- B size of the workforce
- C parents
- D nature of job

Answer: D

Question 197

What has helped Brazil in reducing its poverty?

- A education of kids

- B demographic transition
- C Brazilians Lifestyle
- D initiation of peaceful activities

Answer: B

Question 198

According to the passage, Brazilian children born in poorer families were not involved in which kind of activity so often?

- A bullying
- B street violence
- C gangs
- D drugs

Answer: A

Question 199

What has impacted on reducing poverty in Brazil than the speed of the demographic transition itself?

- A Brazilians lifestyle
- B change in family structure
- C awareness among citizens
- D Both Brazilians lifestyle and change in family structure

Answer: B

Question 200

What does the term 'favelas' used in the passage refers to?

- A street kids
- B slums in brazil
- C interest rates prevailing in brazil
- D labour supply

Answer: B