



SSC CHSL 13th October 2020 Shift-1

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English Language (Basic Knowledge)

Instructions

For the following questions answer them individually

Question 1

Select the most appropriate **ANTONYM** of the given word.

MALIGNANT

- A Benign
- B Hesitant
- C Indignant
- D Fatal

Answer: A

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Question 2

Select the most appropriate word to fill in the blank in the given sentence.

Some people think that the credit card culture encourages people to shop compulsively and merely _____ debts.

- A accumulate
- B stimulate
- C formulate
- D simulate

Answer: A

Question 3

In the given sentence identify the segment which contains the grammatical error.

A Royal Bengal tigress and her three cubs was poison and their carcasses left to rot in the Wildlife Sanctuary in Goa.

- A A Royal Bengal tigress
- B and her three cubs was poison
- C in the Wildlife Sanctuary in Goa
- D and their carcasses left to rot

Answer: B

Question 4

Select the most appropriate word to fill in the blank in the given sentence.

This winter _____ weather conditions have led people to remain indoors.

- A traverse
- B inverse
- C adverse

D averse

Answer: C

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Instructions

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Comprehension:

One complaint parents and teachers have about children these days is that they are simply not interested in (1)____. In his weekly column 'Down in Jungle land' Ranjit Lal, an (2)____ offers some useful suggestions. Keeping a dog or cat as a pet (3)____ to be made mandatory. Regular visits to national parks and (4)____ are another way to get children hooked. Treks in wilderness areas are even (5)____ as children can then engage with all kinds of life-forms on their turf.

Question 5

Select the most appropriate option for blank number 1.

A unnaturalness

B naturalist

C nature

D natural

Answer: C

Question 6

Select the most appropriate option for blank number 2.

A environmentalist

B environs

C environment

D environmental

Answer: A

Question 7

Select the most appropriate option for blank number 3.

A can

B will

C must

D needs

Answer: D

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Question 8

Select the most appropriate option for blank number 4.

- A sanctorum
- B sanctuary
- C sanctuaries
- D sanctity

Answer: C

Question 9

Select the most appropriate option for blank number 5.

- A worse
- B better
- C good
- D best

Answer: B

Instructions

For the following questions answer them individually

Question 10

Select the most appropriate synonym of the given word.

ENRAGE

- A Infuriate
- B Moderate
- C Placate
- D Alleviate

Answer: A

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Question 11

Select the correct passive form of the given sentence.

Rains lashed Delhi and brought the temperature down by a few degrees.

- A Delhi was being lashed by rain and the temperature was being brought down by a few degrees.
- B Delhi had been lashed by rain and the temperature had been brought down by a few degrees.
- C Delhi is being lashed by rain and the temperature was brought down by a few degrees.
- D Delhi was lashed by rains and the temperature was brought down by a few degrees.

Answer: D

Question 12

In the given sentence identify the segment which contains the grammatical error.
Scientist have recently announced that a more effective antidote for snakebite venom has been made.

- A recently announced
- B that a more effective antidote
- C for snakebite venom has been made
- D Scientist have

Answer: D

Question 13

Select the most appropriate synonym of the given word.
OPULENT

- A Distant
- B Shabby
- C Virulent
- D Luxurious

Answer: D

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Question 14

Select the INCORRECTLY spelt word.

- A Decieve
- B Fattening
- C Business
- D Dessert

Answer: A

Question 15

Select the correct indirect form of the given sentence.
Ravi asked, "Ritu, how many sets of class 12 practice papers have you finished?"

- A Ravi asked Ritu how many sets of class 12 practice papers she had finished.
- B Ravi asked Ritu how many sets of class 12 practice papers she has been finishing.
- C Ravi asked Ritu how many sets of class 12 practice papers was she finishing.
- D Ravi asked Ritu how many sets of class 12 practice papers had she been finishing.

Answer: A

Question 16

Select the word which means the same as the group of words given.
Very careful and precise

- A Tremulous
- B Meticulous
- C Garrulous
- D Tumultuous

Answer: B

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Question 17

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

The Arabian Sea region is very important for India as several major ports are locating there.

- A No improvement
- B have been locating
- C was locating
- D are located

Answer: D

Question 18

Select the most appropriate ANTONYM of the given word.
DIVERSE

- A Identical
- B Practical
- C Farcical
- D Parallel

Answer: A

Question 19

Given below are four jumbled sentences. Select the option that gives their correct order.

- A. For example, our project files were kept pending for a few years.
- B. However, such hindrances did not stop us from tirelessly working towards the establishment of 450 clinics.
- C. We initially constructed over 150 clinics.
- D. But very soon many roadblocks were put in our path of expansion.

- A ABDC
- B CDAB
- C CBDA

D DCAB

Answer: B

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Question 20

Select the INCORRECTLY spelt word.

A Accomodate

B Acceptable

C Beginning

D Quizzes

Answer: A

Question 21

Select the most appropriate meaning of the given idiom.

Bite off more than one can chew

A To take on more than one can deal with

B To cheat someone and get away

C To eat quickly and run away

D To taste something while cooking

Answer: A

Question 22

Select the word which means the same as the group of words given.

A natural skill at doing something

A Knack

B Quack

C Snack

D Stack

Answer: A

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Question 23

Given below are four jumbled sentences. Select the option that gives their correct order.

A. Some returned in the 80's but they were not allowed to reclaim or buy land.

B. In the 70's many Vietnamese living in Cambodia faced deportation after a change in government.

C. Their only solution was to live in wooden homes floating on the lake.

D. Even today they can be found living on the lake surviving on fishing and tourism.

A ABDC

B DACB

C CBDA

D BACD

Answer: D

Question 24

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

Sele, is a near extinct language, spoken for just five villages in Nepal, which lie close to Tibet.

A spoken of

B No improvement

C spoken in

D spoken out

Answer: C

Question 25

Select the most appropriate meaning of the given idiom

Like talking to a brick wall

A Fascinated

B Inattentive

C Frightened

D Curious

Answer: B

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General Intelligence

Instructions

For the following questions answer them individually

Question 26

Select the correct mirror image of the given number-cluster when a mirror is placed on the right side of the cluster.

9 5 6 4 3 7

A 7 3 4 2 2 9

B 7 3 4 2 2 9

C 7 3 4 9 5 9

D 7 8 4 0 2 6

Answer: A

Explanation:

When a mirror is placed on the right side of the figure,

The facing of the figure to the left and right direction changes to opposite direction in mirror image(right facing changes to left and vice versa).

∴ The mirror image of the given figure is

6 2 0 4 8 7

Hence, the correct answer is Option A

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Question 27

Which option represents the correct order of the given words as they would appear in an English dictionary?

1. Mankind
2. Manner
3. Manuscript
4. Management
5. Making

A 5, 4, 2, 1, 3

B 5, 1, 4, 2, 3

C 5, 4, 1, 2, 3

D 4, 1, 2, 3, 5

Answer: C

Explanation:

First 2 letters of all the words are same so verifying the third letter.

The third letter of Making is 'k' which comes before 'n' in alphabetical order. So Making is placed first in order.

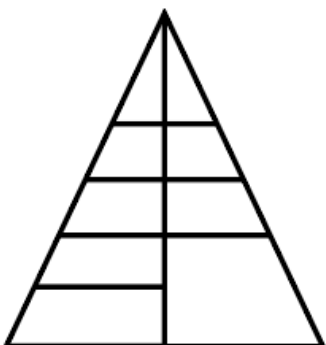
The remaining four words are arranged according to the order of their 4th letter in the alphabetical order. So Management is placed second, Mankind is placed third, Manner is placed fourth and Manuscript is placed fifth.

∴ The order of the words as per English dictionary is 5, 4, 1, 2, 3

Hence, the correct answer is Option C

Question 28

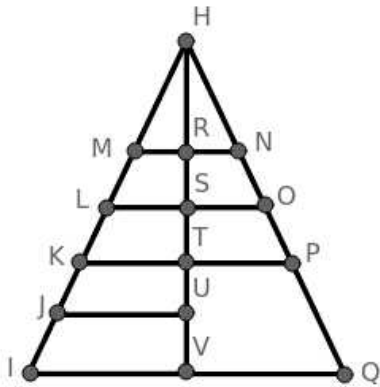
How many triangles are there in the given figure?



- A 13
- B 14
- C 12
- D 11

Answer: A

Explanation:



The different triangles in the given figure is HRM, HRN, HMN, HSL, HSO, HLO, HTK, HTP, HKP, HUJ, HVI, HVQ, HIQ
 ∴ Number of triangles in the given figure is 13

Hence, the correct answer is Option A

Question 29

Select the option in which the numbers are related in the same way as are the numbers in the given set.
 (15, 49, 201)

- A (24, 76, 307)
- B (17, 55, 220)
- C (29, 91, 369)
- D (18, 58, 290)

Answer: C

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Question 30

In a certain code language, 'SECTION' is written as 'PHZQLRK'. How will 'HOSTELS' be written as in that language?

- A ERPQHIP
- B EQPSHIP
- C FSPQHIQ
- D ERPRGIP

Answer: A

Explanation:

Given, 'SECTION' is written as 'PHZQLRK'

S = P
E = H
C = Z
T = Q
I = L
O = R
N = K



The logic here P is the code for S and S is the code for P in the code language. Every letter is assigned a different letter as shown above.

∴ HOSTELS is written as ERPQHIP

Hence, the correct answer is Option A

Question 31

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

1. Some computers are phones.
2. All phones are televisions.

Conclusions:

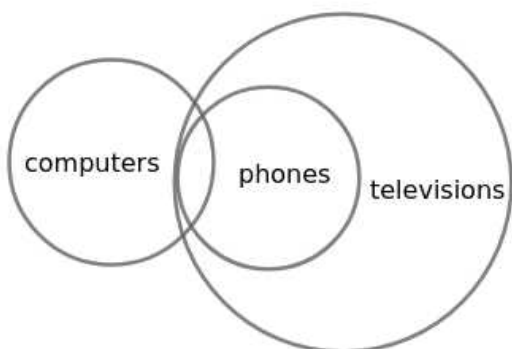
- I. Some phones are computers.
- II. Some televisions are computers.
- III. No television is a computer.

- A Only conclusions I and III follow.
B Only conclusions I and II follow.
C Only conclusions III follow.
D Either conclusion II or III follows.

Answer: B

Explanation:

The basic diagram for the given statements is



I. Some phones are computers

From the basic diagram, Some phones are computers. Hence conclusion I follows.

II. Some televisions are computers

From the basic diagram, Some televisions are computers. Hence conclusion II follows.

III. No television is a computer

Since some televisions are computers conclusion III do not follow.

∴ Only conclusions I and II follow the given statements

Hence, the correct answer is Option B

Question 32

$A \times B$ means 'A is the wife of B';

$A \div B$ means 'A is the father of B'.

Which of the following expression means 'R' is the paternal grandfather of 'S'?

A $J \times S \div R \times U$

B $R \div J \div S \times U$

C $S \times U \times R \div J$

D $S \div U \times J \div R$

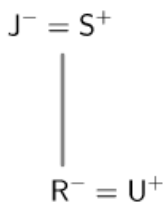
Answer: B

Explanation:

By Trial and error method,

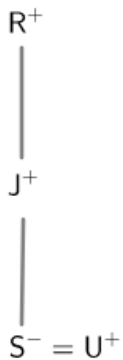
Option A

The family tree is



Option B

The family tree is



Here R is the paternal grandfather of S

Hence, the correct answer is Option B

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Question 33

Four words have been given, out of which three are alike in some manner and one is different. Select the odd one.

A Depression

B Dengue

C Typhoid

D Malaria

Answer: A

Explanation:

Dengue, Typhoid, Malaria are different diseases

Depression is a feeling

∴ Depression is the odd one among the given words

Hence, the correct answer is Option A

Question 34

Select the number that can replace the question mark (?) in the following series.

88, 95, 106, 119, 136, 155, 178, ?

A 217

B 197

C 207

D 249

Answer: C

Explanation:

$$88 + 7 = 95$$

$$95 + 11 = 106$$

$$106 + 13 = 119$$

$$119 + 17 = 136$$

$$136 + 19 = 155$$

$$155 + 23 = 178$$

The next number in the series is obtained by adding consecutive prime numbers to the previous number

Similarly the next number is

$$178 + 29 = 207$$

Hence, the correct answer is Option C

Question 35

Select the option figure that is embedded in the given figure X. (Rotation is not allowed)



Figure X



C



D



Answer: B

Explanation:

The figure 2 is embedded in the given figure X as shown below



Hence, the correct answer is Option B

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Question 36

Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

LZ : OA :: UR : ?

A FI

B HB

C FS

D GK

Answer: A

Explanation:

LZ : OA

L opposite is O

Z opposite is A

Similarly,

U opposite is F

R opposite is I

∴ UR is related to FI in the same way LZ is related to OA

Hence, the correct answer is Option A

Question 37

Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the odd letter-cluster.

A AFK

B BGL

C PUZ

D NSW

Answer: D

Explanation:

In the letter-clusters AFK, BGL, PUZ the number of letters between the consecutive letters is 4.

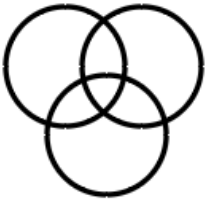
In NSW, number of letters between S and W is 3.

∴ NSW is the odd one among the given letter-clusters

Hence, the correct answer is Option D

Question 38

Which of the following options best represents the given Venn diagram?



A Mothers, Sisters, Daughters

B Mothers, Females, Aunts

C Accountants, Literates, Human beings

D Fathers, Nurses, Males

Answer: A

Explanation:

In Option B, all mothers and aunts are females which do not represent the given diagram.

In Option C, all accountants and literates are human beings which do not represent the given diagram.

In Option D, all fathers are males which do not represent the given diagram.

In Option A, Mothers can be Sisters, Sisters can be Daughters, Daughters can be Mothers.

∴ Mothers, Sisters and Daughters best represents the given Venn Diagram.

Hence, the correct answer is Option A

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Question 39

If the following interchanges are made in signs and numbers, which equation would be correct?

Interchanges:

Signs: ÷ and —

Numbers: 15 and 5

A $4 \times 30 - 15 \div 5 + 12 = 21$

B $12 \times 30 - 15 \div 5 + 4 = 37$

C $4 \times 30 - 15 \div 5 + 12 = 27$

D $4 \times 30 - 5 \div 15 + 14 = 21$

Answer: A

Explanation:

Given,

Signs \div and $-$ are interchanged

Numbers 15 and 5 are interchanged

By Trial and Error method,

Option A

$$4 \times 30 \div 5 - 15 + 12 = 21$$

$$4 \times 6 - 15 + 12 = 21$$

$$24 - 15 + 12 = 21$$

$$21 = 21$$

Hence, the correct answer is Option A

Question 40

In a certain code language, 'TENDER' is coded as '185414520'. How will 'REQUESTED' be coded as in that language?

A 45221942116518

B 45203952017558

C 65101852117516

D 45201952117518

Answer: D

Explanation:

Given, 'TENDER' is coded as '185414520'

TENDER \rightarrow 18 5 4 14 5 20

T = 20

E = 5

N = 14

D = 4

E = 5

R = 18

The code here is in reverse order of the value of the words.

R = 18

E = 5

Q = 17

U = 21

E = 5

S = 19

T = 20

E = 5

D = 4

Similarly, 'REQUESTED' is coded as 45201952117518.

Hence, the correct answer is Option D

Question 41

Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different from the rest.

- A 7 : 343
- B 12 : 1757
- C 11 : 1331
- D 3 : 27

Answer: B

Explanation:

$$7 : 343 \rightarrow 7 : 7^3$$

$$11 : 1331 \rightarrow 11 : 11^3$$

$$3 : 27 \rightarrow 3 : 3^3$$

1757 is not the cube of 12

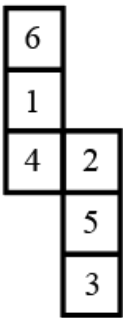
∴ 12 : 1757 is the odd one among the given number pairs

Hence, the correct answer is Option B

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Question 42

A cube is made by folding the given sheet. In the cube so formed, which number would be on the face opposite to the one showing '5'?



- A 4
- B 6
- C 2
- D 1

Answer: D

Explanation:

When the sheet is folded to form a cube with base 2,

2 will be opposite to 3

5 will be opposite to 1

4 will be opposite to 6

∴ 1 will be on the face opposite to the one showing 5

Hence, the correct answer is Option D

Question 43

Select the letter-cluster that can replace the question mark (?) in the following series.
EQM, GRL, ISK, KTJ, ?

- A MUI
- B NUS
- C MVR
- D MTJ

Answer: A

Explanation:

The logic here is

$$E + 2 = G$$

$$Q + 1 = R$$

$$M - 1 = L$$

Similarly, next letter clusters are obtained using the same logic

$$K + 2 = M$$

$$T + 1 = U$$

$$J - 1 = I$$

∴ The fifth letter cluster is MUI

Hence, the correct answer is Option A

Question 44

An amount of ₹504 is to be divided among three persons A, B and C in the ratio of 7 : 8 : 9, respectively. How much amount will B and C receive in total?

- A ₹268
- B ₹419
- C ₹317
- D ₹357

Answer: D

Explanation:

Given, Total amount = ₹504

Ratio of amounts of A,B,C = 7 : 8 : 9

Let the amounts of A,B,C = 7a, 8a, 9a

$$\Rightarrow 7a + 8a + 9a = 504$$

$$\Rightarrow 24a = 504$$

$$\Rightarrow a = 21$$

∴ Total amount of B and C = 8a + 9a = 17a = 17 × 21 = ₹357

Hence, the correct answer is Option D

Question 45

Select the option that is related to the third number in the same way as the second number is related to the first number.

88 : 308 :: 126 : ?

- A 456
- B 450
- C 379
- D 441

Answer: D

Explanation:

$$88 : 308 \longrightarrow 44 \times 2 : 44 \times 7$$

Similarly,

$$126 : ? \longrightarrow 63 \times 2 : ?$$

The required number is the 7th multiple of 63 = $63 \times 7 = 441$

\therefore 126 : 441 is related in the same way 88 : 308 related

Hence, the correct answer is Option D

Question 46

Select the option in which the numbers are related in the same way as are the numbers in the given set.

(15, 556, 331)

- A (9, 159, 78)
- B (12, 228, 74)
- C (17, 495, 104)
- D (4, 331, 305)

Answer: A

Explanation:

The logic here is

$$556 - 331 = 225 = 15^2 \longrightarrow \text{second number} - \text{third number} = \text{first number}^2$$

Similarly,

$$159 - 78 = 81 = 9^2 \longrightarrow \text{second number} - \text{third number} = \text{first number}^2$$

\therefore (9, 159, 78) are related in the same way as (15, 556, 331) are related.

Hence, the correct answer is Option A

Question 47

'Human-beings' is related to 'Mammals' in the same way as 'Snake' is related to

- A Mammals
- B Non-chordates
- C Reptile
- D Amphibian

Answer: C

Explanation:

Mammals give live birth and produce milk for their young ones while reptiles lay eggs.

Human beings belong to Mammals whereas Snakes belong to Reptiles.

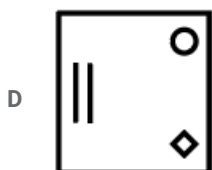
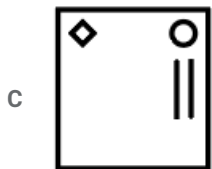
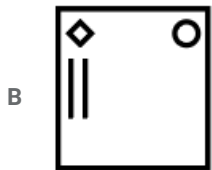
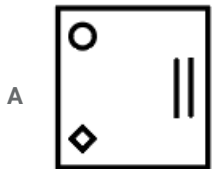
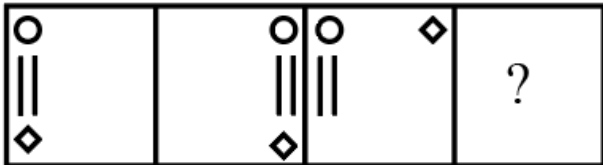
∴ Snake is related to Reptiles in the same way Human-beings is related to Mammals

Hence, the correct answer is Option C

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Question 48

Select the option figure that can replace the question mark (?) in the following figure series.



Answer: C

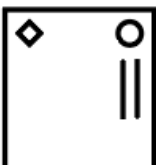
Explanation:

The parallel lines are moving to the opposite faces in the series.

The rhombus is moving one place in the anti clockwise direction in the given series.

The circle is moving one place forward and one place backward in the given series.

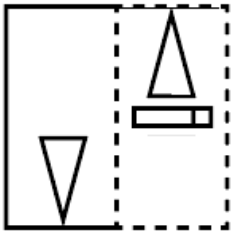
∴ The figure that can replace the question mark (?) in the following figure series is



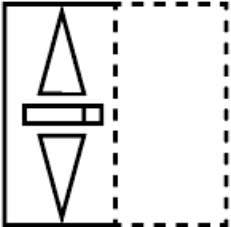
Hence, the correct answer is Option C

Question 49

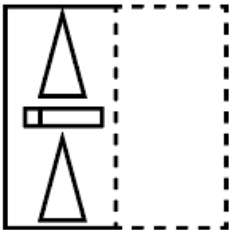
Select the option that depicts how the given transparent sheet of paper would appear if it is folded at the dotted line.



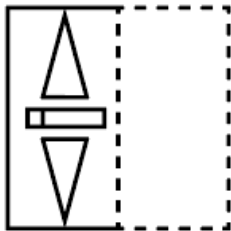
A



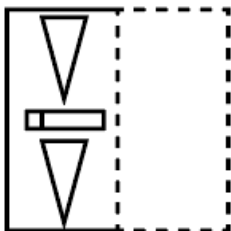
B



C



D

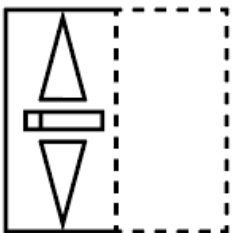


Answer: C

Explanation:

The line in the rectangle which is towards right will be towards left when the transparent sheet is folded. The left triangle remains same. The upper will also be similar when folded.

∴ When the transparent sheet is folded it will appear as shown below



Hence, the correct answer is Option C

Question 50

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

Weight : Kilogram

- A Distance : Hertz
- B Resistance : Ohm
- C Time : Clock
- D Height : Length

Answer: B

Explanation:

Weight is measured in Kilogram whereas Resistance is measured in Ohm

∴ Resistance is related to Ohm in the same way Weight is related to Kilogram.

Hence, the correct answer is Option B

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Quantitative Aptitude(Basic Arithmetic Skill)

Instructions

For the following questions answer them individually

Question 51

If $A = 2(\sin^6 \theta + \cos^6 \theta) - 3(\sin^4 \theta + \cos^4 \theta)$ then the value of 3α such that $\cos \alpha = \sqrt{\frac{3+A}{5+A}}$ is:

- A 90°
- B 180°
- C 45°
- D 135°

Answer: D

Explanation:

Given, $A = 2(\sin^6 \theta + \cos^6 \theta) - 3(\sin^4 \theta + \cos^4 \theta)$

$$\Rightarrow A = 2((\sin^2 \theta)^3 + (\cos^2 \theta)^3) - 3(\sin^4 \theta + \cos^4 \theta)$$

$$\Rightarrow A = 2(\sin^2 \theta + \cos^2 \theta)(\sin^4 \theta - \sin^2 \theta \cos^2 \theta + \cos^4 \theta) - 3(\sin^4 \theta + \cos^4 \theta)$$

$$\Rightarrow A = 2(\sin^4 \theta - \sin^2 \theta \cos^2 \theta + \cos^4 \theta) - 3(\sin^4 \theta + \cos^4 \theta)$$

$$\Rightarrow A = 2 \sin^4 \theta - 2 \sin^2 \theta \cos^2 \theta + 2 \cos^4 \theta - 3 \sin^4 \theta - 3 \cos^4 \theta$$

$$\Rightarrow A = -\sin^4 \theta - \cos^4 \theta - 2 \sin^2 \theta \cos^2 \theta$$

$$\Rightarrow A = -(\sin^4 \theta + \cos^4 \theta + 2 \sin^2 \theta \cos^2 \theta)$$

$$\Rightarrow A = -(\sin^2 \theta + \cos^2 \theta)^2$$

$$\Rightarrow A = -1$$

$$\therefore \cos \alpha = \sqrt{\frac{3+A}{5+A}} = \sqrt{\frac{3-1}{5-1}}$$

$$\Rightarrow \cos \alpha = \sqrt{\frac{2}{4}}$$

$$\Rightarrow \cos \alpha = \sqrt{\frac{1}{2}}$$

$$\Rightarrow \cos \alpha = \frac{1}{\sqrt{2}}$$

$$\Rightarrow \cos \alpha = \cos 45^\circ$$

$$\Rightarrow \alpha = 45^\circ$$

$$\Rightarrow 3\alpha = 3 \times 45^\circ = 135^\circ$$

Hence, the correct answer is Option D

SSC CGL Free Mock Test (Latest Pattern)

Question 52

If $117 \cos^2 A + 129 \sin^2 A = 120$ and $170 \cos^2 B + 158 \sin^2 B = 161$, then the value of $\operatorname{cosec}^2 A \sec^2 B$ is:

A 1

B 16

C 9

D 4

Answer: B

Explanation:

$$117 \cos^2 A + 129 \sin^2 A = 120$$

$$\Rightarrow 117 \cos^2 A + 117 \sin^2 A + 12 \sin^2 A = 120$$

$$\Rightarrow 117 (\cos^2 A + \sin^2 A) + 12 \sin^2 A = 120$$

$$\Rightarrow 117(1) + 12 \sin^2 A = 120$$

$$\Rightarrow 12 \sin^2 A = 3$$

$$\Rightarrow \sin^2 A = \frac{3}{12}$$

$$\Rightarrow \operatorname{cosec}^2 A = \frac{12}{3}$$

$$\Rightarrow \operatorname{cosec}^2 A = 4$$

$$170 \cos^2 B + 158 \sin^2 B = 161$$

$$\Rightarrow 12 \cos^2 B + 158 \cos^2 B + 158 \sin^2 B = 161$$

$$\Rightarrow 12 \cos^2 B + 158 (\cos^2 B + \sin^2 B) = 161$$

$$\Rightarrow 12 \cos^2 B + 158(1) = 161$$

$$\Rightarrow 12 \cos^2 B = 3$$

$$\Rightarrow \cos^2 B = \frac{3}{12}$$

$$\Rightarrow \sec^2 B = \frac{12}{3}$$

$$\Rightarrow \sec^2 B = 4$$

$$\therefore \operatorname{cosec}^2 A \sec^2 B = 4 \times 4 = 16$$

Hence, the correct answer is Option B

Question 53

A person purchases 40 items at ₹10 each. He sells a part of them at 25% profit and the remaining at 10% loss. The net profit is 4% in this transaction. The number of items he sold at a loss, is:

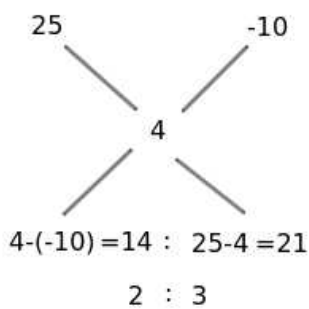
- A 16
- B 18
- C 24
- D 22

Answer: C

Explanation:

Given, total number of items = 40

Using alligation and mixture,



Ratio of number of items sold at 25% profit and 10% loss = 2 : 3

∴ Number of items sold at 10% loss = $\frac{3}{2+3} \times 40 = 24$

Hence, the correct answer is Option C

Question 54

A cylindrical vessel with radius 6 cm and height 5 cm is to be made by melting a number of spherical metal balls of diameter 2 cm. The minimum number of balls needed is:

- A 125
- B 105
- C 115
- D 135

Answer: D

Explanation:

Given, radius of the cylindrical vessel = 6 cm

Height of the cylindrical vessel = 5 cm

Volume of the cylindrical vessel = $\pi r^2 h = \pi (6)^2 (5) = 180\pi$

Diameter of the spherical metal ball = 2 cm

⇒ Radius of the spherical metal ball = 1 cm

Volume of the spherical metal ball = $\frac{4}{3}\pi r^3 = \frac{4}{3}\pi (1)^3 = \frac{4}{3}\pi$

Let the number of spherical metal ball to be melted to make cylindrical vessel = n

⇒ $n \times \frac{4}{3}\pi = 180\pi$

$$\Rightarrow n = 180 \times \frac{3}{4}$$

$$\Rightarrow n = 135$$

∴ Number of spherical metal balls required to melt = 135

Hence, the correct answer is Option D

SSC CHSL Important Questions and Answers (Download PDF)

Question 55

A sum of ₹12,000 was taken at simple interest at some rate. After four months, ₹6,000 more was added and the total principal was charged at double the earlier rate of interest. At the end of the year, if the total interest was ₹2,800, what was the initial rate of interest?

A 10%

B 14%

C 16%

D 12%

Answer: A

Explanation:

Let the rate of interest for the principal amount ₹12,000 = R%

Time for the principal amount ₹12,000 = 4 months = $\frac{4}{12}$ year = $\frac{1}{3}$ year

According to the problem,

Principal amount after 4 months = ₹12,000 + ₹6,000 = ₹18,000

Rate of interest after 4 months = 2R%

Time for the principal amount ₹18,000 = 8 months = $\frac{8}{12}$ year = $\frac{2}{3}$ year

At the end of the year, the total interest was ₹2,800

$$\Rightarrow \frac{12000 \times \frac{1}{3} \times R}{100} + \frac{18000 \times \frac{2}{3} \times 2R}{100} = 2800$$

$$\Rightarrow 40R + 240R = 2800$$

$$\Rightarrow 280R = 2800$$

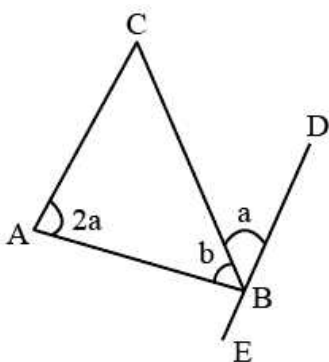
$$\Rightarrow R = 10\%$$

∴ Initial rate of interest = R = 10%

Hence, the correct answer is Option A

Question 56

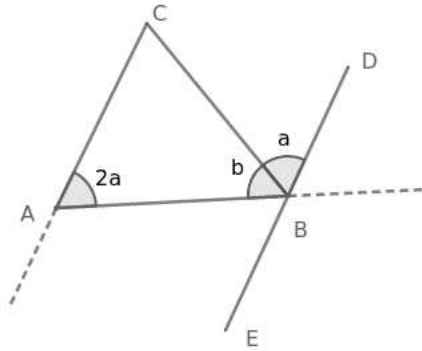
In the given figure, if AC, DE are parallel and $\angle CAB = 38^\circ$, then the value of $\angle ABC + 5\angle CBD$ is:



- A 196°
- B 218°
- C 178°
- D 158°

Answer: B

Explanation:



Given,

$$\angle CAB = 38^\circ$$

$$\Rightarrow 2a = 38^\circ$$

$$\Rightarrow a = 19^\circ$$

$$\Rightarrow \angle CBD = 19^\circ$$

AB is the transversal intersecting parallel lines AC and DE

\therefore Alternate interior angles are equal

$$\Rightarrow \angle ABE = \angle CAB$$

$$\Rightarrow \angle ABE = 38^\circ$$

$$\angle ABE + \angle ABC + \angle CBD = 180^\circ$$

$$\Rightarrow 38^\circ + \angle ABC + 19^\circ = 180^\circ$$

$$\Rightarrow \angle ABC + 57^\circ = 180^\circ$$

$$\Rightarrow \angle ABC = 180^\circ - 57^\circ$$

$$\Rightarrow \angle ABC = 123^\circ$$

$$\therefore \angle ABC + 5\angle CBD = 123^\circ + 5(19^\circ) = 123^\circ + 95^\circ = 218^\circ$$

Hence, the correct answer is Option B

Question 57

The average of 35 consecutive natural numbers is N. Dropping the first 10 numbers and including the next 10 numbers, the average is changed to M. If the value of $M^2 - N^2 = 600$, then the average of 3M and 5N is:

- A 90
- B 115
- C 120
- D 100

Answer: B

Explanation:

Given,

Average of 35 consecutive natural numbers = N

Sum of 35 consecutive natural numbers = 35N

The average after dropping the first 10 numbers and including the next 10 numbers = M

Sum of the numbers after dropping first 10 numbers and including the next 10 numbers = 35M

Every number of the next 10 numbers is 35 more than the respective number of the dropped numbers

\Rightarrow Sum increased after adding next 10 numbers = $10(35) = 350$

$\Rightarrow 35N + 350 = 35M$

$\Rightarrow 35M - 35N = 350$

$\Rightarrow M - N = 10 \dots\dots\dots(1)$

Given $M^2 - N^2 = 600$

$\Rightarrow (M+N)(M-N) = 600$

$\Rightarrow 10(M+N) = 600$

$\Rightarrow M + N = 60 \dots\dots\dots(2)$

Solving (1) + (2)

$2M = 70$

$M = 35$

From (2), $35 + N = 60$

$\Rightarrow N = 25$

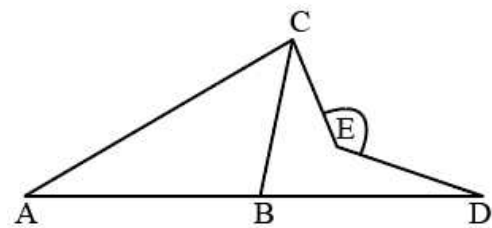
\therefore Average of 3M and 5N = $\frac{3M+5N}{2} = \frac{3(35)+5(25)}{2} = \frac{105+125}{2} = \frac{230}{2} = 115$

Hence, the correct answer is Option B

SSC CHSL Study Material

Question 58

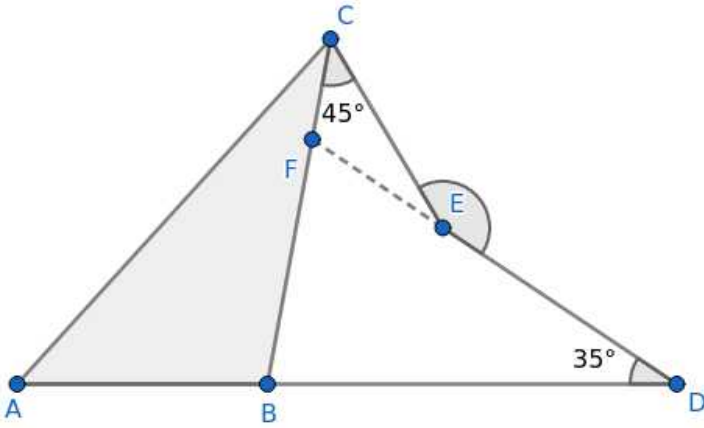
If the given figure, $\angle ACB + \angle BAC = 80^\circ$; $\angle BDE = 35^\circ$; $\angle BCE = 45^\circ$, then the marked angle $\angle CED$ is:



- A 150°
- B 160°
- C 135°
- D 120°

Answer: B

Explanation:



Given,

$$\angle ACB + \angle BAC = 80^\circ$$

$$\angle BDE = 35^\circ$$

$$\angle BCE = 45^\circ$$

In $\triangle ABC$,

$$\angle ACB + \angle BAC + \angle ABC = 180^\circ$$

$$\Rightarrow 80^\circ + \angle ABC = 180^\circ$$

$$\Rightarrow \angle ABC = 100^\circ$$

From the figure,

$$\angle ABC + \angle CBD = 180^\circ$$

$$\Rightarrow 100^\circ + \angle CBD = 180^\circ$$

$$\Rightarrow \angle CBD = 80^\circ$$

In $\triangle FBD$,

$$\Rightarrow \angle FBD + \angle BDF + \angle BFD = 180^\circ$$

$$\Rightarrow \angle CBD + \angle BDE + \angle BFD = 180^\circ$$

$$\Rightarrow 80^\circ + 35^\circ + \angle BFD = 180^\circ$$

$$\Rightarrow 115^\circ + \angle BFD = 180^\circ$$

$$\Rightarrow \angle BFD = 65^\circ$$

In $\triangle CFE$,

$\angle BFD$ is the exterior angle at point F

$$\Rightarrow \angle BFD = \angle FCE + \angle CEF$$

$$\Rightarrow \angle BFD = \angle BCE + \angle CEF$$

$$\Rightarrow 65^\circ = 45^\circ + \angle CEF$$

$$\Rightarrow \angle CEF = 20^\circ$$

From the figure,

$$\angle CEF + \angle CED = 180^\circ$$

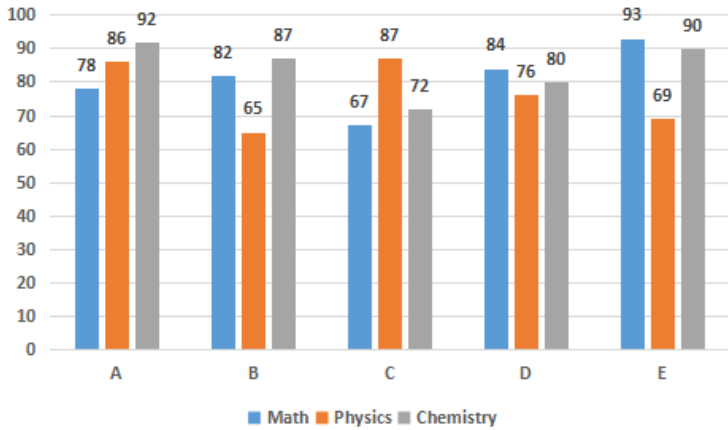
$$\Rightarrow 20^\circ + \angle CED = 180^\circ$$

$$\Rightarrow \angle CED = 160^\circ$$

Hence, the correct answer is Option B

Question 59

The following graph gives the performance of five students A, B, C, D, E in Math, Physics and Chemistry.



Based on the given information - considering that a performance is based on the difficulty level of the paper, which of the following statements is correct?

- A Math is easier for B than for E and A
- B Physics is easier for C than for B and E
- C For D, all subjects are of the same difficulty
- D For C, Math is the most difficult and Chemistry is the easiest

Answer: B

Explanation:

From the graph,

Score of E in maths is greater than score of B in maths, hence option A is incorrect

Score of D in all subjects are different so the difficulty level is different for all subjects for D, hence option C is incorrect

Score of C in maths is the least so maths is the difficult subject for C and score in physics is the highest so physics is the easiest subject for C, hence option D is incorrect

Score of C in physics is greater than score of B and E in physics, hence option B is correct

Question 60

A man purchased a car for ₹12 lakhs and was insured for 80% of the cost. He sold the car at a 15% loss, but had not yet delivered it to the buyer when he met with an accident. After the accident, the car was damaged a lot and the insurance company paid 90% of the insured amount. The net difference in the two transactions is:

- A ₹1.56 lakhs
- B ₹1.38 lakhs
- C ₹88 lakhs
- D ₹92 lakhs

Answer: A

Explanation:

Cost price of the car = ₹12 lakhs

Loss% = 15%

$$\Rightarrow \text{Selling price of the car} = \frac{85}{100} \times 12 = \frac{51}{5} = ₹10.2 \text{ lakhs}$$

$$\text{Insured amount of the car} = \frac{80}{100} \times 12 = \frac{48}{5} = ₹9.6 \text{ lakhs}$$

Amount paid by the insurance company after accident = $\frac{90}{100} \times 9.6 = \frac{86.4}{10} = ₹8.64$ lakhs

∴ Net difference in two transactions = $10.2 - 8.64 = ₹1.56$ lakhs

Hence, the correct answer is Option A

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Question 61

The value of $(a^3 + 2a^2 + 3a^1 + 2a^0 + 1)(a^3 - 2a^1 + 1) - a^2(a^2 - 2)$, when $a = 7$, is:

- A 0
- B 7
- C 1
- D $\sqrt{7}$

Answer: C

Question 62

If, $2^{x+y-2z} = 8^{8z-5-y}$; $5^{4y-6z} = 25^{y+z}$; $3^{4x-3z} = 9^{x+z}$ then the value of $2x + 3y + 5z$ is:

- A 44
- B 28
- C 56
- D 32

Answer: A

Explanation:

$$2^{x+y-2z} = 8^{8z-5-y}$$

$$\Rightarrow 2^{x+y-2z} = (2^3)^{8z-5-y}$$

$$\Rightarrow 2^{x+y-2z} = 2^{24z-15-3y}$$

$$\Rightarrow x + y - 2z = 24z - 15 - 3y$$

$$\Rightarrow x + 4y - 26z = -15 \dots\dots\dots(1)$$

$$5^{4y-6z} = 25^{y+z}$$

$$\Rightarrow 5^{4y-6z} = (5^2)^{y+z}$$

$$\Rightarrow 5^{4y-6z} = 5^{2y+2z}$$

$$\Rightarrow 4y - 6z = 2y + 2z$$

$$\Rightarrow 2y = 8z$$

$$\Rightarrow y = 4z \dots\dots\dots(2)$$

$$3^{4x-3z} = 9^{x+z}$$

$$\Rightarrow 3^{4x-3z} = (3^2)^{x+z}$$

$$\Rightarrow 3^{4x-3z} = 3^{2x+2z}$$

$$\Rightarrow 4x - 3z = 2x + 2z$$

$$\Rightarrow 2x = 5z$$

$$\Rightarrow x = \frac{5}{2}z \dots\dots\dots(3)$$

Substituting (2) and (3) in (1)

$$\Rightarrow \frac{5}{2}z + 16z - 26z = -15$$

$$\Rightarrow \frac{5}{2}z - 10z = -15$$

$$\Rightarrow 10z - \frac{5}{2}z = 15$$

$$\Rightarrow \frac{15}{2}z = 15$$

$$\Rightarrow z = 2$$

From (2), $y = 4z = 4 \times 2 = 8$

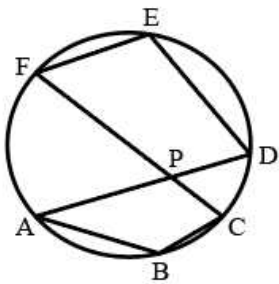
From (3), $x = \frac{5}{2}z = \frac{5}{2} \times 2 = 5$

$$\therefore 2x + 3y + 5z = 2(5) + 3(8) + 5(2) = 10 + 24 + 10 = 44$$

Hence, the correct answer is Option A

Question 63

In the following figure, if angles $\angle ABC = 95^\circ$ $\angle FED = 115^\circ$ (not to scale). Then the angle $\angle APC$ is equal to:



- A 135°
- B 150°
- C 120°
- D 155°

Answer: B

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Question 64

If $A = \left[\frac{3}{7} \text{ of } \frac{1}{45} \div \frac{18}{25} + \frac{17}{24} \right]$ of $\left[\frac{289}{16} \div \left(\frac{3}{4} + \frac{2}{3} \right)^2 \right]$, then the value of $8A$ is:

- A 132
- B 213
- C 231
- D 321

Answer: C

Explanation:

$$A = \left[\frac{3}{7} \text{ of } \frac{1}{45} \div \frac{18}{25} + \frac{17}{24} \right] \text{ of } \left[\frac{289}{16} \div \left(\frac{3}{4} + \frac{2}{3} \right)^2 \right]$$

$$\Rightarrow A = \left[\frac{3}{7} \text{ of } \frac{21}{5} \div \frac{18}{25} + \frac{17}{24} \right] \text{ of } \left[\frac{289}{16} \div (12)^2 \right]$$

$$\Rightarrow A = \left[\frac{63}{35} \div \frac{18}{25} + \frac{17}{24} \right] \text{ of } \left[\frac{289}{16} \div 144 \right]$$

$$\Rightarrow A = \left[\frac{63}{35} \times \frac{25}{18} + \frac{17}{24} \right] \text{ of } \left[\frac{289}{16} \times \frac{144}{289} \right]$$

$$\Rightarrow A = \left[\frac{5}{2} + \frac{17}{24} \right] \text{ of } 9$$

$$\Rightarrow A = \left[\frac{60+17}{24} \right] \times 9$$

$$\Rightarrow A = \frac{77}{24} \times 9$$

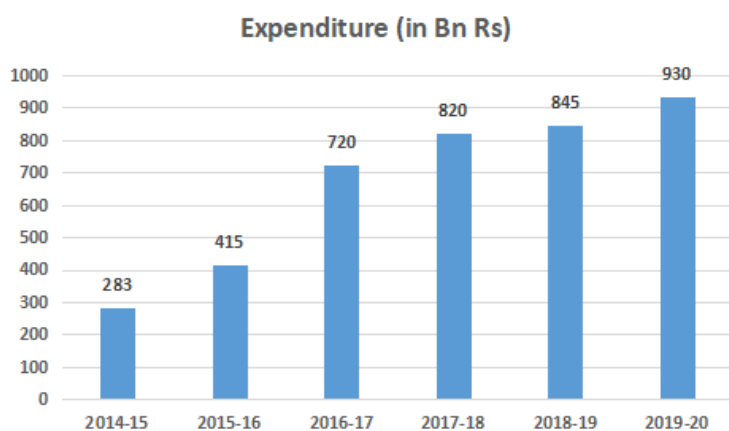
$$\Rightarrow A = \frac{231}{8}$$

$$\Rightarrow 8A = 231$$

Hence, the correct answer is Option C

Question 65

The following graph shows the expenditure on education sector by Indian government for the years-2014-15 to 2019-20



If the government plans to increase the expenditure by 30% on the average of the expenditures in 2016-17, 2017-18, 2018-19, then the approximate amount (in billions of rupees) to be spent in 2020-21 is:

A ₹1,129.5

B ₹1,033.5

C ₹1,087.3

D ₹1,162.6

Answer: B

Explanation:

From the graph,

$$\text{The average of the expenditures in 2016-17, 2017-18, 2018-19} = \frac{720+820+845}{3} = \frac{2385}{3} = 795$$

$$\therefore \text{Expenditure by government in 2020-21} = \frac{130}{100} \times 795 = 1033.5$$

Hence, the correct answer is Option B

Question 66

5 men and 8 women can complete a task in 34 days, whereas 4 men and 18 women can complete the same task in 28 days. In how many days can the same task be completed by 3 men and 5 women?

A 56

B 72

C 64

D 36

Answer: A

Explanation:

Let the work done by 1 man in 1 day = M

work done by 1 woman in 1 day = W

Total work done by 5 men and 8 women in 34 days

$$\Rightarrow \text{Total work} = 34(5M+8W) = 170M + 272W$$

Total work done by 4 men and 18 women in 28 days

$$\Rightarrow \text{Total work} = 28(4M+18W) = 112M + 504W$$

$$\therefore 170M + 272W = 112M + 504W$$

$$\Rightarrow 58M = 232W$$

$$\Rightarrow M = 4W$$

$$\text{Total work} = 170M + 272W = 170(4W) + 272W = 680W + 272W = 952W$$

$$\text{Number of days required for 3 men and 5 women to complete the task} = \frac{952W}{3M+5W} = \frac{952W}{3(4W)+5W} = \frac{952W}{17W} = 56 \text{ days}$$

Hence, the correct answer is Option A

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Question 67

If $2145 : x :: 3003 : 42$, then the value of y so that $x : 2508 :: y : 11704$, is:

A 156

B 96

C 212

D 140

Answer: D

Explanation:

Given, $2145 : x :: 3003 : 42$

$$\Rightarrow \frac{2145}{x} = \frac{3003}{42}$$

$$\Rightarrow x = \frac{2145 \times 42}{3003}$$

$$\Rightarrow x = 30$$

$x : 2508 :: y : 11704$

$$\Rightarrow \frac{x}{2508} = \frac{y}{11704}$$

$$\Rightarrow \frac{30}{2508} = \frac{y}{11704}$$

$$\Rightarrow y = \frac{30 \times 11704}{2508}$$

$$\Rightarrow y = 140$$

Hence, the correct answer is Option D

Question 68

The value of $(9-4\sqrt{5})^2 + (9+4\sqrt{5})^2$ is:

- A 322
- B 424
- C 246
- D 286

Answer: A

Explanation:

$$\begin{aligned} (9-4\sqrt{5})^2 + (9+4\sqrt{5})^2 &= 81+80-72\sqrt{5} + 81+80+72\sqrt{5} \\ &= 161-72\sqrt{5} + 161+72\sqrt{5} \\ &= \frac{161+72\sqrt{5}+161-72\sqrt{5}}{161^2-(72\sqrt{5})^2} \\ &= \frac{322}{25921-25920} \\ &= 322 \end{aligned}$$

Question 69

The value of $\left[\frac{\sqrt{3}+2\sin P}{1-2\cos P}\right]^3 + \left[\frac{1+2\cos P}{\sqrt{3}-2\sin P}\right]^3$ is:

- A 1
- B 0
- C $2 \sin P \cos P$
- D $\sin P \cos P$

Answer: B

Explanation:

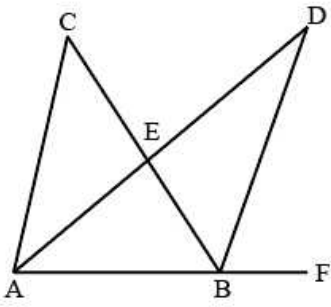
$$\begin{aligned} \left[\frac{\sqrt{3}+2\sin P}{1-2\cos P}\right]^3 + \left[\frac{1+2\cos P}{\sqrt{3}-2\sin P}\right]^3 &= \left[\frac{\frac{\sqrt{3}}{2}+\sin P}{\frac{1}{2}-\cos P}\right]^3 + \left[\frac{\frac{1}{2}+\cos P}{\frac{\sqrt{3}}{2}-\sin P}\right]^3 \\ &= \left[\frac{\sin 60^\circ + \sin P}{\cos 60^\circ - \cos P}\right]^3 + \left[\frac{\cos 60^\circ + \cos P}{\sin 60^\circ - \sin P}\right]^3 \\ &= \left[\frac{2 \sin\left(\frac{60+P}{2}\right) \cos\left(\frac{60-P}{2}\right)}{-2 \sin\left(\frac{60+P}{2}\right) \sin\left(\frac{60-P}{2}\right)}\right]^3 + \left[\frac{2 \cos\left(\frac{60+P}{2}\right) \cos\left(\frac{60-P}{2}\right)}{2 \cos\left(\frac{60+P}{2}\right) \sin\left(\frac{60-P}{2}\right)}\right]^3 \\ &= \left[-\cot\left(\frac{60-P}{2}\right)\right]^3 + \left[\cot\left(\frac{60-P}{2}\right)\right]^3 \\ &= -\cot^3\left(\frac{60-P}{2}\right) + \cot^3\left(\frac{60-P}{2}\right) \\ &= 0 \end{aligned}$$

Hence, the correct answer is Option B

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Question 70

In the given figure, AD is bisector of angle $\angle CAB$ and BD is bisector of angle $\angle CBF$. If the angle at C is 34° , the angle $\angle ADB$ is:



A 32°

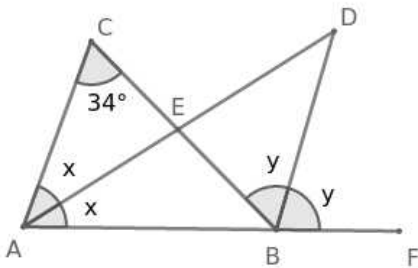
B 17°

C 34°

D 16°

Answer: B

Explanation:



Given,

$$\angle C = 34^\circ$$

AD is bisector of angle $\angle CAB$

$$\Rightarrow \angle ACE = \angle BAE$$

$$\text{Let } \angle ACE = \angle BAE = x$$

BD is bisector of angle $\angle CBF$

$$\Rightarrow \angle CBD = \angle FBD$$

$$\text{Let } \angle CBD = \angle FBD = y$$

In $\triangle ABC$, $\angle CBF$ is the exterior angle at B

$$\Rightarrow 2y = 34^\circ + 2x$$

$$\Rightarrow y = 17^\circ + x$$

In $\triangle ABC$,

$$\angle ABC + \angle BAC + \angle ACB = 180^\circ$$

$$\Rightarrow \angle ABC + 2x + 34^\circ = 180^\circ$$

$$\Rightarrow \angle ABC = 146^\circ - 2x$$

In $\triangle ABD$,

$$\Rightarrow \angle ABD + \angle BAD + \angle ADB = 180^\circ$$

$$\Rightarrow 146^\circ - 2x + y + x + \angle ADB = 180^\circ$$

$$\Rightarrow 146^\circ - x + 17^\circ + x + \angle ADB = 180^\circ$$

$$\Rightarrow 163^\circ + \angle ADB = 180^\circ$$

$$\Rightarrow \angle ADB = 17^\circ$$

Hence, the correct answer is Option B

Question 71

A sells an item at 20% profit to B, B sells the same at 10% profit to C and receives ₹1,32,000.0. Had C purchased the same item from A, he would have spent 5% less than what he spent with B. What profit would A have made then?

A ₹25,400

B ₹25,540

C ₹24,540

D ₹24,450

Answer: A

Explanation:

Let Cost price of A = C

$$\text{Selling price of A at 20\% profit} = \frac{120}{100} C$$

$$\text{Cost price of B} = \frac{120}{100} C$$

$$\text{Selling price of B at 10\% profit} = \frac{110}{100} \times \frac{120}{100} C$$

Given, selling price of B = ₹1,32,000

$$\Rightarrow \frac{110}{100} \times \frac{120}{100} C = 1,32,000$$

$$\Rightarrow C = ₹1,00,000$$

Cost price of C = ₹1,00,000

If C purchased the item from A, he would have spent 5% less

$$\Rightarrow \text{Cost price of C when purchased from A} = \frac{95}{100} \times 1,32,000 = ₹1,25,400$$

Selling price of A = ₹1,25,400

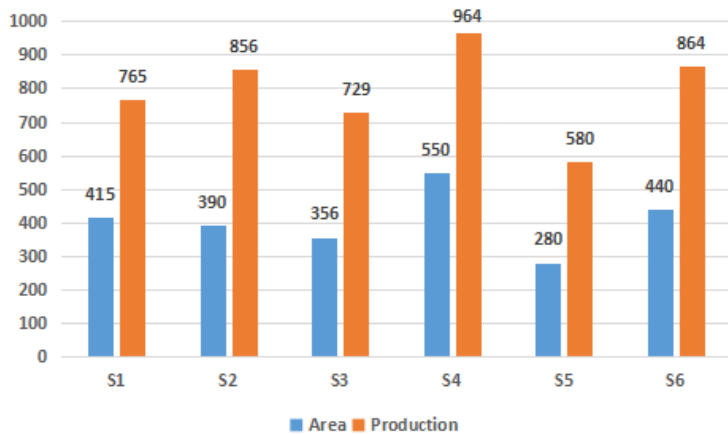
Cost Price of A = ₹1,00,000

Profit of A = 1,25,400 - 1,00,000 = ₹25,400

Hence, the correct answer is Option A

Question 72

The following graph shows the production of paddy in the agricultural land available the 6 places S1, S2, S3, S4, S5, S6 (area in hundreds of hectares and production in thousands of tonnes)



Based on the information, the production ratio (production to land) is highest and lowest, respectively, in:

- A S5, S3
- B S3, S6
- C S2, S1
- D S2, S4

Answer: D

Explanation:

$$\text{Production Ratio for S1} = \frac{765}{415} = 1.84$$

$$\text{Production Ratio for S2} = \frac{856}{390} = 2.19$$

$$\text{Production Ratio for S3} = \frac{729}{356} = 2.04$$

$$\text{Production Ratio for S4} = \frac{964}{550} = 1.75$$

$$\text{Production Ratio for S5} = \frac{580}{280} = 2.07$$

$$\text{Production Ratio for S6} = \frac{864}{440} = 1.96$$

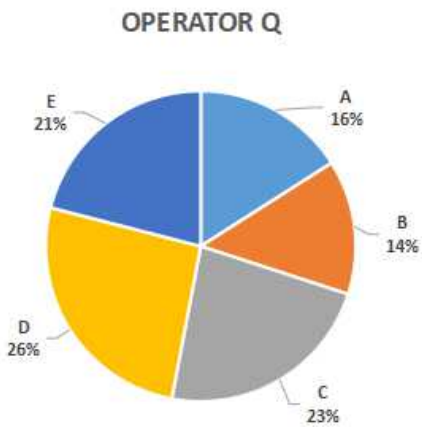
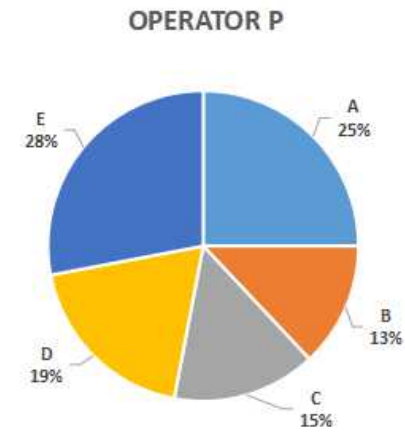
∴ The production ratio is highest for S2 and lowest for S4

Hence, the correct answer is Option D

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Question 73

The percentage of customers of two network operators P and Q across the cities A, B, C, D, E is shown in the given pie charts.



Based on the information in the pie charts, if the customers of operator P are 3.6 lakhs, and the customers of operator Q are 4.2 lakhs, then in the city C, the positive difference between the customers of the operators is:

- A 44,500
- B 42,600
- C 52,000
- D 48,000

Answer: B

Explanation:

From the pie charts,

$$\text{The customers of P in city C} = \frac{15}{100} \times 360000 = 15 \times 3600 = 54,000$$

$$\text{The customers of Q in city C} = \frac{23}{100} \times 420000 = 23 \times 4200 = 96,600$$

$$\therefore \text{Difference} = 96600 - 54000 = 42,600$$

Hence, the correct answer is Option B

Question 74

Which of the following numbers is divisible by 6?

- A 23,408
- B 1,00,246
- C 43,923

D 3,49,722

Answer: D

Explanation:

If a number is divisible by 6 then the number is divisible by 2 and 3

Sum of the digits of the 23,408 is 17 which is not divisible by 3 so the number is not divisible by 3, hence the number is not divisible by 6

Sum of the digits of the 1,00,246 is 13 which is not divisible by 3 so the number is not divisible by 3, hence the number is not divisible by 6

The units digit of 43,923 is not divisible by 2 so the number is not divisible by 2, hence the number is not divisible by 6

The units digit of 3,49,722 is divisible by 2 so the number is divisible by 2, the sum of the digits of the number is 27 which is divisible by 3 so the number is divisible by 3, hence the number is divisible by 6

Hence, the correct answer is Option D

Question 75

The distance between two railway stations is 1176 km. To cover this distance, an express train takes 5 hours less than a passenger train while the average speed of the passenger train is 70 km/h less than that of the express train. The time taken by the passenger train to complete the travel is:

A 12 hours

B 23 hours

C 17 hours

D 18 hours

Answer: A

Explanation:

Given,

Distance between two railway stations = 1176 km

Let the time taken by passenger train to cover the distance = t

⇒ Time taken by express train to cover the distance = t - 5

The average speed of the passenger train is 70 km/h less than that of the express train

$$\Rightarrow \frac{1176}{t-5} - \frac{1176}{t} = 70$$

$$\Rightarrow \frac{168}{t-5} - \frac{168}{t} = 10$$

$$\Rightarrow 168 \left[\frac{t-t+5}{(t-5)t} \right] = 10$$

$$\Rightarrow 168 \left[\frac{5}{(t-5)t} \right] = 10$$

$$\Rightarrow t^2 - 5t - 84 = 0$$

$$\Rightarrow t^2 - 12t + 7t - 84 = 0$$

$$\Rightarrow t(t - 12) + 7(t - 12) = 0$$

$$\Rightarrow (t - 12)(t + 7) = 0$$

$$\Rightarrow t - 12 = 0 \text{ or } t + 7 = 0$$

$$\Rightarrow t = 12 \text{ or } t = -7$$

t cannot be negative

$$\Rightarrow t = 12$$

∴ The time taken by the passenger train to complete the travel = 12 hours

Hence, the correct answer is Option A

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General Awareness

Instructions

For the following questions answer them individually

Question 76

Which of the following state's legislative assembly adopted a redesigned logo consisting of the National Emblem and the State flower - the Foxtail Orchid (*Rhynchosyilis Retusa*) on 9 January 2020?

- A Chhattisgarh Legislative Assembly
- B Jharkhand Legislative Assembly
- C Arunachal Pradesh Legislative Assembly
- D Kerala Legislative Assembly

Answer: C

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Question 77

Which river originates from Tibet and enters India through Arunachal Pradesh?

- A Chambal River
- B Godavari River
- C Kaveri River
- D Brahmaputra River

Answer: D

Question 78

Who won the 'Most Valuable Player of the Series' award in IPL 2019?

- A David Warner
- B KL Rahul
- C Andre Russell
- D Shubman Gill

Answer: C

Question 79

The novel 'Quichotte' was shortlisted for the '2019 Booker Prize'. Who is the author of this book?

- A Vikram Seth
- B Salman Rushdie

- C Amitav Ghosh
- D Arundhati Roy

Answer: B

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Question 80

How many districts of Uttar Pradesh started the second phase of Mission Indradhanush 2.0 at the block level on 7 January 2020?

- A 25
- B 35
- C 30
- D 40

Answer: B

Question 81

In which battle did Ahmad Shah Abdali defeat the Marathas?

- A Third battle of Panipat
- B Battle of Buxar
- C Battle of Khanwa
- D First battle of Tarain

Answer: A

Question 82

Which law states that the volume of an ideal gas at constant pressure is directly proportional to the absolute temperature?

- A Joule's law
- B Charles's law
- C Avogadro's law
- D Boyle's law

Answer: B

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Question 83

What is the full form of PROM?

- A Programmable read-only memory
- B Program read-output memory
- C Program read-only memory

D Primary read-only memory

Answer: A

Question 84

On August 2019, Rambir Singh Khokhar won the 'Dronacharya award' in the lifetime category for his contribution in _____.

A Kabaddi

B Hockey

C Football

D Boxing

Answer: A

Question 85

Who threw a bomb in the central legislative assembly along with Bhagat Singh to protest against the Public Safety Bill in 1929?

A Subhash Chandra Bose

B Chandra Shekhar Azad

C Rajguru

D Batukeshwar Dutt

Answer: D

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Question 86

'Mayurbhanj Chhau' is a folk dance form of which state?

A Maharashtra

B Karnataka

C Odisha

D Rajasthan

Answer: C

Question 87

With reference to metals and their ores, which of the following pairs is INCORRECT?

A Aluminium (Al) - Cryolite

B Mercury (Hg) - Greenockite

C Cobalt (Co) - Smelite

D Gold (Au) - Calaverite

Answer: B

Question 88

Who was the first Asian player to win the Junior Wimbledon's Boys singles title?

- A Vijay Amritraj
- B Sumit Nagal
- C Mahesh Bhupathi
- D Ramanathan Krishnan

Answer: D

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Question 89

Which of the following eye disorders is known as 'lazy eye'?

- A Hypermetropia
- B Myopia
- C Presbyopia
- D Amblyopia

Answer: D

Question 90

Which company was ranked as the largest profit making PSU in India for the fiscal year 2018-2019?

- A Power Finance Corporation
- B Indian Oil
- C Power Grid Corporation
- D Oil & Natural Gas Corporation

Answer: D

Question 91

Who is known as the 'Father of Public Sector Undertakings' in India?

- A Ashok Desai
- B V Krishnamurthy
- C Sashi Sivramkrishna
- D Prasanta Chandra Mahalanobis

Answer: B

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Question 92

The December 1929 session of Congress, in which the resolution for 'Poorna Swaraj' was passed, was presided over by:

- A Jawaharlal Nehru
- B CR Das
- C Vallabhbhai Patel
- D Subhash Chandra Bose

Answer: A

Question 93

Who described the preamble of Indian Constitution as the 'Political horoscope of the Indian Constitution'?

- A Kanhaiyalal Maniklal Munshi
- B NA Palkhiwala
- C Bhimrao Ramji Ambedkar
- D Thakurdas Bhargav

Answer: A

Question 94

Which Indian social activist and politician led the Self-Respect Movement or Dravidian Movement against Brahminism?

- A C Rajagopalachari
- B C Annadurai
- C P Theagaraya Chetty
- D Erode Venkatappa Ramasamy

Answer: D

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Question 95

Garro-Khasi range is located in which Indian state?

- A Meghalaya
- B Mizoram
- C Odisha
- D Sikkim

Answer: A

Question 96

Which is the tallest waterfall of India with a height of 1,493 ft?

- A Thalaiyar Falls, Tamil Nadu
- B Meenmutty Falls, Kerala
- C Barkana Falls, Karnataka
- D Kunchikal Falls, Karnataka

Answer: D

Question 97

On 30 October 2019, CBSE and NCERT, New Delhi developed an Aptitude Test for Senior School Students. What is the name of that test?

- A Udaan
- B Lakshya
- C Akanksha
- D Tamanna

Answer: D

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Question 98

In which year did UNESCO include Yoga in its Intangible Cultural Heritage list?

- A 2014
- B 2015
- C 2016
- D 2018

Answer: C

Question 99

Who is the only Indian to have won the United Nations Award in the field of human rights?

- A Ela Bhatt
- B Baba Amte
- C Verghese Kurien
- D Kanshi Ram

Answer: B

Question 100

Which sanctuary is famous for endangered Estuarine Crocodiles conservation in India?

- A Bhitarkanika Wildlife Sanctuary, Odisha
- B Indira Gandhi Wildlife Sanctuary

C Dandeli Wildlife Sanctuary, Karnataka

D Chinnar Wildlife Sanctuary, Kerala

Answer: A

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