

SSC CHSL 10 March 2018 Afternoon Shift

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Quant

Instructions

For the following questions answer them individually

Question 1

Find the value of $\sqrt{7\sqrt{7\sqrt{7\sqrt{7\sqrt{7\sqrt{7}}}}}}$

- A 31/64
- B 1/64
- C 63/64
- D 7/64

Answer: C

Question 2

Find the value of x. if $\sqrt{1 - \frac{x}{324}} = \frac{13}{18}$

- A 155
- B 157
- C 159
- D 161

Answer: A

Explanation:

$$\text{Expression : } \sqrt{1 - \frac{x}{324}} = \frac{13}{18}$$

$$\Rightarrow \sqrt{\frac{324-x}{324}} = \frac{13}{18}$$

$$\Rightarrow \frac{324-x}{324} = \left(\frac{13}{18}\right)^2$$

$$\Rightarrow \frac{324-x}{324} = \frac{169}{324}$$

$$\Rightarrow 324 - x = 169$$

$$\Rightarrow x = 324 - 169 = 155$$

=> Ans - (A)

Question 3

If $x - \frac{1}{x} = 10$ then find the value of $\frac{x^4+1}{x^2}$

- A 98
- B 100
- C 102
- D 106

Answer: C

Explanation:

Given : $x - \frac{1}{x} = 10$

Squaring both sides, we get :

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

$$\Rightarrow x^2 + \frac{1}{x^2} - 2(x)(\frac{1}{x}) = 100$$

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

$$\Rightarrow \frac{x^4+1}{x^2} = 102$$

=> Ans - (C)

Question 4

If $7^{m+1} = 2401$, then find the value of 2^{2m+2}

- A 224
- B 256
- C 264
- D 286

Answer: B

Explanation:

Given : $7^{m+1} = 2401$

$$\Rightarrow 7^{m+1} = 7^4$$

$$\Rightarrow m + 1 = 4$$

$$\Rightarrow m = 4 - 1 = 3$$

$$\therefore 2^{m+2} = 2^{2 \times 3+2}$$

$$= 2^8 = 256$$

=> Ans - (B)

Question 5

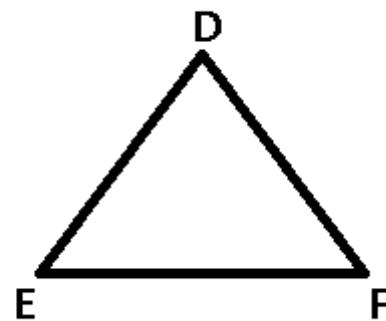
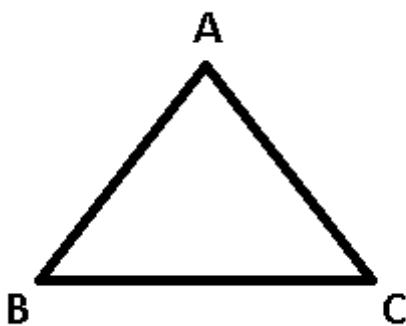
If the triangle ABC and DEF follows the given equation, then these two triangles are similar by which of following criterion ?

$$\frac{AB}{DE} = \frac{BC}{EF} = \frac{AC}{DF}$$

- A SAS similarity
- B SSS similarity
- C AAA similarity
- D None of the these

Answer: B

Explanation:



$$\text{Given: } \frac{AB}{DE} = \frac{BC}{EF} = \frac{AC}{DF}$$

$$\Rightarrow AB = DE, BC = EF, AC = DF$$

Thus, all corresponding sides of the two triangles are equal.

\therefore The two triangles are similar by SSS similarity.

=> Ans - (B)

Question 6

Which of the following is the CORRECT option for the triangles having sides in the ratio of 3:4:6?

- A Acute angled

- B Obtuse angled
- C Right angled
- D Either acute or right angled

Answer: B

Explanation:

Let the sides of $\triangle ABC$ be a, b, c , where the largest side = 'c'

If $c^2 = a^2 + b^2$, then the angle at C is right angle.

If $c^2 < a^2 + b^2$, then the angle at C is acute angle.

If $c^2 > a^2 + b^2$, then the angle at C is obtuse angle.

Now, according to ques, $=> 6^2 = 36$

and $3^2 + 4^2 = 9 + 16 = 25$

$\therefore c^2 > a^2 + b^2$, hence it is an obtuse angled triangle.

$=>$ Ans - (B)

Question 7

If 35% of A is equal to 60% of B, then what is the ratio of A and B?

- A 8 : 13
- B 12 : 7
- C 2 : 3
- D 13 : 7

Answer: B

Explanation:

Given : 35% of $A = 60\%$ of B

$$=> \frac{35}{100}A = \frac{60}{100}B$$

$$=> 35A = 60B$$

$$=> \frac{A}{B} = \frac{60}{35} = \frac{12}{7}$$

\therefore Ratio of $A : B = 12 : 7$

$=>$ Ans - (B)

Question 8

A bag contain equal number of 1 rupee, 50 paisa and 25 paisa coins. If the total amount is Rs 105, then many coins of each type are there?

- A 15
- B 45
- C 60
- D 80

Answer: C

Explanation:

Let x type of each coin is in the bag.

$$\text{Total amount} = (x \times 1) + (x \times 0.5) + (x \times 0.25) = 105$$

$$\Rightarrow x + 0.5x + 0.25x = 1.75x = 105$$

$$\Rightarrow x = \frac{105}{1.75} = 60$$

∴ There are **60** coins of each type.

⇒ Ans - (C)

Question 9

The alcohol and water in a mixture are in the ratio of 7 : 8 respectively. If 11 litre water is added to it, the ratio of alcohol and water in the new mixture becomes 3 : 5. What is the total quantity (in litres) of the alcohol in the new mixture?

- A 21
- B 24
- C 35
- D 32

Answer: A

Explanation:

Let initial quantity of alcohol and water in the mixture be $7x$ and $8x$ litres respectively.

According to ques,

$$\Rightarrow \frac{7x}{8x+11} = \frac{3}{5}$$

$$\Rightarrow 35x = 24x + 33$$

$$\Rightarrow 35x - 24x = 33$$

$$\Rightarrow x = \frac{33}{11} = 3$$

\therefore Quantity of alcohol in final mixture = Quantity of alcohol in initial mixture $= 7 \times 3 = 21$ litres

\Rightarrow Ans - (A)

Question 10

In a committee there are 15 members. If two members whose ages are 45 years and 55 years are replaced by two new members, then average age of 15 members is increased by 2 years. What is the average (in years) of the new members?

A 59

B 61

C 65

D 68

Answer: C

Explanation:

Let average age of 15 members $= x$ years

$$\Rightarrow \text{Total age of 15 members} = 15x$$

Let sum of ages of 2 new members $= 2z$, thus average age $= z = ?$

According to ques,

$$\Rightarrow \frac{15x - 45 - 55 + 2z}{15} = x + 2$$

$$\Rightarrow 15x - 100 + 2z = 25x + 30$$

$$\Rightarrow 2z = 100 + 30 = 130$$

$$\Rightarrow z = \frac{130}{2} = 65$$

\therefore Average age of the new members = 65

\Rightarrow Ans - (C)

Question 11

Simple interest on a sum of Rs 1400 for 3 years and 4 months is Rs 700. What is the rate (in percentage) interest per annum?

A 17

B 15

C 18

D 12

Answer: B

Explanation:

Principal amount = Rs. 1400 and interest = Rs. 700

Let rate of interest = $r\%$ and time period = $3\frac{4}{12} = 3\frac{1}{3} = \frac{10}{3}$ years

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

$$\Rightarrow \frac{1400 \times r \times 10}{3 \times 100} = 700$$

$$\Rightarrow \frac{140r}{3} = 700$$

$$\Rightarrow r = \frac{700 \times 3}{140}$$

$$\Rightarrow r = 5 \times 3 = 15\%$$

\Rightarrow Ans - (B)

Question 12

The difference between cost price and selling price is Rs 12.54. If loss percentage is 33%, then what is cost price (in Rs)?

A 35.44

B 50.54

C 41

D 38

Answer: D

Explanation:

Difference between cost price and selling price = Loss = Rs. 12.54

$$\text{Loss \%} = \frac{\text{loss}}{\text{C.P.}} \times 100$$

$$\Rightarrow \frac{12.54}{\text{CP}} \times 100 = 33$$

$$\Rightarrow \text{CP} = \frac{1254}{33} = \text{Rs. 38}$$

\Rightarrow Ans - (D)

Question 13

Selling price of an article is Rs 494 and discount of 5% is offered. What is the marked price (in Rs)?

A 524.5

B 587

C 520

D 540

Answer: C

Explanation:

Selling price = Rs. 494

Discount % = 5%

$$\Rightarrow \text{Marked price} = \frac{494}{(100-5)} \times 100$$

$$= 26 \times 20 = \text{Rs. } 520$$

\Rightarrow Ans - (C)

Question 14

What is the simplified value of $\sqrt{\frac{(0.07)^2 + (0.29)^3 - 0.0203}{(0.07)^3 + (0.29)^3}}$

A 0.6

B 0.06

C $(1/0.6)$

D $(1/0.06)$

Answer: C

Explanation:

$$\text{Expression : } \sqrt{\frac{(0.07)^2 + (0.29)^3 - 0.0203}{(0.07)^3 + (0.29)^3}}$$

Let $0.07 = x$ and $0.29 = y$

$$= \sqrt{\frac{(x)^2 + (y)^3 - xy}{(x)^3 + (y)^3}}$$

$$\text{Using, } (x^3 + y^3) = (x + y)(x^2 - xy + y^2)$$

$$= \sqrt{\frac{(x^2 + y^2 - xy)}{(x+y)(x^2 - xy + y^2)}}$$

$$= \sqrt{\frac{1}{x+y}} = \sqrt{\frac{1}{0.07+0.29}}$$

$$= \frac{1}{0.36} = \frac{1}{0.6}$$

\Rightarrow Ans - (C)

Question 15

X alone can do a piece of work in 12 days and Y alone can do the same work in 6 days. In how many will both together complete the same work?

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

Answer: B

Explanation:

Let total work to be done = L.C.M. (12,6) = 12 units

X alone can do the work in 12 days, \Rightarrow X's efficiency $\frac{12}{12} = 1$ unit/day

Similarly, Y's efficiency $= \frac{12}{6} = 2$ units/day

Thus, (X+Y)'s 1 day's work $= 1 + 2 = 3$ units/day

\therefore Time taken by them together to finish the work $= \frac{12}{3} = 4$ days

\Rightarrow Ans - (B)

Question 16

A 800 metres long train is running at the speed of 90 km/hr. If it crosses a bridge in 50 seconds, then is the length (in metres) of the bridge?

- A 250
- B 300
- C 350
- D 450

Answer: D

Explanation:

Let length of bridge = l m and length of train = 800 m

Speed of train = 90 km/hr $= (90 \times \frac{5}{18}) = 25$ m/s

Using, distance = speed \times time

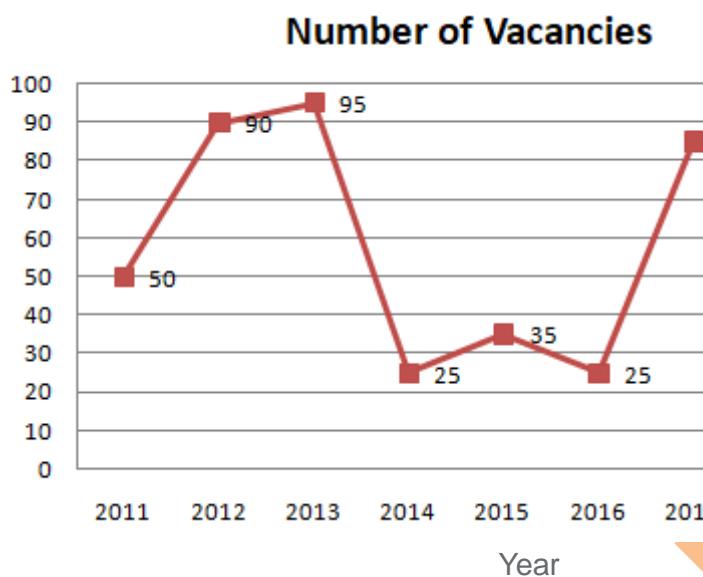
$$\Rightarrow l + 800 = 25 \times 50$$

$$\Rightarrow l = 1250 - 800 = 450 \text{ m}$$

=> Ans - (D)

Instructions

The line graph shows the number of vacancies for management trainees in a certain company. Study the diagram and answer the following questions.



Question 17

In which year were the number of vacancies lesser than that of the previous year?

- A 2015
- B 2012
- C 2014
- D 2013

Answer: C

Explanation:

In 2014 and 2016, the number of vacancies were lesser than that of the previous year.

=> Ans - (C)

Question 18

What was the difference in the number of vacancies between the years 2011 and 2014?

- A 25

B 20

C 15

D 30

Answer: A

Explanation:

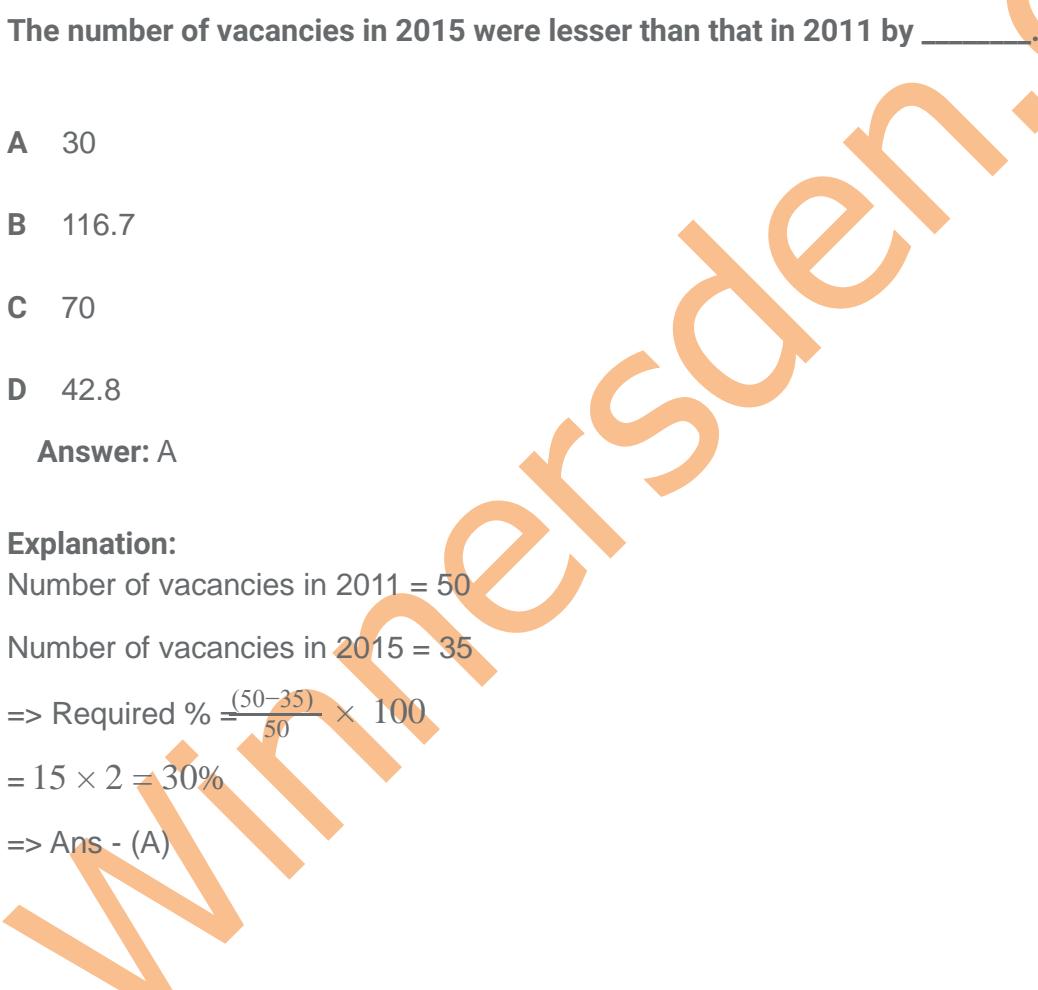
Number of vacancies in 2011 = 50

Number of vacancies in 2014 = 25

=> Required difference = $50 - 25 = 25$

=> Ans - (A)

Question 19

The number of vacancies in 2015 were lesser than that in 2011 by _____.


A 30

B 116.7

C 70

D 42.8

Answer: A

Explanation:

Number of vacancies in 2011 = 50

Number of vacancies in 2015 = 35

=> Required % $\frac{(50-35)}{50} \times 100$

$= 15 \times 2 = 30\%$

=> Ans - (A)

Question 20

The salary of a management trainee in the company is Rs 15,000, then what was the increase in the expense (in Rs lakhs) due to salaries that had to be paid when posts were filled for the vacancies in the 2012?

A 13

B 13.5

C 14

D 14.5

Answer: B

Explanation:

Number of vacancies in 2012 = 90

Salary of a management trainee in the company = Rs 15,000

=> Total expense (in Rs. lakhs) $= 90 \times 0.15 = 13.5$

=> Ans - (B)

Instructions

For the following questions answer them individually

Question 21

The length of the diagonal and the breadth of a rectangle is 26 cm and 10 cm respectively. Calculate its area (in cm²)

A 480

B 96

C 240

D 192

Answer: C

Explanation:

Let the length of rectangle = l cm and breadth, $b = 10$ cm

=> Diagonal, $d^2 = l^2 + b^2$

=> $l^2 = (26)^2 - (10)^2$

=> $l^2 = 676 - 100 = 576$

=> $l = \sqrt{576} = 24$ cm

\therefore Area = $24 \times 10 = 240$ cm²

=> Ans - (C)

Question 22

If a regular polygon has 10 sides then the measure of its interior angle is greater than the measure of its exterior angle by how many degrees?

- A 120
- B 132
- C 140
- D 108

Answer: D

Explanation:

Sum of all interior angles of n sided polygon $= (n - 2) \times 180^\circ$

Sum of all exterior angles $= 360^\circ$

Thus, difference between measure of an interior and exterior angle, when $n = 10$

$$= \left[\frac{(10-2) \times 180^\circ}{10} \right] - \left[\frac{360^\circ}{10} \right]$$

$$= (8 \times 18^\circ) - (36^\circ)$$

$$= 144^\circ - 36^\circ = 108^\circ$$

\Rightarrow Ans - (D)

Question 23

Find the total surface area (in cm^2) of a cuboid of length, breadth and height of 10.5 cm, 8 cm and 9 cm respectively.

- A 607
- B 767
- C 769
- D 501

Answer: D

Explanation:

Length, $l = 10.5$ cm, breadth, $b = 8$ cm and height, $h = 9$ cm

Total surface area of cuboid $= 2(lb + bh + hl)$

$$= 2[(10.5 \times 8) + (8 \times 9) + (9 \times 10.5)]$$

$$= 2 \times (84 + 72 + 94.5)$$

$$= 2 \times 250.5 = 501 \text{ cm}^2$$

=> Ans - (D)

Question 24

What is the value of $\cot 45^\circ - \sqrt{2}$?

A $\frac{\sqrt{3}-1}{2\sqrt{3}}$

B $\frac{\sqrt{3}-1}{2}$

C $1 - \sqrt{2}$

D $1 - \sqrt{3}$

Answer: C

Explanation:

Expression : $\cot(45^\circ) - \sqrt{2}$

$= 1 - \sqrt{2}$

=> Ans - (C)

Question 25

In $\triangle DEF$ measure of angle E is 90° . If $\tan D = \frac{4}{3}$, and $DE = 6\text{cm}$, then what is the length (in cm) of side

A 10

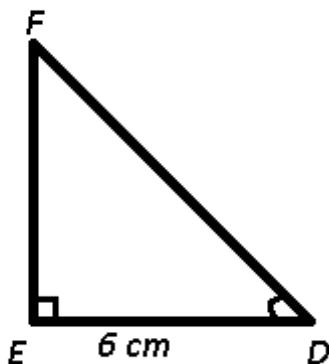
B 5

C 8

D 4

Answer: C

Explanation:



Given : $DE = 6\text{ cm}$ and $\tan D = \frac{4}{3}$

To find : $EF = ?$

Solution : In right $\triangle DEF$,

$$\Rightarrow \tan(D) = \frac{EF}{DE}$$

$$\Rightarrow \frac{4}{3} = \frac{EF}{6}$$

$$\Rightarrow EF = \frac{4}{3} \times 6 = 8 \text{ cm}$$

\Rightarrow Ans - (C)

Reasoning

Instructions

For the following questions answer them individually

Question 26

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

Bulb : Electricity :: ? : ?

A Fuel : Diesel

B Car : Petrol

C Scooter : Vehicle

D Pen : Pencil

Answer: B

Explanation:

Expression = Bulb : Electricity :: ? : ?

The first works using second, i.e. a bulb uses electricity to glow, similarly a car needs petrol to operate.

\Rightarrow Ans - (B)

Question 27

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

432 : 234 :: 789 : ?

A 876

B 795

C 987

D 894

Answer: C

Explanation:

Expression = 432 : 234 :: 789 : ?

The pattern followed is that the second number in the pair is reverse of the first number.

Similarly, reverse of 789 : 987

=> Ans - (C)

Question 28

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

TMP : QJM :: PIK : ?

A MFH

B RHK

C GFI

D AHK

Answer: A

Explanation:

Expression = TMP : QJM :: PIK : ?

The pattern followed is :

T	M	P
(-3)	(-3)	(-3)
Q	J	M

Similarly, for PIK : MFH

P	I	K
(-3)	(-3)	(-3)
M	F	H

=> Ans - (A)

Question 29

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

- A Red - Colour
- B Colour - Green
- C Pink - Colour
- D Blue - Colour

Answer: B

Explanation:

The second word is colour and first is one of the colour names, but in second option, colour is written as word in the pair, hence it is the odd one out.

=> Ans - (B)

Question 30

In the following question, four number pairs are given. The number on left side of (-) is related to the number of the right side of (-) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

- A 23 - 25
- B 27 - 29
- C 21 - 23
- D 25 - 29

Answer: D

Explanation:

The difference between each of the pair of numbers is 2.

But in the last option => $29 - 25 = 4$

Thus, (25 - 29) is the odd one out.

=> Ans - (D)

Question 31

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

- A IJLO
- B EFHI

C KLNQ

D GHJM

Answer: B

Explanation:

(A) : I (+1 letter) = J (+2 letters) = L (+3 letters) = O

(B) : E (+1 letter) = F (+2 letters) = H (+1 letter) = I

(C) : K (+1 letter) = L (+2 letters) = N (+3 letters) = Q

(D) : G (+1 letter) = H (+2 letters) = J (+3 letters) = M

=> Ans - (B)

Question 32

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

1. Participle

2. Parking

3. Parrot

4. Pedestrian

5. Peach

A 13245

B 23154

C 54213

D 43125

Answer: B

Explanation:

As per the order of dictionary :

= Parking -> Parrot -> Participle -> Peach -> Pedestrian

= 23154

=> Ans - (B)

Question 33

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

5, 8, 11, 14, 17, ?

A 21

B 19

C 20

D 23

Answer: C

Explanation:

'3' is added to each of the numbers.

$$5 + 3 = 8$$

$$8 + 3 = 11$$

$$11 + 3 = 14$$

$$14 + 3 = 17$$

$$17 + 3 = 20$$

=> Ans - (C)

Question 34

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

KNJ, NQM, QTP, TWS, ?

A XYZ

B YXV

C WYZ

D WZV

Answer: D

Explanation:

Series : KNJ, NQM, QTP, TWS, ?

The pattern followed in each letter of the terms is :

1st letter : K (+3 letters) = N (+3 letters) = Q (+3 letters) = T (+3 letters) = W

2nd letter : N (+3 letters) = Q (+3 letters) = T (+3 letters) = W (+3 letters) = Z

3rd letter : J (+3 letters) = M (+3 letters) = P (+3 letters) = S (+3 letters) = V

Thus, missing term = WZV

=> Ans - (D)

Question 35

The ratio of the present ages of Shreya and her husband is 8 : 9. 9 years from now, ages of her husband and her son will be in the ratio of 9 : 4. If the present age of Shreya is 56 years, then what will be her son's present age (in years)?

- A 23
- B 24
- C 19
- D 25

Answer: A

Explanation:

Shreya's present age = 56 years

Ratio of present ages of Shreya and her husband = 8 : 9

\Rightarrow Shreya's husband's present age $\frac{9}{8} \times 56 = 63$ years

Her husband's age 9 years from now = $63 + 9 = 72$ years

Ratio of her husband's age and her son's age 9 years from now = 9 : 4

\Rightarrow Son's age 9 years from now $\frac{4}{9} \times 72 = 32$ years

\therefore Son's present age = $32 - 9 = 23$ years

\Rightarrow Ans - (A)

Question 36

From the given alternatives, select the word which CANNOT be formed using the letters of the given Components

A Cool

B Come

C Most

D Men

Answer: A

Explanation:

The word COMPONENTS does not contain any 'L', thus the term **Cool** cannot be formed.

=> Ans - (A)

Question 37

In a certain code language, "TRAP" is written as "53" and "MADE" is written as "21". How is "LATE" in that code language?

- A 37
- B 36
- C 38
- D 35

Answer: B

Explanation:

The letters are numbered based on their position according to the English alphabetical order. A=1, B=2, D=4 and so on.

The numbers are then added and '2' is subtracted to get the final output.

$$\text{Eg : - TRAP} = (20 + 18 + 1 + 16) - 2 = 55 - 2 = 53$$

$$\text{MADE} = (13 + 1 + 4 + 5) - 2 = 23 - 2 = 21$$

$$\text{Similarly, LATE} = (12 + 1 + 20 + 5) - 2 = 38 - 2 = 36$$

=> Ans - (B)

Question 38

In a certain code language, 'x' represents '+', '÷' represents 'x', '-' represents '÷' and '+' represents '-'. Find the answer to the following question.

$$24 + 12 \times 30 \div 2 - 6 = ?$$

- A 18
- B 13
- C 37
- D 22

Answer: D

Explanation:

$$\text{Expression : } 24 + 12 \times 30 \div 2 - 6 = ?$$

$$\equiv 24 - 12 + 30 \times 2 \div 6$$

$$= 12 + \frac{60}{6}$$

$$= 12 + 10 = 22$$

=> Ans - (D)

Question 39

The following equation is incorrect. Which two signs should be interchanged to correct the equation?

$$21 + 16 \times 35 - 70 \div 20 = 9$$

- A + and x
- B - and \div
- C - and +
- D \div and +

Answer: B

Explanation:

$$\text{Expression : } 21 + 16 \times 35 - 70 \div 20 = 9$$

(A) : + and x

$$\equiv 21 \times 16 + 35 - 70 \div 20 = 9$$

$$\text{L.H.S.} = 336 + 35 - 3.5 = 367.5 \Rightarrow \text{R.H.S.}$$

(B) : - and \div

$$\equiv 21 + 16 \times 35 \div 70 - 20 = 9$$

$$\text{L.H.S.} = 21 + (16 \times \frac{1}{2}) - 20 = 9 = \text{R.H.S.}$$

=> Ans- (B)

Question 40

If $2*10 = 6$, $14*16 = 15$ and $4*16 = 10$, then find the value of $16*8 = ?$

- A 12
- B 8
- C 10
- D 18

Answer: A

Explanation:

Given : $2*10 = 6$, $14*16 = 15$ and $4*16 = 10$

If we replace '*' with '+', and divide the sum by 2, we get the desired result.

$$\text{Eg: } -\frac{2+10}{2} = 6$$

$$\text{and } \frac{14+16}{2} = 15 \text{ and } \frac{4+16}{2} = 10$$

$$\text{Similarly, } \frac{16+8}{2} = 12$$

=> Ans - (A)

Question 41

Which of the following terms follows the trend of the given list?

YYYYYYX, YYYYYXX, YYYYYXX, YYYXXXX, YYXXXXX, _____.

A XXXXXXX

B YXXXXXX

C YYYYYYYX

D YYYYYYXX

Answer: B

Explanation:

Expression : YYYYYYYX, YYYYYXX, YYYYYXX, YYYXXXX, YYXXXXX, _____.

The pattern followed is that each term is a combination 'XY' (7 letters), and the number of Y's starting from left are decreasing and also number of X's starting from right end are increasing one at a time.

Thus, in the missing term, the second term will also be 'X' = YXXXXXX

=> Ans - (B)

Question 42

Two autos start from the same stand. Auto A travels 2 km East, then turns to its right and travels a km. Meanwhile auto B travels 5 km North, then turns West and travels 3 km, then it turns to its left and travels 8 km. Where is auto B with respect to auto A?

A 5 km West

B 1 km West

C 5 km East

D 1 km East

Answer: A

Question 43

In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

Statement I: No rubber are plastic

Statement II: All polymers are rubber

Conclusion I: Some plastic are polymers

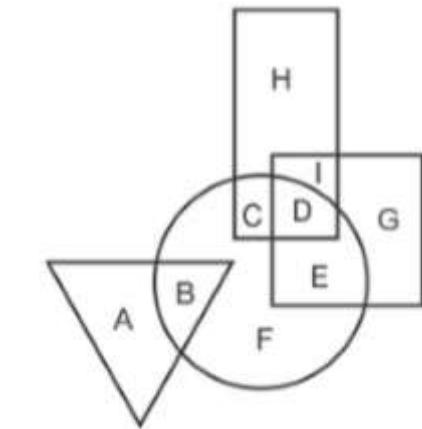
Conclusion II: No polymers are plastic

- A Only conclusion I follows
- B Only conclusion II follows
- C Both conclusions I and II follow
- D Neither conclusion I nor conclusion II follows

Answer: B

Question 44

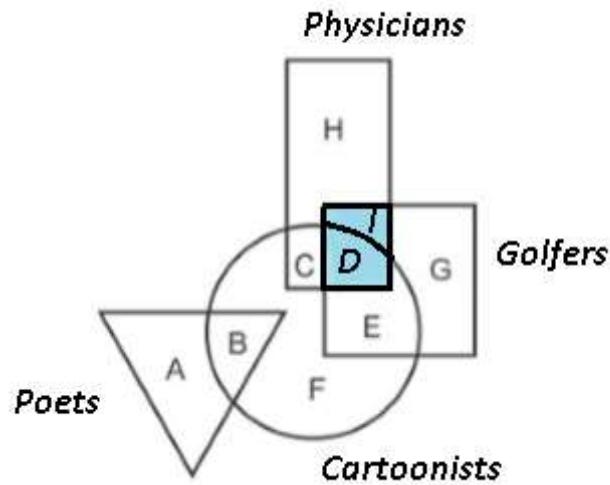
In the following figure, rectangle represents Physicians, circle represents Cartoonists, triangle Poets and square represents Golfers. Which set of letters represents Physicians who are Golfers?



- A GE
- B HC
- C HCIDGE
- D ID

Answer: D

Explanation:



Physicians who are Golfers = I + D

=> Ans - (D)

Question 45

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

ONU, NKP, MHK, LEF, ?

A KBA

B KAA

C KBZ

D KAZ

Answer: A

Explanation:

Series : ONU, NKP, MHK, LEF, ?

The pattern followed in each letter of the terms is :

1st letter : O (-1 letter) = N (-1 letter) = M (-1 letter) = L (-1 letter) = K

2nd letter : N (-3 letters) = K (-3 letters) = H (-3 letters) = E (-3 letters) = B

3rd letter : U (-5 letters) = P (-5 letters) = K (-5 letters) = F (-5 letters) = A

Thus, missing term = **KBA**

=> Ans - (A)

Question 46

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

123, 120, 116, 111, ?, 98

- A 100
- B 105
- C 99
- D 103

Answer: B

Explanation:

Consecutive integers are subtracted.

$$123 - 3 = 120$$

$$120 - 4 = 116$$

$$116 - 5 = 111$$

$$111 - 6 = 105$$

$$105 - 7 = 98$$

=> Ans - (B)

Question 47

In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

- A (19, 22, 27)
- B (41, 44, 49)
- C (61, 64, 71)
- D (83, 86, 91)

Answer: C

Explanation:

The numbers are of the form : $(x, x + 3, x + 8)$

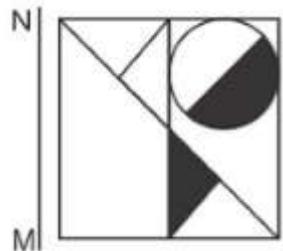
But in the third option, we have $61 + 8 = 69 \neq 71$

Thus, (61, 64, 71) is the odd one out.

=> Ans - (C)

Question 48

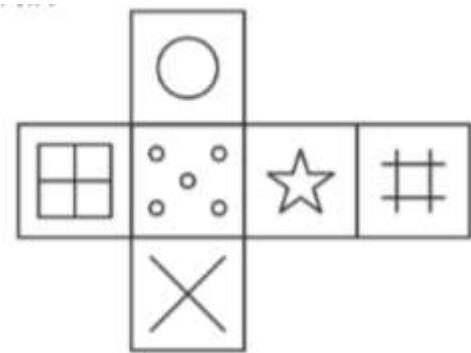
If a mirror is placed on the line MN, then which of the answer figures is the right image of the given



Answer: D

Question 49

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?



- A
- B
- C
- D

Answer: C

Question 50

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The 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, for example 'G' can be represented by 31, 24 etc and 'Y' can be represented by 86, 97 etc. Similarly, you have to identify the set for the word 'COWS'.

Matrix - I					
	0	1	2	3	4
0	C	C	D	I	J
1	E	K	I	B	E
2	I	F	A	K	G
3	C	G	E	L	I
4	J	H	I	F	A

Matrix - II					
	5	6	7	8	9
5	O	X	N	W	X
6	N	Q	N	X	O
7	Z	T	V	N	T
8	O	Y	W	O	R
9	N	P	Y	S	Z

- A 12,88,12,99
- B 34,68,21,57
- C 30,55,87,98
- D 32,98,42,77

Answer: C

Explanation:

- (A) : 12,88,12,99 = IOIZ
- (B) : 34,68,21,57 = IXFN
- (C) : 30,55,87,98 = COWS
- (D) : 32,98,42,77 = ESIV

=> Ans - (C)

English

Instructions

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

Question 51

To his opinion (a)/ every entertainment (b)/ movie is foolish. (c)/ No error (d)

- A To his opinion
- B every entertainment
- C movie is foolish
- D No error

Answer: A

Question 52

The Hellenistic period covering the period of Mediterranean (a)/ history between the death of Alexander Great in (b)/ 323 BC and the emergence of the Roman Empire. (c)/ No error (d)

- A The Hellenistic period covering the period of Mediterranean
- B history between the death of Alexander the Great in
- C 323 BC and the emergence of the Roman Empire
- D No error

Answer: A

Instructions

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

Question 53

The Police took ___ from there.

- A after
- B over
- C upon
- D on

Answer: B

Question 54

One is caught in the box with what one knows and hence no new ideas ____.

- A emerge
- B destroy
- C rooted
- D innovate

Answer: A

Instructions

In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

Question 55

Clandestine

- A Truthful
- B Secret
- C Frank
- D Upright

Answer: B

Question 56

Cloistered

- A Isolated
- B Mendable
- C Improvement
- D Crowded

Answer: A

Instructions

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

Question 57

Consanguinity

- A Affinity
- B Kin
- C Race
- D Disunion

Answer: D

Question 58

Deathly

- A Wasted
- B Blooming
- C Horrible
- D Sick

Answer: B

Instructions

For the following questions answer them individually

Question 59

Rearrange the parts of the sentence in correct order.

There needs to be a

P : more coordinated effort

Q : forest diseases in India

R : towards dealing with

- A PRQ
- B PQR

C RPQ

D RQP

Answer: A

Question 60

A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one best expresses the same sentence in Passive/Active Voice.

A policeman caught her.

- A She was caught by a policeman.
- B She is catch by a policeman.
- C She caught by a policeman.
- D She is caught by a policeman.

Answer: A

Question 61

A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.

Raju wrote, "He will be going to Mumbai the next weekend."

- A Raju wrote that he will be going to Mumbai the next weekend.
- B Raju wrote that he would be going to Mumbai the last weekend.
- C Raju wrote that he would be going to Mumbai the next weekend.
- D Raju wrote that he should be gone to Mumbai the next weekend.

Answer: C

Question 62

In the following questions, a word has been written in four different ways out of which only one is spelt. Select the correctly spelt word.

A Preferred

B Prefereed

C Prefored

D Prefearred

Answer: A

Instructions

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

People may see, and hear, and feel all their lives without _____ learning the nature of things they
But reason is the mind's eye, and enables us to see why things are, and when and how events may be
to happen _____ not to happen. The logician endeavours to _____ exactly what this
which makes the power of men. We all, as I have said, must reason well or ill, but logic is the science of
reasoning and enables us to distinguish _____ the good reasoning which leads to truth, and
reasoning which everyday betrays people into error _____ misfortune.

Question 63

their lives without _____ learning the nature

A really

B real

C reality

D realise

Answer: A

Question 64

made to happen _____ not to happen.

A or

B but

C so

D at

Answer: A

Question 65

logician endeavours to _____ exactly what this reason

- A learnt
- B learns
- C learn
- D learning

Answer: C

Question 66

us to distinguish _____ the good reasoning

- A in
- B within
- C between
- D amidst

Answer: C

Question 67

people into error _____ misfortune.

- A nor
- B neither
- C also
- D and

Answer: D

Instructions

In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.

Question 68

Be worlds apart

- A Travel a very long distance.
- B To go from heaven to hell.
- C Be very different.
- D To sustain affection despite living very far away.

Answer: C

Question 69

Silver bullet

- A A very expensive solution used only as the last measure.
- B A simple and seemingly magical solution to a complicated problem.
- C A solution which is worse than the problem.
- D A thing of beauty but which is actually deadly.

Answer: B

Instructions

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

Question 70

The ability to make good judgements and take quick decisions

- A Puerility
- B Acumen
- C Stupor
- D Sanity

Answer: B

Question 71

A high degree of skill

- A Proficiency
- B Maladroit
- C Amateur
- D Gawkiness

Answer: A

Instructions

In the following question, out of the four alternatives, select the alternative which will improve the part of the sentence. In case no improvement is needed, select "no improvement".

Question 72

From the early 1990s, salaries shot up and stock options (were introduced).

- A are introduced
- B is introduced
- C was introduced
- D no improvement

Answer: D

Question 73

I have always (baffle) by the unique melange of languages and dialects that India is home to.

- A being baffled
- B been baffled
- C baffling
- D no improvement

Answer: B

Instructions

For the following questions answer them individually

Question 74

The question below consists of a set of labelled sentences. Out of the four options given, select the logical order of the sentences to form a coherent paragraph.

There was an old study

- A: of marathon runners which
- B: heart muscle during post-mortem
- C: showed significant fibrosis of the

A ABC

B ACB

C CBA

D CAB

Answer: B

Question 75

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

A exacerbate

B exacrbate

C exacerbat

D exacrbat

Answer: A

General Awareness

Instructions

For the following questions answer them individually

Question 76

Permanent settlement was a feature of_____.

- A Zamindari System
- B Mahalwari System
- C Ryotwari System
- D No option is correct.

Answer: A

Question 77

Who was the Finance Minister of India during the New Economic Policy (1991) ?

- A Manmohan Singh
- B Uma Kapila
- C Pranab Mukherjee
- D Jaswant Singh

Answer: A

Question 78

Which of the following elements were not found in the form of archaeological remains from Kalibanga?

- A Black bangles
- B Fire pit
- C Ploughed field
- D Couple burial

Answer: D

Question 79

Who led the English Army in the Battle of Buxar?

- A Lord Clive
- B Vansittart

C Hector Munro

D Eyre Coot

Answer: C

Question 80

Which of the following planets has the highest average density?

A Jupiter

B Mars

C Earth

D Mercury

Answer: D

Question 81

Where is the Girnar hills located?

A Bihar

B Gujarat

C Karnataka

D Rajasthan

Answer: B

Question 82

The birthplace of the tenth and last guru of Sikhs Guru Gobind Singh is:

A Guwahati

B Hemkund Sahib

C Amritsar

D Patna Sahib

Answer: D

Question 83

How many agreements have been signed by India and Israel on January 15, 2018?

- A 6
- B 9
- C 12
- D 15

Answer: B

Question 84

Which Player has been awarded Padma Bhushan in the year 2018 for his contribution to Cricket?

- A Saurabh Ganguli
- B Rahul Dravid
- C Mahendra Singh Dhoni
- D Virat Kohli

Answer: C

Question 85

Which state of India does not get the border from Pakistan?

- A Gujarat
- B Rajasthan
- C Punjab
- D Himachal Pradesh

Answer: D

Question 86

In which of the following, Nylon is used?

- A** Sleeping bags
- B** Parachute
- C** Toothbrush
- D** All options are correct.

Answer: D

Question 87

Latek

- A** I - 2, II - 1, III - 4, IV - 3
- B** I - 3, II - 1, III - 2, IV - 4
- C** I - 1, II - 2, III - 3, IV - 4
- D** I - 4, II - 3, III - 1, IV - 2

Answer: A

Question 88

If any Fundamental Right of a citizen is breached, then under Article 32 of Indian Constitution he can directly go to the ____.

- A** Chief Minister of state
- B** Prime Minister of India
- C** Supreme Court of India
- D** Governor of state

Answer: C

Question 89

Which type of city administration controls transitional areas (from rural to urban)?

- A** Nagar Panchayat
- B** Municipal Council
- C** Municipal Corporation
- D** No option is correct.

Answer: A

Question 90

The process of acquiring oxygen from outside the body and to use it in the process of breakdown of sources for cellular needs is commonly called

_____.

- A** respiration
- B** nutrition
- C** digestion
- D** transportation

Answer: A

Question 91

What is the function of guard cells of stomata?

- A** Opening of stomata only
- B** Closing of stomata only
- C** Both opening and closing of stomata
- D** Neither opening nor closing of stomata

Answer: C

Question 92

In August 2017, Indian Government has launched a portal to provide a platform to sell agricultural called 'e-RAKAM'. What does 'M' stand for?

- A Market
- B Mandi
- C Management
- D Messaging

Answer: B

Question 93

SARAS PT1N, the new upgraded version of indigenous transport aircraft. SARAS has been developed by _____.

- A Hindustan Aeronautics Limited
- B National Aeronautics Laboratory
- C Bharat Dynamics Limited
- D Defence Research and Development Organisation

Answer: B

Question 94

In April 2017, N. K. Singh Committee recommended a fiscal deficit of how much percent of GDP by Financial Year 2022-23?

- A 2.50%
- B 3.00%
- C 3.50%
- D 4.00%

Answer: A

Question 95

On 12 April 2017, Parliament passed the HIV/AIDS (Prevention and Control) Bill, 2017. This Bill provides essential support to National AIDS control programme. It aims to achieve the target of ending this by year _____.

- A 2025
- B 2022
- C 2030
- D 2020

Answer: C

Question 96

Calculate the time period (in seconds) of a sound wave of wavelength 2m travelling with a speed of 250 m/s.

- A 500
- B 0.008
- C 0.016
- D 250

Answer: B

Question 97

The ratio of the total distance travelled by a body to the total time taken by it is its

- A instantaneous velocity
- B linear velocity
- C average speed
- D acceleration

Answer: C

Question 98

The average weather pattern taken over a long time, say 25 years, is called the _____ of the

- A ecology
- B environment
- C climate
- D habitat

Answer: C

Question 99

Which of the statements given below are correct?

- A) Rajiv Ouseph won the Badminton 2017 BWF Super Series Finals Men's Singles.
- B) In 2017, Anthony Davis played for the NBA team New Orleans Pelicans.
- C) Lewis Hamilton won the Formula One 2017 Australian Grand Prix.

- A Only A
- B Only B
- C Only C
- D B and C

Answer: B

Question 100

In Microsoft Word, _____ refers to the way our text will look like.

- A Inserting
- B Formatting
- C Cutting
- D Pasting

Answer: B

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