

Reasoning

Instructions

For the following questions answer them individually

Question 1

CAT : 21 :: DOG : ?

- A 23
- B 24
- C 25
- D 26

Answer: A

Explanation:

C = 3, A = 1, T = 20

Add all numbers and subtract '3' as there are 3 letters in the word.

Hence CAT is coded as $24 - 3 = 21$.

Now, D = 4, O = 15, G = 7

DOG is coded as $26 - 3 = 23$.

Hence, option A is the correct answer.

Question 2

Painting : Art :: ? : Dance

- A Meerabai
- B Function
- C Kathak
- D Tabla

Answer: C

Explanation:

Painting is an art and likewise Kathak is a type of dance.

Hence, option C is the correct answer.

Question 3

ADIP : DGLS :: BEJQ : ?

- A EHMT
- B EJQU
- C CGLS
- D FINU

Answer: A

Explanation:

The pattern followed here is $(n + 3)$,

$A + 3 = D$, $D + 3 = G$, $I + 3 = L$, $P + 3 = S$

BEJQ can be written as,

$B + 3 = E$, $E + 3 = H$, $J + 3 = M$, $Q + 3 = T$

Hence, option A is the correct answer.

Question 4

Find the missing number 10, 12, 9, 13, 8, __, 7

A 11

B 7

C 14

D 12

Answer: C

Explanation:

The pattern followed here is alternate addition and subtraction with 2,3,4,5,6

$10 + 2 = 12$,

$12 - 3 = 9$,

$9 + 4 = 13$,

$13 - 5 = 8$,

$8 + 6 = 14$

Hence, option C is the correct answer.

Question 5

Find the odd number/letter/word from the given alternatives.

A Heart

B Kidney

C Spleen

D Liver

Answer: E

Question 6

Find the odd number/letter/word from the given alternatives.

A ACEG

B MOQS

C GHJL

D RTVX

Answer: C

Explanation:

Except in option C difference between the letters is '2'

Hence, option C is the correct answer.

Question 7

find the odd number/letter/word from the given alternatives.

A 1

B 2

C 3

D 4

Answer: E

Question 8

After arrange the following in dictionary order, which will be the third word?

1. particular

2. particle

3. participate

4. partiality

A 2

B 3

C 4

D 1

Answer: A

Explanation:

After arranging the given words in dictionary order. we get,

1) partiality 2) participate 3) particle 4) particular

3rd word in the dictionary order would be 'PARTICLE'

Hence, option A is the correct answer.

Question 9

If D is the daughter of A, D is the sister of M and A's brother is C, how are C and M related?

A mother and daughter

B uncle and niece

C father and daughter

D aunt and niece

Answer: B

Question 10

From the given alternatives, find the word which CANNOT be formed from the letters used in the given word INTERDEPENDENCE

- A DEPENDENT
- B INTEND
- C INCENT
- D INCIDENT

Answer: D

Explanation:

Except INCIDENT other words can be formed using given word.

Hence, option D is the correct answer.

Question 11

If RATE is written as SBUF, then FIRE can be written as

- A HJSF
- B GJSF
- C GJFS
- D JGSF

Answer: B

Explanation:

The pattern followed here is (n+1)

RATE - SBUF

$R + 1 = S, A + 1 = B, T + 1 = U, E + 1 = F$

FIRE - GJSF

$F + 1 = G, I + 1 = J, R + 1 = S, E + 1 = F$

Hence, option B is the correct answer.

Question 12

Which one of the given responses can be inserted to make a meaningful word ?

- A TE
- B ER
- C FE
- D AT

Answer: E

Instructions

In the following question, a series of words is given. In each question, a blank space is followed by four given ones that will complete

the series.

Question 13

10, 11, 14, 23, 50, ___?

A 110

B 104

C 70

D 131

Answer: D

Explanation:

The common difference between the numbers is multiplied with 3 and added.

$$10 + 1 = 11,$$

$$11 + 3 = 14,$$

$$14 + 9 = 23,$$

$$23 + 27 = 50,$$

$$50 + 81 = 131.$$

Hence, option D is the correct answer.

Question 14

15, 20, 30, ?, 65

A 40

B 45

C 50

D 60

Answer: B

Explanation:

$$15 + 5 = 20,$$

$$20 + 10 = 30,$$

$$30 + 15 = 45,$$

$$45 + 20 = 65.$$

Hence, option B is the correct answer.

Question 15

37, 32, 26, 19, ?

A 10

B 11

C 12

D 13

Answer: B

Explanation:

$$37 - 5 = 32,$$

$$32 - 6 = 26,$$

$$26 - 7 = 19,$$

$$19 - 8 = 11.$$

Hence, option B is the correct answer.

Instructions

For the following questions answer them individually

Question 16

Identify the correct response from the given following symbols

$$2(27 * 3) * 30 * 30 * 18$$

A $+ - = +$

B $\times + \div =$

C $+ - \div =$

D $\div + - =$

Answer: D

Explanation:

Only option D fits in the given equation

$$2(27 \div 3) + 30 - 30 = 18$$

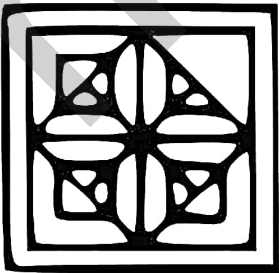
$$2(9) = 18$$

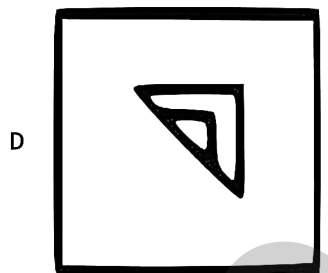
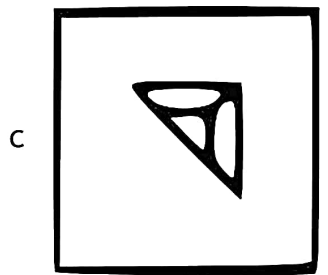
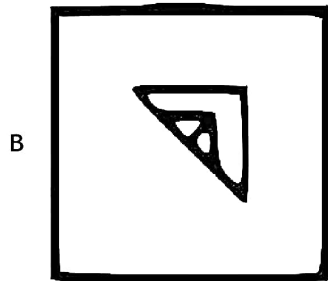
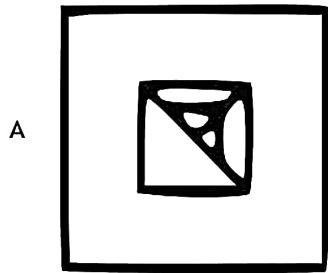
$$18 = 18$$

Hence, option D is the correct answer.

Question 17

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

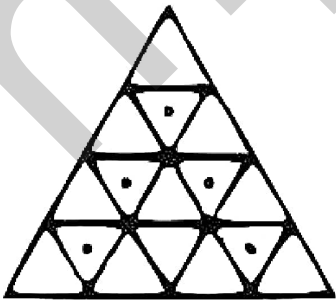




Answer: E

Question 18

Find out the number of triangles with dots:



A 5

B 8

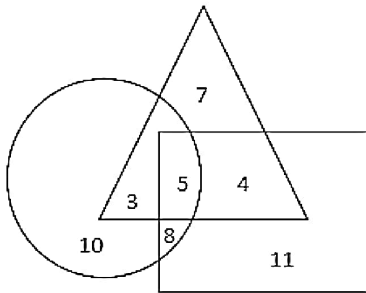
C 10

D 16

Answer: E

Question 19

In the following diagram, the circle represents Cricket players, the triangle represents Hockey players and the square represents Football players. How many play both Football & Hockey ?



- A 7
- B 9
- C 11
- D 4

Answer: B

Explanation:

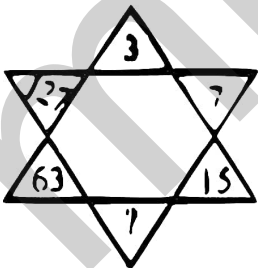
Number of players who play both hockey and football = number of players in common area of triangle and square

$$5 + 4 = 9$$

Hence, option B is the correct answer.

Question 20

In question Nos. 20 and 21, select the missing number from the given responses.



- A 37
- B 35
- C 31
- D 29

Answer: C

Explanation:

The pattern followed here is $(n \times 2) + 1$

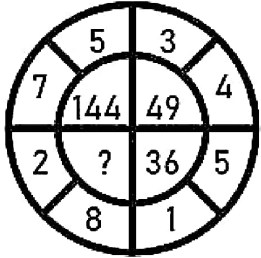
$$(3 \times 2) + 1 = 7$$

$$(7 \times 2) + 1 = 15$$

$$(15 \times 2) + 1 = 31 \dots\dots$$

Hence, option C is the correct answer.

Question 21



- A 100
- B 81
- C 64
- D 121

Answer: A

Explanation:

$$(7 + 5) = 12 \text{ and square of } 12 \text{ is } 144$$

$$(4 + 3) = 7 \text{ and square of } 7 \text{ is } 49$$

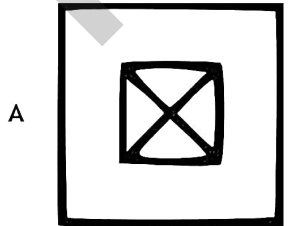
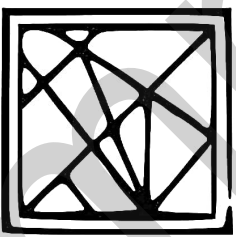
$$(5 + 1) = 6 \text{ and square of } 6 \text{ is } 36$$

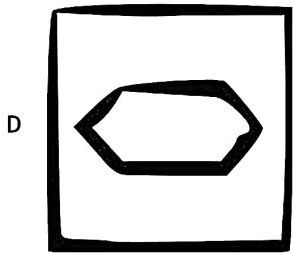
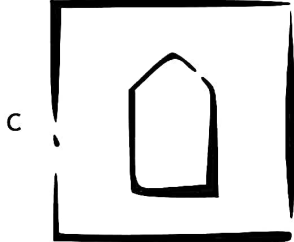
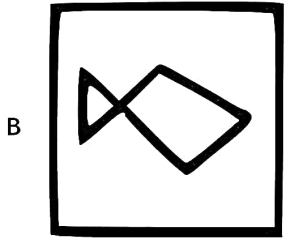
$$(2 + 8) = 10 \text{ and square of } 10 \text{ is } 100$$

Hence, option A is the correct answer.

Question 22

Which of the answer figure is embedded in the question figure ?





Answer: B

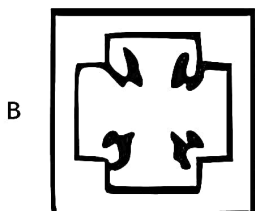
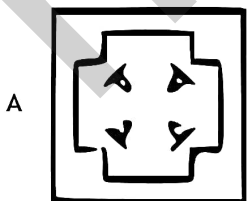
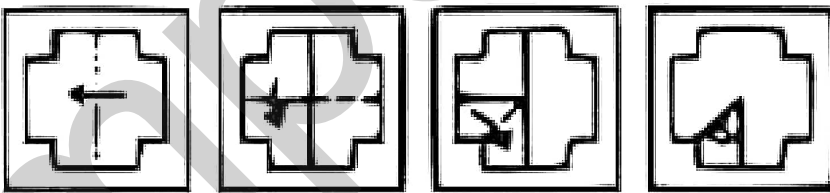
Explanation:

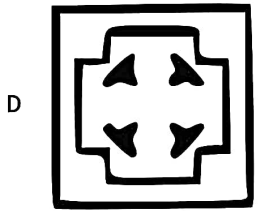
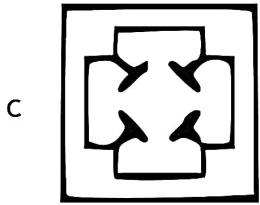
Figure in option B is embedded in question figure.

Hence, option B is the correct answer.

Question 23

A square piece of paper with its corners cut is folded as shown below. From the given responses, indicate how it will appear when opened ?

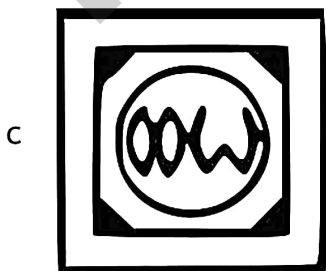
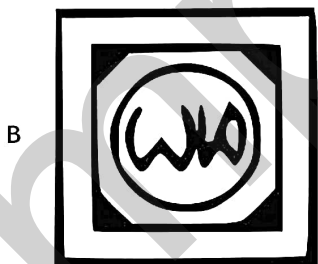
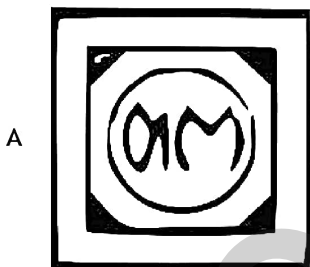
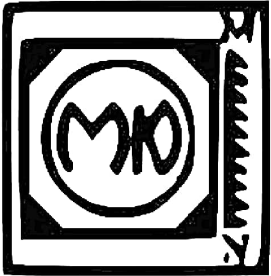


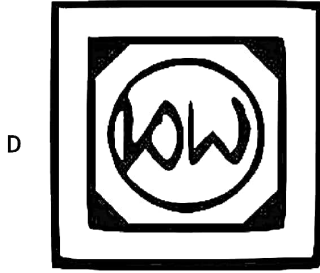


Answer: E

Question 24

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





Answer: A

Explanation:

Figure in option A is the mirror image of the given figure.

Hence, option A is the correct answer.

Question 25

A word is represented by only 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 in two matrices given below. The columns 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, eg., 'S' can be represented by 03, 44, etc., and 'R' can be represented by 69, 78 etc. Similarly, you have to identify the set for the word 'PUPIL'

Matrix

I

	0	1	2	3	4
0	P	U	L	S	E
1	U	L	S	E	P
2	L	S	E	P	U
3	S	E	P	U	L
4	E	P	U	L	S

II

	5	6	7	8	9
5	R	A	D	I	O
6	A	D	I	O	R
7	D	I	O	R	A
8	I	O	R	A	D
9	O	R	A	D	I

A 41,10,32,85,86

B 32,85,23,76,12

C 23,33,41,58,90

D 41,33,32,85,43

Answer: D

Explanation:

According to the given information,

P = 00, 14, 23, 32, 41

U = 01, 10, 24, 33, 42

I = 58, 67, 76, 85, 99

L = 02, 11, 20, 34, 43

41,33,32,85,43 can be a combination of the word PUPIL

Hence, option D is the correct answer.

English

Instructions

For the following questions answer them individually

Question 26

In Question some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the oval corresponding to the appropriate letter (A, B, C). If a sentence is free from error, blacken the oval corresponding to (D) in the Answer Sheet.

- A I have
- B known him
- C since two years
- D No error

Answer: E

Question 27

In Question some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the oval corresponding to the appropriate letter (A, B, C). If a sentence is free from error, blacken the oval corresponding to (D) in the Answer Sheet.

- A He is
- B your brother
- C isn't it?
- D No error

Answer: E

Question 28

In Question some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the oval corresponding to the appropriate letter (A, B, C). If a sentence is free from error, blacken the oval corresponding to (D) in the Answer Sheet.

- A This time you will have to work
- B hardly to pass
- C your qualifying examination
- D No error

Answer: E

Question 29

In Question some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the oval corresponding to the appropriate letter (A, B, C). If a sentence is free from error, blacken the oval corresponding to (D) in the Answer Sheet.

- A My ideas are not

- B the same as
- C my father
- D No error

Answer: E

Question 30

In Question some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the oval corresponding to the appropriate letter (A, B, C). If a sentence is free from error, blacken the oval corresponding to (D) in the Answer Sheet.

- A It was
- B approved answer
- C to the problem
- D No error

Answer: E

Question 31

Rather than reduce the commuter delays, the new toll road has_____

- A aggravated
- B minimized
- C refined
- D decreased

Answer: E

Question 32

India has shown considerable_____

- A efficient
- B proficiency
- C effect
- D progress

Answer: E

Question 33

Surya is suffering_____ a viral fever

- A from

B with

C by

D for

Answer: E

Question 34

these talent-contests will enable the students to bring _____ their best

A in

B out

C off

D up

Answer: B

Explanation:

Bring out means to reveal or uncover. Hence, Bring out is more appropriate in the given sentence.

Question 35

Janet had always been afraid ___ flying.

A to

B from

C of

D for

Answer: C

Explanation:

Janet is always been afraid of flying.

Question 36

man is generally a _____ animal

A social

B enterprising

C amicable

D agile

Answer: E

Question 37

birds _____ from one place to another during winter

A migrate

- B emigrate
- C immigrate
- D transfer

Answer: E

Question 38

the students jumped _____ the opportunity of going on a study tour

- A for
- B with
- C on
- D at

Answer: E

Question 39

ravi's marriage was _____ the wishes of his parents

- A opposed
- B fighting
- C against
- D anti

Answer: E

Question 40

In question out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the answer sheet 'feeble'

- A small
- B frail
- C trivial
- D supple

Answer: E

Question 41

in question choose the word opposite in meaning to the given word and mark it in the answer sheet 'affected'

- A genuine
- B altered
- C confined

D feigned

Answer: A

Question 42

in question four alternatives are given for the idiom\phrase underlined in the sentence choose the alternative which best express the meaning of the

Ramu gave the dog a wide berth

A to give it freedom

B to keep as far away from it as possible

C to teach a lesson to it

D to give false hopes to it

Answer: E

Question 43

Which of the following will replace the phrase given in bold to make it grammatically and contextually correct?

It's a fine day, no?

A is it?

B isn't it?

C yes?

D No improvement

Answer: B

Explanation:

Since the sentence contains 'It is a fine day'. So it should end with 'isn't it?'

Question 44

A confused complicated or embarrassing situation

A Imbroglia

B Inflammable

C Infinitesimal

D Awkward

Answer: A

Question 45

A from of a word, phrase, etc. that is shorter than the full form

A acronym

- B abbreviation
- C conscription
- D bibliography

Answer: E

Instructions

The greatest flourishing of northern Indian culture, art, and imperial strength undoubtedly took place during the reign of the Mughal monarchs of the 16th and 17th centuries. The Mughals were Central Asian descendants of the great Mongol warriors Ghengis Khan and Timur (Tamerlane), whose hordes of cavalry swept across the Eurasian steppe in the 13th and 14th centuries, conquering everything between Beijing and Budapest. But by the turn of the 16th century, the great Mongol empire has splintered: the many royal descendants of Ghengis and Timur fought over the territorial scraps and did their best to hold on to their own minor Sultanates.

One of these Sultans, Babur, was not satisfied with his small kingdom of Ferghana (now in modern-day Kyrgyzstan and eastern Uzbekistan), and he tried and tried again to permanently reconquer Timur's greatest prize, Samarkand. He never succeeded. So instead, Babur turned his attention south to the Sultanate of Delhi in northern India, which had been ruled successively by five dynasties of Muslim warriors from Afghanistan since the late 11th century. As history would show, Babur's campaign against the Delhi Sultanate catalyzed the foundation of one of the greatest dynasties in the history of South Asia: the Mughal Empire.

Question 46

The mughals can trace their ancestry to

- A beijing
- B budapest
- C central asia
- D the eurasian steppes

Answer: C

Question 47

The mughal attacked the delhi sultanate because

- A they were the royal descendants of ghengis khan
- B they wanted to expand their kingdom
- C they could not gain supremacy in the kingdom of samarkand
- D both (B) and (C)

Answer: E

Question 48

the mughal rulers were responsible for

- A unleashing terror amongst their subjects
- B organizing the eurasian steppe region
- C patronizing art and culture
- D in-fighting amongst themselves

Answer: B

Question 49

the mongols in the 13th and 14th centuries

- A plundered the greater part of asia and eastern europe
- B gave rise to the mughal dynasty
- C encouraged imperial strength in northern india
- D none of the above

Answer: B

Question 50

the word closet in meaning to catalyzed is

- A unrestricted
- B exploited
- C disseminated
- D accelerated

Answer: D

Quant

Instructions

For the following questions answer them individually

Question 51

The simplified value of

$$\sqrt{\frac{1.21 \times 0.9}{1.1 \times 0.11}} \text{ is}$$

- A 2
- B 3
- C 9
- D 11

Answer: B

Explanation:

$$\text{Expression: } \sqrt{\frac{1.21 \times 0.9}{1.1 \times 0.11}}$$

$$= \sqrt{\frac{1.1 \times 1.1 \times 0.9}{1.1 \times 0.11}}$$

$$= \sqrt{\frac{11 \times 11 \times 9}{11 \times 11}}$$

$$= \sqrt{9} = 3$$

=> Ans - (B)

Question 52

By what least number $25 \times 20 \times 9 \times 12 \times 30$ should be multiplied to make it a perfect square number ?

A 5

B 4

C 3

D 2

Answer: D

Explanation:

Expression : $25 \times 20 \times 9 \times 12 \times 30$

$$= (5^2) \times (2^2 \times 5) \times (3^2) \times (2^2 \times 3) \times (2 \times 3 \times 5)$$

$$= (2^5) \times (3^4) \times (5^4)$$

To make above number a perfect square, all the exponents must be even, thus the smallest number which should be multiplied = 2

=> Ans - (D)

Question 53

Three taps can fill a cistern in 18 min, 15 min and 10 min respectively. The cistern being empty, all the three taps are kept open. After 3 min the first tap is closed. Counting time from that moment the cistern will be full in

A 5 min

B 1 min

C 3 min

D 2 min

Answer: D

Explanation:

Let total capacity of cistern is L.C.M. (18, 15, 10) = 90 units

Let the three taps be A, B and C respectively.

A alone can fill in 18 minutes, => A's efficiency = $\frac{90}{18} = 5$ units/min

Similarly B's efficiency = $\frac{90}{15} = 6$ units/min

and C's efficiency = $\frac{90}{10} = 9$ units/min

Now, (A+B+C)'s 3 minute's work = $(5 + 6 + 9) \times 3 = 20 \times 3 = 60$ units

Capacity of cistern left to be filled = $90 - 60 = 30$ units

\therefore Now remaining time taken by taps B and C to fill the cistern = $\frac{30}{(6+9)} = 2$ minutes

=> Ans - (D)

Question 54

A can do piece of work in 4 days, B in 12 days and C in 6 days. If A is assisted by both B and C on every third day, the total work can be done in

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

Answer: B

Explanation:

Let total work is L.C.M. (4,12,6) = 12 units

A alone can do the work in 4 days, \Rightarrow A's efficiency = $\frac{12}{4} = 3$ units/day

Similarly B's efficiency = $\frac{12}{12} = 1$ unit/day

and C's efficiency = $\frac{12}{6} = 2$ units/day

Work done by A in 2 days = $3 \times 2 = 6$ units

Now, (A+B+C)'s 1 day's work = $3 + 1 + 2 = 6$ units/day

\therefore Total work, i.e. $6 + 6 = 12$ units is done in = 3 days

\Rightarrow Ans - (B)

Question 55

A piece of wire is in the shape of an equilateral triangle, each of whose sides is 4.4 cm. If it is re-bent to form a circular ring, the radius of the ring so formed (taking $\pi = \frac{22}{7}$) is

- A 5.1
- B 3.2
- C 2.1
- D 1.5

Answer: C

Explanation:

Let radius of ring = r cm and side of equilateral triangle = 4.4 cm

Circumference of circle = Perimeter of triangle

$$\Rightarrow 2\pi r = 3s$$

$$\Rightarrow 2 \times \frac{22}{7} r = 3 \times (4.4)$$

$$\Rightarrow \frac{44r}{7} = 3 \times 4.4$$

$$\Rightarrow r = \frac{7 \times 3 \times 4.4}{44}$$

$$\Rightarrow r = 2.1 \text{ cm}$$

\Rightarrow Ans - (C)

Question 56

if the ratio of the volumes of two right circular cones is 2:3 and the ratio of the radii of their bases is 1:2, then the ratio of their heights will be

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

Answer: B

Explanation:

Let the heights of the two cones respectively be h_1 and h_2

Let their radii be r and $2r$ respectively.

$$\text{Thus, volume of cone} = \frac{1}{3}\pi r^2 h$$

$$\text{According to ques, } \Rightarrow \frac{1}{3}\pi(2r)^2 h_1 = \frac{2}{3}\pi r^2 h_2$$

$$\frac{h_1}{h_2} = \frac{2}{3}$$

$$\Rightarrow 4h_2 = 3h_1$$

$$\frac{h_1}{h_2} = \frac{8}{3}$$

$$\Rightarrow h_2 = \frac{3}{8}h_1$$

\Rightarrow Ans - (B)

Question 57

A tradesman marks his goods 30% more than the cost price, if he allows a discount of 20% on the marked price, then his gain percent is

- A 15
- B 10
- C 6
- D 4

Answer: D

Explanation:

Let cost price = Rs. 100

$$\Rightarrow \text{Marked price} = 100 + \left(\frac{30}{100} \times 100\right)$$

$$= 100 + 30 = \text{Rs. } 130$$

Discount % = 20%

$$\Rightarrow \text{Selling price} = 130 - \left(\frac{20}{100} \times 130\right)$$

$$= 130 - 26 = \text{Rs. } 104$$

$$\therefore \text{Profit \%} = \frac{(104-100)}{100} \times 100 = 4\%$$

\Rightarrow Ans - (D)

Question 58

The marked price of an article is 300. The shopkeeper gives a discount of 10% on the marked price and still gains 25%. Then the cost price of the article is

- A 216
- B 203.50
- C 237.50
- D 215

Answer: A

Explanation:

Marked price = Rs. 300

Discount % = 10%

$$\begin{aligned} \Rightarrow \text{Selling price} &= 300 - \left(\frac{10}{100} \times 300 \right) \\ &= 300 - 30 = \text{Rs. } 270 \end{aligned}$$

Profit % = 25%

$$\begin{aligned} \therefore \text{Cost price} &= \left(\frac{100+25}{100} \right) \times \frac{270}{4} \times 100 \\ &= \frac{270 \times 4}{5} = \text{Rs. } 216 \end{aligned}$$

=> Ans - (A)

Question 59

A machine is marked at 7,500. The shopkeeper allows successive discount of 8%, 5% and 2% on it The net selling price is

- A 6,400.30
- B 6,423.90
- C 6,427.50
- D 6,415.50

Answer: B

Explanation:

Marked price = Rs. 7500

$$\begin{aligned} \text{After 1st discount of 8\%, price} &= 7500 - \left(\frac{8}{100} \times 7500 \right) \\ &= 7500 - 600 = 6900 \end{aligned}$$

$$\begin{aligned} \text{After 2nd discount of 5\% (on changed price), selling price} &= 6900 - \left(\frac{5}{100} \times 6900 \right) \\ &= 6900 - 345 = \text{Rs. } 6555 \end{aligned}$$

$$\begin{aligned} \text{After 3rd discount of 2\%, net selling price} &= 6555 - \left(\frac{2}{100} \times 6555 \right) \\ &= 6555 - 131.10 = \text{Rs. } 6423.90 \end{aligned}$$

=> Ans - (B)

Question 60

A grocer mixed sugar at 12 per kg with sugar at 9 per kg in a certain ratio and sold the mixture at 11 per kg to have a gain of 1/8th of his total investment. The ratio of two types of sugar in the mixture is

A 7 : 20

B 1 : 2

C 9 : 12

D 3 : 4

Answer: A

Explanation:

Selling price of mixture = Rs. 11/kg and gain = 8%

$$\Rightarrow \text{Cost price} = \frac{11}{1 + \frac{8}{100}}$$

$$= \frac{11 \times 100}{100 + 8} = \text{Rs. } \frac{1100}{108}$$

Let ratio of both types of sugar respectively be $x : y$

According to ques,

$$\Rightarrow 12x + 9y = \frac{1100}{108} (x + y)$$

$$\Rightarrow 108x + 81y = 1100x + 1100y$$

$$\Rightarrow 108x - 1100x = 1100y - 81y$$

$$\Rightarrow 20x = 7y$$

$$\Rightarrow \frac{x}{y} = \frac{7}{20}$$

\therefore The ratio of two types of sugar in the mixture = 7 : 20

\Rightarrow Ans - (A)

Question 61

53 is divided among A, B, C in such a way that A gets 7 more than what B gets and B gets 8 more than what C gets. Ratio of their shares is

A 5 : 3 : 1

B 25 : 18 : 10

C 9 : 7 : 3

D 30 : 16 : 13

Answer: B

Explanation:

Let C gets = x

$$\Rightarrow \text{B gets} = (x + 8)$$

$$\Rightarrow \text{A gets} = (x + 8 + 7) = (x + 15)$$

According to ques, total amount = $(x) + (x + 8) + (x + 15) = 53$

$$\Rightarrow 3x = 53 - 23 = 30$$

$$\Rightarrow x = \frac{30}{3} = 10$$

$\therefore A : B : C = 25 : 18 : 10$

=> Ans - (B)

Question 62

The ratio of speeds of two trains, one travelling at 45 km/hour and the other at 10 m/sec is

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

Answer: A

Explanation:

Speed of first train = 45 km/hr = $45 \times \left(\frac{5}{18}\right) = 12.5$ m/s

Speed of second train = 10 m/s

=> Required ratio = 12.5 : 10

= 5 : 4

=> Ans - (A)

Question 63

In 6 days of a week, 250 boys attended for the first four days and 260 boys for the last three days. The average attendance in this week is 255. The number of students present on Thursday was ?

- A 260
- B 250
- C 240
- D 280

Answer: B

Explanation:

Average attendance in 6 days = 255

=> Total boys attended in 6 days = $255 \times 6 = 1530$

Similarly, total boys attended in first 4 days = $250 \times 4 = 1000$

Total boys attended in last 3 days = $260 \times 3 = 780$

=> The number of students present on Thursday = $(1000 + 780) - 1530 = 250$

=> Ans - (B)

Question 64

The average of all the prime numbers between 1 and 20 is

- A 9.625
- B 9.75
- C 8.66

D 10.625

Answer: A

Explanation:

Sum of prime numbers between 1 and 20 = $2 + 3 + 5 + 7 + 11 + 13 + 17 + 19 = 77$

=> Required average = $\frac{77}{8} = 9.625$

=> Ans - (A)

Question 65

A dealer sells a radio at a gain of 10%. If he had bought it at 10% less and sold it for 132 less, he would have still gained 10%. The cost price of the radio is

A 1,100

B 1,200

C 1,300

D 1,320

Answer: B

Explanation:

Let cost price of the radio = Rs. $100x$

Profit % = 10%

=> Selling price = $100 \times 100x = \text{Rs. } 110x$

Now, new cost price = $C' = 100x - \left(\frac{10}{100} \times 100x\right) = \text{Rs. } 90x$

Similarly, new selling price = $S' = \text{Rs. } (110x - 132)$

=> Profit % = $\frac{(S' - C')}{C'} \times 100$

=> $\frac{(110x - 132) - 90x}{90x} \times 100 = 10$

=> $\frac{20x - 132}{90x} = \frac{10}{100}$

=> $\frac{20x - 132}{9x} = 1$

=> $20x - 132 = 9x$

=> $20x - 9x = 11x = 132$

=> $x = \frac{132}{11} = 12$

∴ Cost price = $100 \times 12 = \text{Rs. } 1,200$

=> Ans - (B)

Question 66

If the cost price of 15 articles is equal to the selling price 10 articles, then the gain percentage is

A 45

B 50

C 55

D 60

Answer: B

Explanation:

Let C.P. of 1 article = Rs. x and S.P. of 1 article = Rs. y

According to ques, $\Rightarrow 15x = 10y$

$$\frac{x}{10} = \frac{y}{15} \Rightarrow y = \frac{3}{2}x$$

Let $x = 2$ and $y = 3$

$$\begin{aligned} \therefore \text{Profit\%} &= \frac{(y-x)}{x} \times 100 \\ &= \frac{(3-2)}{2} \times 100 = 50\% \\ \Rightarrow \text{Ans - (B)} \end{aligned}$$

Question 67

A man sold two articles for 1,200 each. In one, he gained 20% and on the other, he lost 20%. His total loss(in Rs.) was

- A 400
- B 300
- C 200
- D 100

Answer: D

Explanation:

Selling price of both articles = Rs. 1200

$$\begin{aligned} \text{Cost price of article on which he get 20\% profit} &= C_1 = 1200 \times \frac{100}{100+20} \\ &= 10 \times 100 = \text{Rs. } 1000 \end{aligned}$$

$$\begin{aligned} \text{Similarly, cost price of article on which he get 20\% loss} &= C_2 = 1200 \times \frac{100}{100-20} \\ &= 15 \times 100 = \text{Rs. } 1500 \end{aligned}$$

$$\Rightarrow \text{Total CP} = (1000 + 1500) = \text{Rs. } 2500$$

$$\text{and total SP} = (1200 + 1200) = \text{Rs. } 2400$$

$$\therefore \text{Loss} = 2500 - 2400 = 100$$

\Rightarrow Ans - (D)

Question 68

If 70% of the students in a school are boys and the number of girls be 504, the number of boys is

- A 1176
- B 1008
- C 3024
- D 1208

Answer: A

Explanation:

Let total number of students = $100x$

$$\Rightarrow \text{Number of boys} = 100 \times \frac{70}{100}x = 70x$$

$$\Rightarrow \text{Number of girls} = 100x - 70x = 30x$$

According to ques, $\Rightarrow 30x = 504$

$$\Rightarrow x = \frac{504}{30} = 16.8$$

$$\therefore \text{Total number of boys} = 70 \times 16.8 = 1176$$

\Rightarrow Ans - (A)

Question 69

A rebate of 7.5% is allowed if an electric bill is paid in due time. A man gets a rebate of 16.50. The amount of the bill is (in ?)

A 160

B 215

C 240

D 220

Answer: D

Explanation:

Let the amount of bill = Rs. $100x$

According to ques, $\Rightarrow 100 \times \frac{7.5}{100}x = 16.50$

$$\Rightarrow 7.5x = 16.5$$

$$\Rightarrow x = \frac{16.5}{7.5} = 2.2$$

$$\therefore \text{Bill} = 100 \times 2.2 = 220$$

\Rightarrow Ans - (D)

Question 70

The number of seconds taken by a 500 m long train with speed 63 km per hour to cross a man walking at 3 km per hour in the same direction is

A 20

B 25

C 30

D 35

Answer: C

Explanation:

Train and man are walking in same direction, \Rightarrow Relative speed = $63 - 3 = 60$ km/hr

$$= 60 \times \frac{5}{18} = 16.67 \text{ m/s}$$

Length of train = 500m

\Rightarrow Time taken = distance/speed

$$= \frac{500}{16.67} \approx 30$$

$$= 500 \times \frac{3}{10} = 150$$

$$= 10 \times 3 = 30 \text{ seconds}$$

=> Ans - (C)

Question 71

A train X leaves Howrah at 6 a.m. and reaches Asansol at 10 a.m. Another train Y leaves Asansol at 8 a.m. and reaches Howrah at 11.30 a.m. The two trains cross one another at

- A 8.44 a.m.
- B 8.56 a.m.
- C 9.27 a.m.
- D 9.42 a.m.

Answer: B

Explanation:

Time taken by train X to reach destination = 4 hours and time taken by train Y = 3.5 hours

Let distance between Howrah and Asansol = L.C.M. (4,3.5) = 28 km

$$\Rightarrow \text{Speed of train X} = \frac{28}{4} = 7 \text{ km/hr}$$

$$\text{and speed of train Y} = \frac{28}{3.5} = 8 \text{ km/hr}$$

If the two trains meet after t hours from 6 a.m., then

$$\Rightarrow 7t + 8(t - 2) = 28$$

$$\Rightarrow 15t = 28 + 16 = 44$$

$$\Rightarrow t = \frac{44}{15} \text{ hours}$$

$$\Rightarrow t = \frac{44}{15} \times 60 = 176 \text{ minutes} = 2 \text{ hours } 56 \text{ minutes}$$

∴ The two trains cross one another at = 8.56 a.m.

=> Ans - (B)

Question 72

In what time will 8,000, at 3% simple interest per annum produce the same income as 6,000 does in 5 years at 4% simple interest ?

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

Answer: B

Explanation:

Principal sum = Rs. 6000 and rate of interest = 4% and time period = 5 years

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

$$= \frac{6000 \times 4 \times 5}{100} = 1200$$

Now, let time taken for sum = Rs. 8000 at 3% to generate simple interest = Rs. 1200 is t years

$$\Rightarrow \frac{8000 \times 3 \times t}{100} = 1200$$

$$\Rightarrow 240t = 1200$$

$$\Rightarrow t = \frac{1200}{240} = 5 \text{ years}$$

\Rightarrow Ans - (B)

Question 73

A man borrows some money at 3% simple interest per annum and lends it to somebody at 5% interest to be compounded annually. By this he makes a profit of Rs. 541 at the end of 3 years. The money he borrowed was

A 8,000

B 6,762

C 6,000

D 8,070

Answer: A

Explanation:

Let amount that the man borrowed = Rs. $100x$

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

Interest the man need to return to the source at 3% in 3 years

$$= A = \frac{100x \times 3 \times 3}{100} = \text{Rs. } 9x$$

$$\text{Compound interest at 5\%} = P \left[\left(1 + \frac{R}{100} \right)^T - 1 \right]$$

$$\text{Similarly, interest the man get from other person} = A' = 100x \left[\left(1 + \frac{5}{100} \right)^3 - 1 \right]$$

$$= 100x \left[\left(\frac{105}{100} \right)^3 - 1 \right]$$

$$= 100x \left(\frac{9261 - 8000}{1000} \right)$$

$$= 100x \times \frac{1261}{1000} = \text{Rs. } 15.7625x$$

According to ques,

$$\Rightarrow A' - A = 541$$

$$\Rightarrow 15.7625x - 9x = 6.7625x = 541$$

$$\Rightarrow x = \frac{541}{6.7625} = 80$$

$$\therefore \text{Amount the man borrowed} = 100 \times 80 = \text{Rs. } 8,000$$

\Rightarrow Ans - (A)

Question 74

The amount proposed on education is greater than that on Roads and Communication by

A 1000

B 2000

C 3000

D 1500

Answer: E

Question 75

12,000 is proposed on

- A Education
- B Irrigation and power
- C Roads and communication
- D Agriculter

Answer: E

General Awareness

Instructions

For the following questions answer them individually

Question 76

who is the first economist to receive the nobel prize in economics in single

- A simon kuznets
- B wassily leontief
- C milton friedman
- D paul A. samuelson

Answer: E

Question 77

The supply of money in a cuntry means

- A cash balance held by the government
- B Aggregate stock of money issued by the central bank
- C cash reserves owned by the commercial banks
- D total stock of money in circulation at a given peroid of time

Answer: D

Question 78

Corner shop is an example for

- A Partnership
- B Sole trade
- C Limited company

D Public company

Answer: B

Question 79

Which one of the following is an advantage of the market economic system ?

A Better governance

B Equal income distribution

C Protects the environment

D Incentives to producers

Answer: D

Question 80

The vertical distance between total cost and total variable cost is

A total average cost

B marginal cost

C total fixed cost

D as average fixed cost

Answer: C

Question 81

Who said that, 'Man is by nature a political animal' ?

A Plato

B Chew

C Polyblus

D Aristotle

Answer: D

Question 82

According to Indian Constitution, Right to Property is a

A Fundamental Right

B Legal

C Both Right

D None

Answer: B

Question 83

Which among the following are duties of Indian citizens as per Constitution of India ?

- A Respect National Anthem, Flag etc.
- B Develop Scientific temper.
- C Protect and preserve National and Cultural Heritage.
- D All of the above.

Answer: D

Question 84

The Right to Information is based on the

- A right to know implied under Article 14
- B right to know implied under Article 19
- C right to know implied under Article 21
- D right to know implied under Article 32

Answer: B

Question 85

Which was called by Gandhi as 'Post dated cheque' ?

- A Cripps proposal
- B McDonald Award
- C Simon Commission Report
- D None of these

Answer: A

Question 86

Whom did Ashoka appoint to spread Buddhism to many parts of Asia

- A Nagarikas
- B Adhyakshas
- C Mahamatras
- D Dharma Mahamatras

Answer: D

Explanation:

Ashoka appointed Dharma Mahamatras to spread Buddhism to many parts of Asia.

Question 87

under whose leadership the sikhs became a political and military force ?

- A Guru Har Rai
- B Guru Har Kishan
- C Guru Tegh Bahadur
- D Guru Gobind Singh

Answer: D

Explanation:

Under the leadership of Guru Gobind Singh, Sikhs became a political force and military force.

Question 88

Khajuraho was the capital of

- A Paramaras
- B Chauhans
- C Chandelas
- D Rathods

Answer: C

Explanation:

Khajuraho was an ancient city in the state of Madhya Pradesh and it was the capital of Chandela Kings who ruled Bundelkhand.

Question 89

During the British rule, the only British King to visit India and hold a grand Durban was

- A Edward VII
- B George V
- C James II
- D James VII

Answer: B

Explanation:

King George V was the only British King to visit India and hold a grand Durban during the British rule in India.

Question 90

Who among the following noted for the first time the existence of seven castes in India ?

- A Kautilya
- B Seleucus Nicator

C Megasthenes

D Justin

Answer: C

Question 91

The largest industry in India is

A Textile

B Steel

C Cement

D Automobile

Answer: A

Question 92

Who have measured first the circumferences of earth ?

A Hecatacus

B Herodotus

C Aristotle

D Eratosthenes

Answer: D

Question 93

Which one of the following landforms is not related to glaciers?

A Hanging valleys

B Corries in the mountains

C U-shaped valleys

D Natural levees

Answer: D

Explanation:

Of the given options, Natural levees is not related to Glaciers. Natural levees are a deposit of sand or mud built up along and sloping away from either side of the flood plain of a river or stream.

Question 94

India recently launched a satellite in orbit for the purpose of

A Education

B Marine Exploration

- C Mission to Moon
- D Resource Evaluation

Answer: E

Question 95

Pedology deals with the scientific study of

- A Rocks
- B Soils
- C Caves
- D Fossils

Answer: B

Question 96

Which of the following is exclusively marine animals ?

- A Chondrichthyes
- B Echinoderms
- C Molluscs
- D Coelenterates

Answer: E

Question 97

Which one can imitate human speech ?

- A whale
- B dolphin
- C ape
- D bear

Answer: E

Question 98

Haemophilia is a kind of disease which is

- A viral
- B bacterial
- C hereditary

D fungal

Answer: E

Question 99

For a living organism, greatest available energy is from

A H_2O

B CO_2

C *ATP*

D *ADP*

Answer: E

Question 100

HIV is a

A Combination of diseasesymptoms

B developmental index

C viral disease

D retrovirus

Answer: E