

# SNAP 2018

## Analytical & Logical Reasoning

1. Which is the seventh number in the sequence 5, 9, 16, 29, 54,

- A 300
- B 200
- C 330
- D 103

**Answer:** B

**Explanation:**

5, 9, 16, 29, 54, \_\_, ?

$$5 \times 2 - 1 = 9$$

$$9 \times 2 - 2 = 16$$

$$16 \times 2 - 3 = 29$$

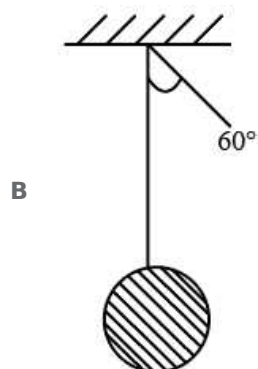
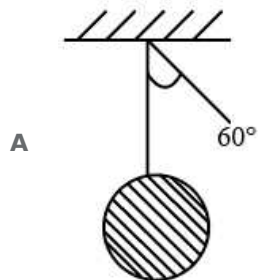
$$29 \times 2 - 4 = 54$$

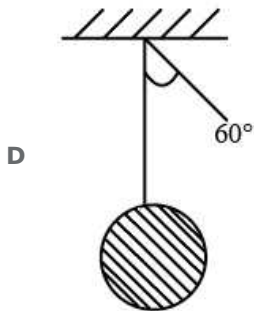
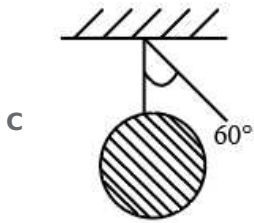
$$54 \times 2 - 5 = 103$$

$$103 \times 2 - 6 = 200$$

Answer 200

2. Which of the below pendulums will move the slowest, if each one of them is displaced by an angle of  $60^\circ$  from the center?





**Answer: B**

**Explanation:**

The time period of a pendulum  $(T) = 2\pi \sqrt{\frac{l}{g}}$ .

The time period is directly proportional to the length of the pendulum.

More the time period, lesser will be the speed of the pendulum.

So Option B is correct.

3. Lectures by industry experts have to be scheduled in Marketing, Finance, Operations, Organisational Behaviour and Information Systems. This has to be scheduled on a weekday (Monday to Friday). Only one lecture can be scheduled per day. Marketing cannot be scheduled on Tuesday as it is inconvenient for the expert. Expert for Finance is available only on Tuesday. As Information Systems and Finance are always considered important, Information Systems has to be scheduled immediately on the day following the Marketing lecture. The Dean has decided that Organisational Behaviour lecture has to be scheduled immediately before the day of Marketing lecture. Finally the schedule is prepared which satisfies all conditions.

Which lecture is scheduled on Monday?

- A Finance
- B Marketing
- C Information Systems
- D Operations

**Answer: D**

**Explanation:**

The following information can be gathered:

=> Marketing cannot be scheduled on Tuesday as it is inconvenient for the expert.

=> Expert for Finance is available only on Tuesday.

Monday Tuesday Wednesday Thursday Friday

\_\_\_\_\_ Finance

=> Information Systems has to be scheduled immediately on the day following the Marketing lecture.

=> Organisational Behaviour lecture has to be scheduled immediately before the day of Marketing lecture.

Monday Tuesday Wednesday Thursday Friday

Operations-Finance-Organisational Behaviour- Marketing-Information Systems

Option D

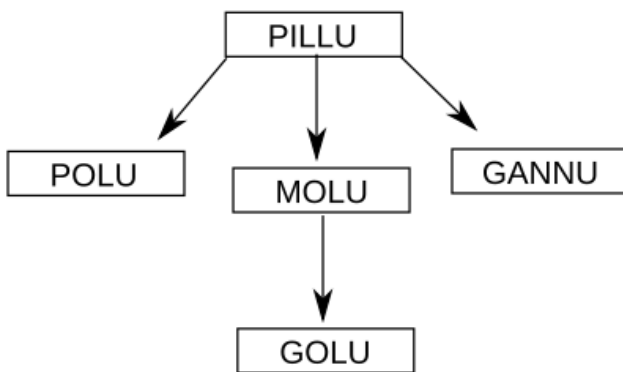
4. If Golu is son of Molu, Molu and Polu are sisters, Pillu is Polu's mother, Gannu is son of Pillu, which of the following statements is definitely true?

- A Golu and Gannu are cousins
- B Golu's nephew is Gannu
- C Golu's maternal uncle is Gannu
- D None of the option is correct

**Answer:** C

**Explanation:**

From the information given in the question, we can make the following diagram.



Option C is correct

5. If Pig: Farrow and Lion : Cub, then Bear :

- A Goat
- B Cygnet
- C Cub
- D Foal

**Answer:** C

**Explanation:**

Baby Pig is called a Farrow.

Baby Lion is called a Cub.

Baby bear is also called a Cub.

6. A fast train leaves Chennai to Bengaluru and at the same point in time a slow train leaves from Bengaluru to Chennai. The fast train moves at a speed of 60 km /hr and the slow train moves at half of the speed of the fast train. Both these trains meet at a point after some time. Which of these trains are further away from Chennai when they meet? (Do not consider the length of the train)

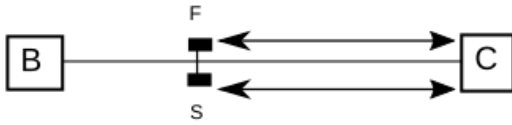
- A The fast train is further from Chennai
- B The slow train is further from Chennai
- C Both the trains are equidistant from Chennai

**D** None of the option is correct

**Answer: C**

**Explanation:**

The moment they will meet they will be equidistant from the two cities.



Option C is correct.

7. Given the series Z, Y, X, V, S, the next alphabet will be?

**A** N

**B** 0

**C** L

**D** K

**Answer: A**

**Explanation:**

Fibonacci Series = 1,1,2,3,5,8.....

Z-Y=1

Y-X=1

X-V=2

V-S=3

N-S=5

Option A is correct.

8. If PUNE / GOA = 1 and CHENNAI / GOA = 1.5, then MUMBAI / PUNE = ?

**A** 1.25

**B** 1

**C** 1.5

**D** 1.75

**Answer: C**

**Explanation:**

No of vowels in PUNE=2

No of vowels in GOA=2

$2/2=1$

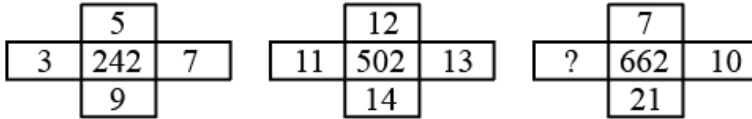
No of vowels in PUNE=3

No of vowels in MUMBAI=2

$3/2=1.5$

Option C

9. Find the missing number (?)



- A 26
- B 28
- C 32
- D 34

**Answer: B**

**Explanation:**

$$3+5+7+9=24.....242$$

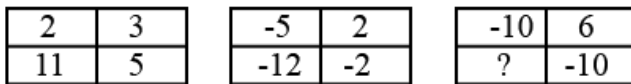
$$11+12+13+14=50.....502$$

$$66= 7+10+21+x$$

$$x=28$$

Option B

10. Find the missing number (?)



- A 13
- B -70
- C 15
- D -60

**Answer: B**

**Explanation:**

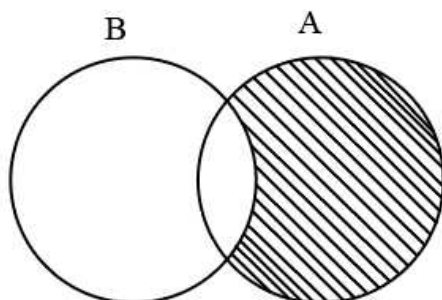
$$11=2 \times 3+5$$

$$-12= (-5) \times 2+(-2)$$

$$(-10) \times 6 + (-10)=-70$$

Option B is correct

11.



If A and B are represented by the above diagrams as two circles then shaded area is represented as?

**A**  $A \cap B$

**B**  $(A \cup B) - A$

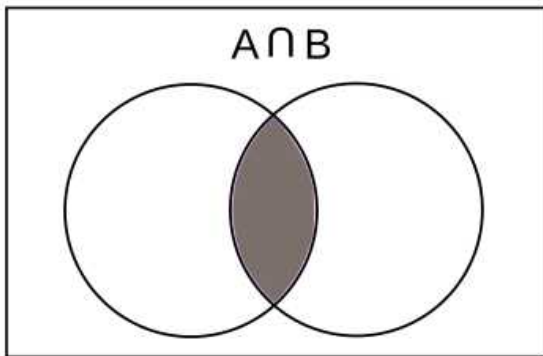
**C**  $(A \cap B) \cup A$

**D** None of the options is correct

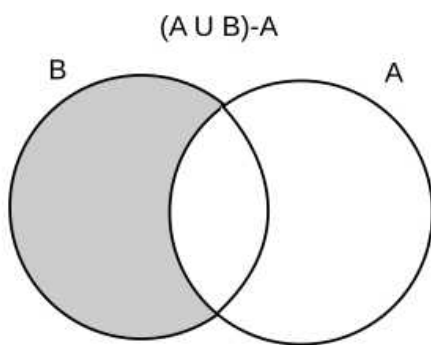
**Answer:** D

**Explanation:**

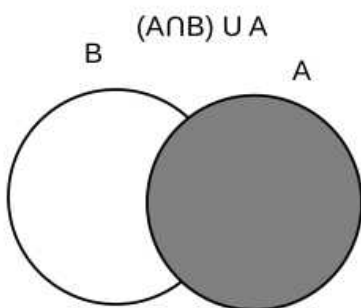
$A \cap B$



$(A \cup B) - A$



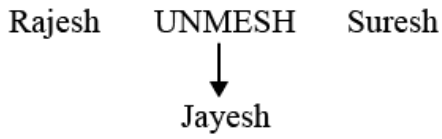
$(A \cap B) \cup A$



Option D is correct.

12. Unmesh is facing Jayesh and when he hears a bell ring he turns towards Rajesh by making 90 shift. He continues to do this every time the bell rings. If the bell rang 3926 times, whom will Unmesh be facing?

Mahesh



- A Rajesh
- B Mahesh
- C Suresh
- D Jayesh

**Answer:** B

**Explanation:**

After the bell will ring four times Umesh will again face Jayesh.

So after 3924 turns, it will face Jayesh.

After 3926 turns he will face Mahesh.

Option B

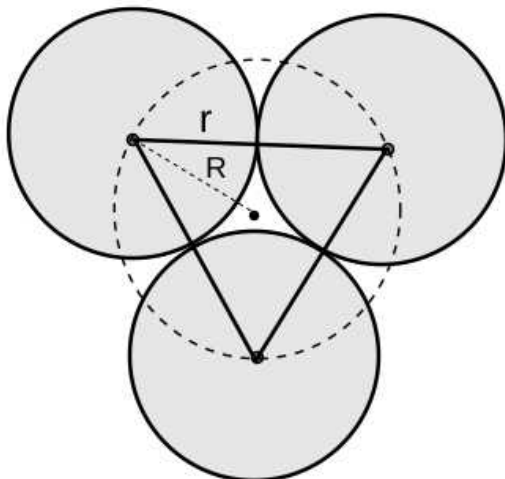
13. Ram places three identical cones of radius on a table in such a way that each cone base touches the other two, also the altitude of the cone is perpendicular to the table. The radius of the circle drawn through the cone vertices would be?

- A Smaller than r
- B Equal to r
- C Larger than r
- D Cannot be determined

**Answer:** C

**Explanation:**

The top view of the three cones can be seen in the figure below.

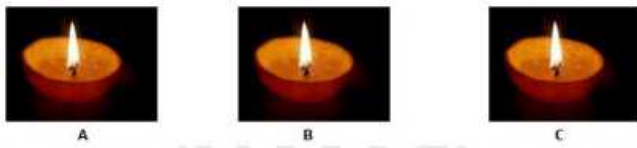


The three centres will form an equilateral triangle.  $R = \frac{2}{3} \sqrt{3}r$

$$R = \frac{2}{\sqrt{3}} * r$$

R is larger than r.

Option C



14.

Three lamps A, B and C as shown in the figure above are burning using oil as its source of energy. Three incense sticks, E, F and G are taken. E is dipped in oil, F is dipped in petrol and G is dipped in water and are immediately placed over the wick of A, B and C respectively. Then

- A A will glow bright, B will glow bright and C will be put off
- B A will be put off, B will glow bright and C will be put off
- C A, B and C will keep glowing
- D C will be put off and the status of A and B be cannot determined

**Answer: B**

**Explanation:**

Oil and water will put off the flame while petrol will increase the flame.

Option B

15. Find the missing number in the series:

16, \_\_, 68, 88

- A 06
- B 08
- C 36
- D 46

**Answer: A**

**Explanation:**

16, \_\_, 68, 88

The mirror image of each sequence will be

19, \_\_, 98, 88

Invert the digits

91, \_\_, 89, 88

90 inverted digits will be 06.

16. A Men Singles Tennis Tournament is being held out at Mumbai. 30 players participated in the tournament. There is a rule that is implemented, the rule states that, if a player loses a match then he is eliminated from the tournament. How many matches have to be played to decide the winner of the tournament?

- A 30
- B 15

**C** 29

**D** 10

**Answer: C**

**Explanation:**

30 players participated in the tournament.

In the first elimination round, 15 players will be eliminated. ( 15 matches )

In the second elimination round, 7 players will be eliminated. (7matches)

In the third elimination round, 4 players will be eliminated. (4matches)

In the fourth elimination round, 2 players will be eliminated. (2matches)

Final Match (1 match)

Total matches= 1+2+4+7+15 matches

=29 matches

17. Ramu has several friends and all of them are well settled in India.  $\frac{1}{5}^{\text{th}}$  of Ramu's friends went to Mumbai and  $\frac{1}{3}^{\text{rd}}$  of his friends went to Delhi, three times the difference of these two went to Chennai and only one went to Pune. How many of his friends went to Mumbai?

**A** 15

**B** 3

**C** 10

**D** Cannot be determined

**Answer: B**

**Explanation:**

Let the total number of friends be T

The total number of friends went to Chennai=  $3(T/3 - T/5) = 2T/5$

Number of friends went to Pune=  $T - T/5 - 2T/5 - T/3$

=  $T - 14T/15$

=  $T/15 = 1$

T=15

The number of friends who went to Mumbai=  $T/5 = 15/5 = 3$

18. There are 3 closed cartons in a room. One of the cartons contains cash. There is a printed message that is displayed outside each carton. Only one message is True and the other two messages are False. The first carton has the message: Cash is not in the Carton. The second carton has the message: No cash in the Carton. The third carton has the message: Cash is in the second carton. Which carton has the cash?

**A** First

**B** Second

**C** Third

**D** Cannot be determined

**Answer: A**

**Explanation:**

Only one message is True and the other two messages are False.

The first carton has the message: Cash is not in the Carton.

The second carton has the message: No cash in the Carton.

The third carton has the message: Cash is in the second carton

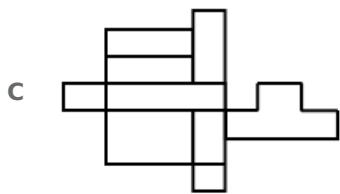
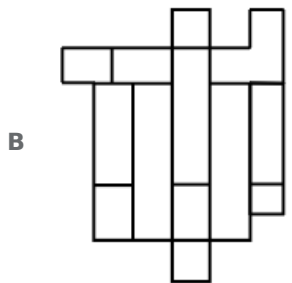
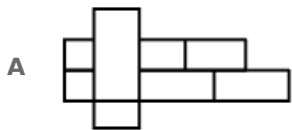
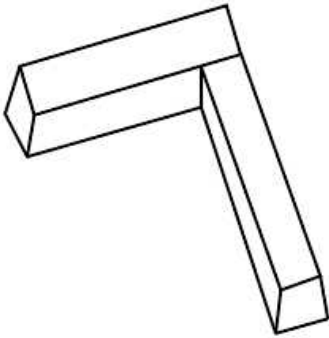
If the second carton has the cash, then there will be 2 true messages i.e. First and Third.

If the third carton has the cash, then there will be 2 true messages i.e. First and Second.

If the first carton has the cash, then there will be 1 true message i.e. of second.

Option A

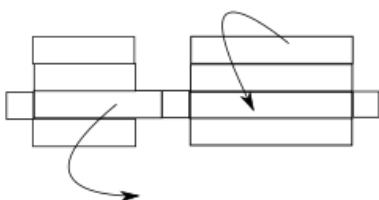
19. The figure below has been made by folding paper as given in one of the options, choose the correct option.



D None of the option is correct

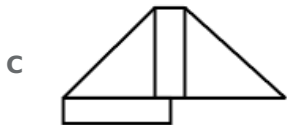
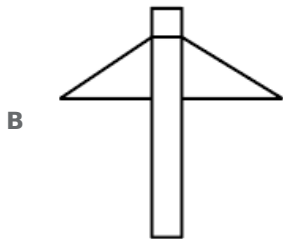
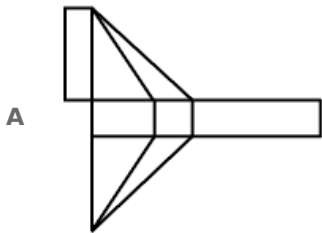
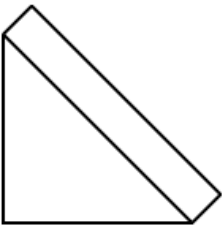
**Answer: D**

**Explanation:**



None of these paper combinations can form the figure given in the question.

20. The figure given has been made by folding paper as given in one of the options, choose the correct option

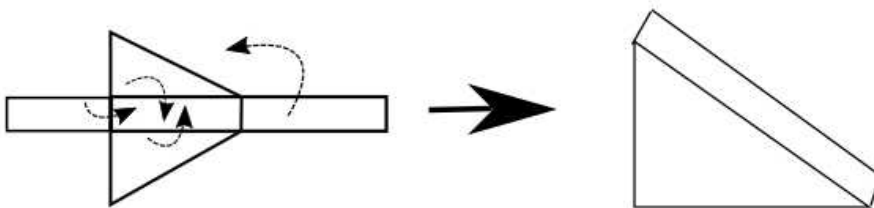


D None of the option is correct

**Answer:** D

**Explanation:**

The following diagram will explain the basic structure of the paper:



None of the above figures can make the given shape.

Option D

21. Four classes Rural Marketing, Digital Marketing, International Marketing and Service Marketing were taught in four consecutive periods of one hour each starting from 8.00 am on a week day.

Read the statements and find out the probable option which can be sufficient to answer the question:

At what time was the Digital Marketing class scheduled?

Statement I. International marketing class ended at 10.00 am which was preceded by Service Marketing.

Statement II. Rural Marketing was scheduled as the last class.

Statement III. International Marketing was immediately followed by Digital Marketing.

- A** I only
- B** II only
- C** I and II together or I and III together
- D** II and III together

**Answer: C**

**Explanation:**

Four classes Rural Marketing, Digital Marketing, International Marketing and Service Marketing were taught in four consecutive periods of one hour each starting from 8.00 am on a week day.

Digital Marketing class was scheduled:

**Statement I.** International marketing class ended at 10.00 am which was preceded by Service Marketing.

We can make the following schedule

8.00 am- 9.00 am: Service Marketing

9.00 am- 10.00 am: International Marketing

10.00 am- 11.00 am: \_\_\_\_\_

11.00 am- 12.00 noon: \_\_\_\_\_

**Statement II.** Rural Marketing was scheduled as the last class.

**Statement III.** International Marketing was immediately followed by Digital Marketing.

We can subsequently find the exact time when Digital Marketing is scheduled from both the statements.

Hence the correct answer is Option C

22. **Read the statements and find out the probable option which can be sufficient to answer the question:**

**What is the total monthly salary of Kakade?**

**Statement I.** Kakade's basic salary is Rs.100/- more than Madan's salary, who also serves in Kakade's company.

**Statement II.** Other allowance taken by Madan besides his basic salary is  $\frac{1}{10}$ th of Kakade's salary.

**Statement III.** Madan's basic salary is Rs.15000/- per month.

- A** II and III together
- B** I and III together
- C** I, II and III together
- D** Data insufficient

**Answer: D**

**Explanation:**

**Statement I.** Kakade's basic salary is Rs.100/- more than Madan's salary, who also serves in Kakade's company.

**Statement II.** Other allowance taken by Madan besides his basic salary is 1/10th of Kakade's salary.

**Statement III.** Madan's basic salary is Rs.15000/- per month.

From all the three statements we can find the basic monthly salary of Kakade but we cannot calculate the allowance he gets, thus the data is insufficient.

23. **Babu is younger than Gopu. Somu is older than Pappu. Read the statements and find out the probable option which can be sufficient to answer the question:**

**Who among them is the oldest?**

**Statement I.** Somu is older than Babu.

**Statement II.** Gopu is older than Somu.

**Statement III.** Pappu is the youngest of all.

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

**Answer: D**

**Explanation:**

Babu is younger than Gopu. Somu is older than Pappu. Babu < Gopu & Pappu < Somu

**Statement I.** Somu is older than Babu. ....Gopu can still be older than Somu, so we cannot find the oldest among all.

**Statement II.** Gopu is older than Somu. Here Gopu will definitely be the oldest

**Statement III.** Pappu is the youngest of all. Cannot find the oldest among all.

Hence Option D is correct.

24. If in a coded language, MASTER is written as 79 7 115 121 31 109 then LAUGH will be written as

(Note: - Do NOT include any spaces in your answer)

**Answer:**7371274349

**Explanation:**

MASTER is written as 79 7 115 121 31 109

In the alphabetical order M=13, A=1, S=19, T=20, E=5, R=18

The sequence is  $(n \times 6)+1$ :  $79= 13 \times 6+1$   $7= 1 \times 6+1$   $115= 19 \times 6+1$

.....

Thus the sequence for LAUGH will be

$L= 12 \times 6+1 =73$

$A=1 \times 6+1=7$

$U=21 \times 6+1= 127$

$G=7 \times 6+1= 43$

$H=8 \times 6+1= 49$

**Answer:** 7371274349

25. There were 12 friends A, B, C, D, E, F, G, H, I, J, K, & L. In the year 1996, A celebrated his birthday on January 11 and it was Thursday. B celebrated his birthday on February 20, which was a Tuesday and C, D, E, F, G, H and I, celebrated on April 05 (Friday), May 05 (Sunday), June 05 (Wednesday), July 05 (Friday), August 05 (Monday), September 05 (Thursday) and October 05 (Saturday) respectively. J, K and L celebrated their birthday on November 15 (Friday), March 15, (Friday) and December 15 (Sunday) respectively. Before the year 2025, when will all of them celebrate their birthdays again on the same day as they did in 1996?

(Note:- DO NOT include spaces in your answer)

**Answer:**2024

**Explanation:**

Every non-leap year have 365 days. i.e  $(7 \times 52+1)$  days.

Leap year have 366 days i.e  $(7 \times 52+2)$  days

A cycle of four years will have  $1+1+1+2$  days i.e 5 days shift

For the days to repeat, the shift should be a multiple of 7.

A cycle of four years if repeated 7 times will have a 35 days shift. Every day will repeat after  $4 \times 7$  (28 years).

After 1996 the cycle will be in  $1996+28 = 2024$

26. If January = 10125, June = 10605, then July = ?

(Note:- DO NOT include spaces in your answer)

Answer:10725

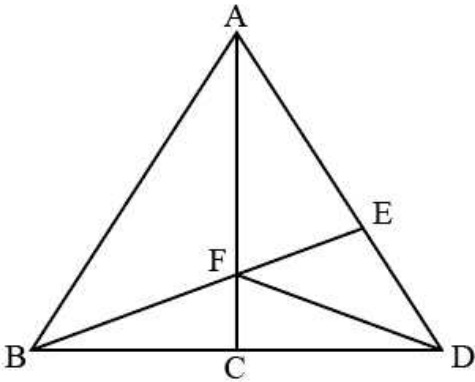
**Explanation:**

January: 10125: [10] [1] [25] : [ J ] [ 1st month ] [ Y ] : [First letter] [Month of the calendar] [ Last letter]

June: 10605: [10] [6] [05] : [ J ] [ 6th month ] [E] : [First letter] [Month of the calendar] [ Last letter]

July : [ J ] [ 7th month ] [Y] : [10] [7] [25] 10725

Answer 10725



27. In the figure given above there are maximum ..... number of triangles that can be identified

(Note:- DO NOT include spaces in your answer)

Answer:12

**Explanation:**

Following triangles are possible:

AFB, AFE, FED, FCD, FCB .....5

ABC, ABE, ACD, BED, AFD, BFD.....6

ABD.....1

Total of 12 triangles possible.

28. Rohan (Coded as 1), Pawan (Coded as 2), Mohan (Coded as 3), Sohan (Coded as 4) are waiting for a group photo to be taken. The photographer arrives to take the photo. They decide to stand in a straight row and inform the photographer to take photo by facing them. Mohan is to the left of Pawan and Sohan is to the right of Pawan. Rohan is between Sohan and Pawan.

The code of the person who would be second from the left for the photographer is ?

(Note:- DO NOT include spaces in your answer)

Answer:1

**Explanation:**

Let's consider the photographer to be facing south, and Rohan, Pawan, Mohan and Sohan will be facing north.



Ph



As we can see that Rohan(1) is the second from the left for the photographer.

### Instructions [29 - 35]

Please read the following information and answer the questions.

There are 12 seats in total which are arranged as 6 in a row facing each other. Ten people have occupied the seats in such a way that 5 are seated in each row and there is equal distance between adjacent seats. In row 1, Sadhana, David, Lakshmi, Sonal and Anu are seated and all of them are facing south. In row 2, Lily, Suresh, Deepika, Mahesh and Arvind are sitting and all of them are facing north. One seat is vacant in each row. In the given seating arrangement described above, each person seated in a row faces another member of the other row or a vacant seat. Each member likes only one activity or sport namely, kabaddi, Cricket, Baseball, Chess, Wrestling, Boating, walking, Running, Swimming and Skating. Mahesh sits third to the right of Deepika and likes Chess. Only 2 people sit between Suresh and the vacant seat. Suresh sits at one of the extreme end. Deepika does not like Kabaddi and Running. Suresh does not like Wrestling and Baseball. Ann is not an immediate neighbor of Lakshmi. David likes Skating. The one who likes Baseball faces the other one who likes Running. Vacant seat of row 1 does not face Mahesh and he does not sit at any extreme ends. The one who likes baseball sits opposite to the one, who sits third right of the one, who sits opposite to Mahesh. Lakshmi is not an immediate neighbor of Sonal. Arvind, who neither likes Wrestling nor Boating does not face vacant seat and sits opposite to the person who likes Kabaddi. Deepika does not sit at extreme ends. Sonal faces Deepika. Vacant seats are not opposite to each other. Two seats are there between Lakshmi and David. David sits third right of the one who likes Walking. The one who likes swimming faces the one who likes chess. The person who likes kabaddi and running are adjacent to each other. Vacant seat of the row 1 is not an immediate neighbor of Sonal. Lakshmi is located at an extreme end.

29. What sport does Lily like?

- A Cricket
- B Baseball
- C Wrestling
- D Boating

**Answer:** C

**Explanation:** C

30. What sport does Deepika like?

- A Cricket
- B Baseball
- C Wrestling
- D Boating

**Answer:** B

**Explanation:** B

31. Who is between David and Sadhana?

- A Lakshmi
- B Sonal
- C Anu
- D Vacant Seat

**Answer:** D

**Explanation:** Correct Option D

32. Who among the following sits to the immediate right of the person who faces the vacant seat?

- A The person who likes running
- B The person who likes walking
- C The person who likes boating
- D The person who likes Cricket

**Answer:** A

**Explanation:** Correct Option A

33. Find the statement which is false

- A Sadhana likes boating
- B Mahesh likes chess
- C Deepika likes baseball
- D Sonal likes running

**Answer:** A

**Explanation:** Correct Option A

34. Who face vacant seats?

- A David, Lakshmi
- B David, Lily
- C Ann, David
- D Lily, Sadhana

**Answer:** B

**Explanation:** Correct Option B

35. Which sports do Arvind, Suresh, Sadhana and Ann like?

- A baseball, boating, swimming, kabbadi
- B cricket, boating, kabbadi, swimming
- C cricket, swimming, boating, kabbadi
- D cricket, boating, swimming, kabbadi

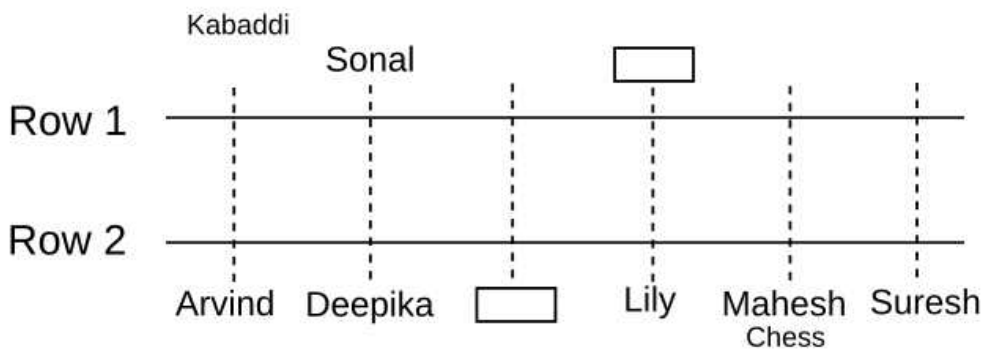
**Answer:** D

**Explanation:**

We have the following details of Row 2.

1. Mahesh sits third to the right of Deepika and likes Chess.
2. Only 2 people sit between Suresh and the vacant seat.
3. Suresh sits at one of the extreme ends.
4. The vacant seat of row 1 does not face Mahesh and he does not sit at any extreme ends.
5. Arvind, who neither likes Wrestling nor Boating does not face vacant seat and sits opposite to the person who likes Kabaddi.
6. Deepika does not sit at extreme ends.
7. The one who likes baseball sits opposite to the one, who sits third right of the one, who sits opposite to Mahesh.
8. Vacant seats are not opposite to each other.
9. Sonal faces Deepika.

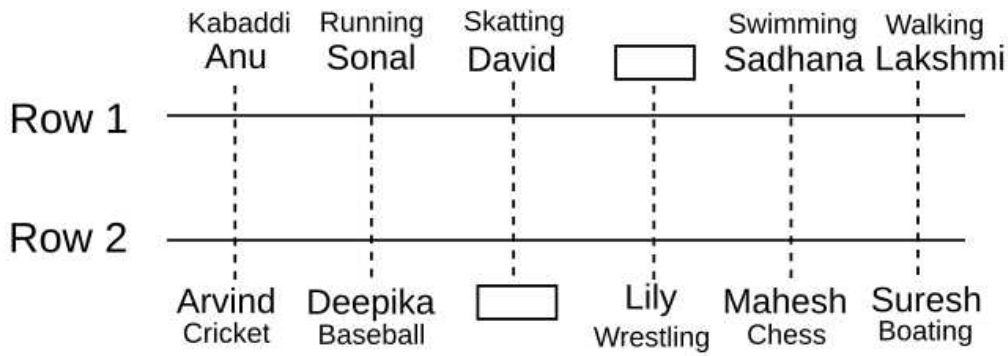
Thus we can make the following arrangement:



Further information:

- Ann is not an immediate neighbour of Lakshmi.
- Lakshmi is not an immediate neighbour of Sonal.
- Two seats are there between Lakshmi and David.
- The vacant seat of row 1 is not an immediate neighbour of Sonal. Lakshmi is located at an extreme end.
- David likes Skating.
- David sits third right of the one who likes Walking.
- The person who likes kabaddi and running are adjacent to each other.
- The one who likes Baseball faces the other one who likes Running.
- Deepika does not like Kabbadi and Running.
- Suresh does not like Wrestling and Baseball.
- The one who likes swimming faces the one who likes chess.

We can make the following table:



Option D

### Quantitative, Data Interpretation & Data Sufficiency

36.  $\left\{ \frac{2^2 \times 3^1 \times 4^4}{10^{-\frac{1}{5}} \times 5^{\frac{3}{5}}} \div \frac{3^3 \times 5^{-\frac{7}{5}}}{4^{\frac{3}{5}} \times 6} \right\} \times 2 =$

- A 10
- B 20
- C 30
- D 40

**Answer: B**

**Explanation:**

we have :

$$\left( \frac{2^2 \times 3^1 \times 4^4}{10^{-\frac{1}{5}} \times 5^{\frac{3}{5}}} \right)$$

Now  $4 = 2^2$  and  $10 = 2 \times 5$

$$\text{We get } \frac{2^{\frac{1}{2} + \frac{1}{2} \times 3} \times 3^{\frac{1}{3}}}{2^{-\frac{1}{5}} \times 5^{-\frac{1}{5}} \times 5^{\frac{3}{5}}} = \frac{2^{\frac{6}{5}} \times 3^{\frac{1}{3}}}{5^{\frac{2}{5}}} \quad (1)$$

$$\text{Now the next term we have is : } \frac{3^{\frac{4}{3}} \times 5^{-\frac{7}{5}}}{4^{-\frac{3}{5}} \times 6}$$

$6 = 2 \times 3$  and  $4 = 2^2$

$$\text{We get } \frac{3^{\frac{1}{3}} \times 5^{-\frac{7}{5}}}{2^{-\frac{1}{5}}} \quad (2)$$

Dividing (1) and (2) we get

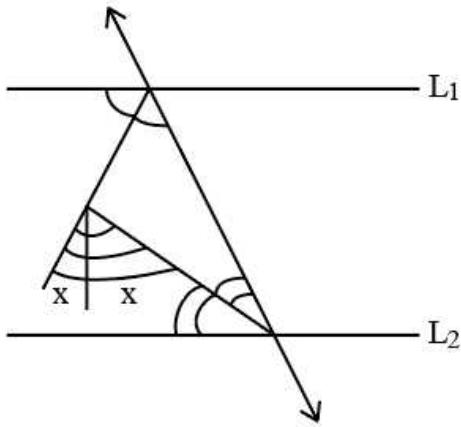
$$\frac{2^{\frac{6}{5}} \times 3^{\frac{1}{3}}}{5^{\frac{2}{5}}} \times \frac{2^{-\frac{1}{5}}}{3^{\frac{1}{3}} \times 5^{-\frac{7}{5}}}$$

$$= 2^{\frac{6}{5} - \frac{1}{5}} = 2$$

Now we have to multiply by 2

so we get  $2 \times 2 = 4$

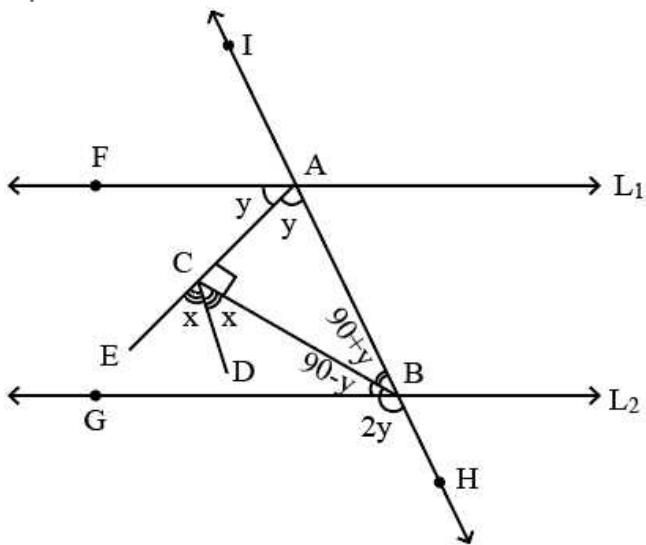
37. In the figure given below  $L_1 \parallel L_2$  then  $x =$  \_\_\_\_\_.



- A 30
- B 45
- C 60
- D Cannot be determined

**Answer: B**

**Explanation:**



Let  $\angle HBG = 2y$

$\angle BAF = 2y$  (corresponding angles are equal)

$\angle FAC = \angle CAB = y$

$\angle ABG = 180 - 2y$

$\angle ABC = \angle CBG = 90 - y$

Sum of all angles of a triangle =  $180^\circ$

In triangle,  $\angle CAB = y$ ,  $\angle ABC = 90 - y$

$y + 90 - y + \angle ACB = 180$

$\angle ACB = 90^\circ$

$\angle ECB = 180 - 90 = 90$

$2x = 90$

$$x = 45^\circ$$

Answer is option B

38. If  $h, c, v$ , are the height, the curved surface area and the volume of a cone, then  $3\pi v h^3$  is

- A  $9v^2 - c^2h^3$
- B  $c^2h^2 - 9v^2$
- C  $c^2h^2 - 9v^3$
- D  $c^2h^2 - 16v^2$

**Answer: B**

**Explanation:**

$$c = \pi r l = \pi r \sqrt{r^2 + h^2}$$

$$v = \frac{1}{3} \pi r^2 h$$

$$3\pi v h^3 = 3\pi \left(\frac{1}{3} \pi r^2 h\right) h^3 = \pi^2 r^2 h^4$$

$$A) 9v^2 - c^2h^3 = 9 \left(\frac{1}{3} \pi r^2 h\right)^2 - \pi^2 r^2 (h^2 + r^2) h^3 = \pi^2 r^4 h^2 - \pi^2 r^2 h^5 - \pi^2 r^4 h^3$$

$$B) c^2h^2 - 9v^2 = \pi^2 r^2 (h^2 + r^2) h^2 - 9 \left(\frac{1}{3} \pi r^2 h\right)^2 = \pi^2 r^2 h^4 + \pi^2 r^4 h^2 - \pi^2 r^4 h^2 = \pi^2 r^2 h^4 = 3\pi v h^3$$

option C and D is not equal to  $3\pi v h^3$

Answer is option B.

39. ABC Paints Ltd. is planning to create different combination of dyes. The research team has decided they will be using five different green dyes, three different red dyes and four different blue dyes. How many combinations of dyes can be created by ABC Paints Ltd., by including at least one blue and one green dye?

- A 5720
- B None of the option is correct
- C 60
- D 31

**Answer: B**

**Explanation:**

Number of green dyes = 5

Number of blue dyes = 4

Number of red dyes = 3

The no of ways of choosing of at least one green and one blue is =  $(2^5 - 1) (2^4 - 1) 2^3$

$$= 31 * 15 * 8$$

$$= 3720$$

B is the correct answer.

40. The expression  $(a - b)^3 + (b - c)^3 + (c - a)^3$  can be factorized as

- A  $(a - b)(b - c)(c - a)$

- B**  $3(a - b)(b - c)(c - a)$
- C**  $3(a + b)(b - c)(c + a)$
- D** None of the option is correct

**Answer:** B

**Explanation:**

If  $X + Y + Z = 0$ , then  $X^3 + Y^3 + Z^3 = 3XYZ$

Let  $a - b = X$ ,  $b - c = Y$ ,  $c - a = Z$

We can see that  $X + Y + Z = 0$

so  $(a - b)^3 + (b - c)^3 + (c - a)^3 = 3(a - b)(b - c)(c - a)$

B is the correct answer.

41. Sonal and Meenal appear in an interview for same post having two vacancies. If  $\frac{1}{7}$  is Sonal's probability of selection and  $\frac{1}{5}$  is Meenal's probability of selection then what is the probability that only one of them is selected?

- A**  $\frac{1}{7}$
- B**  $\frac{2}{7}$
- C**  $\frac{3}{5}$
- D**  $\frac{1}{5}$

**Answer:** B

**Explanation:**

Probability of Sonal's selection =  $\frac{1}{7}$

Probability of Meenal's selection =  $\frac{1}{5}$

The probability that only one of them is selected =  $\frac{1}{7} \cdot \frac{4}{5} + \frac{6}{7} \cdot \frac{1}{5}$

=  $\frac{10}{35}$

=  $\frac{2}{7}$

B is the correct answer.

42. If  $\log_{10} 11 = a$  then  $\log_{10} \left( \frac{1}{110} \right)$  is equal to

- A**  $-a$
- B**  $(1 + a)^{-1}$
- C**  $\frac{1}{10a}$
- D**  $-(a + 1)$

**Answer:** D

**Explanation:**

$\log_{10} \left( \frac{1}{110} \right)$

$\log_a \left( \frac{x}{y} \right) = \log_a x - \log_a y$

$\log_{10} \left( \frac{1}{110} \right) = \log_{10} 1 - \log_{10} 110$

=  $0 - \log_{10} 110$

$$= -\log_{10} 11 \times 10$$

$$= -(\log_{10} 11 + \log_{10} 10)$$

$$= -(a+1)$$

D is the correct answer.

43. A man purchased a TV and fridge. If the price of TV is 150% of price of fridge then price of fridge is what percentage of the total cost of TV and fridge?

- A 30
- B 40
- C 45
- D 50

**Answer:** B

**Explanation:**

Let the cost of the fridge =  $100x$

The price of the TV =  $150x$  (Since the cost of TV is 150% of the cost of the fridge)

The price of the fridge =  $\frac{100x}{100x+150x}$  times the price of TV and fridge

The price of the fridge = 40% of the price of TV and fridge

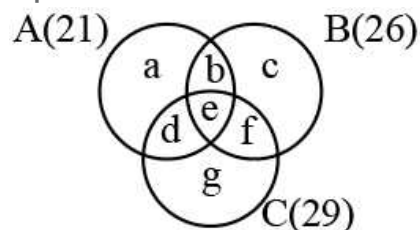
B is the correct answer.

44. During the placement season of a class, 21 students got shortlisted for company A, 26 got shortlisted for Company B and 29 got shortlisted for company C and 14 students got shortlisted for both A and B, 12 students got shortlisted for A and C and 15 for both B and C. All the companies shortlisted 8 students from the class. Then what is the ratio of number of students who got shortlisted for only B and number of students who got shortlisted for only C?

- A 1:1
- B 1:2
- C 2:3
- D 3:2

**Answer:** B

**Explanation:**



Given  $e = 8$

Number of students shortlisted for A and B is 14

$$e + b = 14$$

$$b = 6$$

Number of students shortlisted for A and C is 12

$$e + d = 12$$

$$d = 4$$

Number of students shortlisted for B and C is 15

$$e + f = 15$$

$$f = 7$$

Given

Number of students shortlisted for B is 26

$$b + f + e + c = 26$$

$$6 + 7 + 8 + c = 26$$

$$c = 5$$

Number of students shortlisted for C is 29

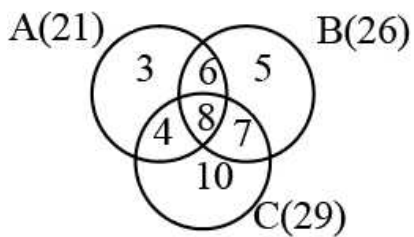
$$d + e + f + g = 29$$

$$g = 10$$

Number of students shortlisted for A is 21

$$b + e + d + a = 21$$

$$a = 3$$



Number of students shortlisted for only B =  $c = 5$

Number of students shortlisted for only C =  $g = 10$

$$\text{Ratio} = 5:10 = 1:2$$

Answer is option B

45. Pune taxi services has a fixed charge plus a variable charge based on the distance covered. For travelling 10km the total fare paid by Somu is Rs.150 and for a journey of 15km the total fare paid by Ramu is RS220. Then Tomy will pay \_as the total fare for travelling a distance of 25 km.

**A** Rs. 350

**B** Rs. 380

**C** Rs. 360

**D** Rs. 400

**Answer:** C

**Explanation:**

Let the fixed charge be Rs.  $x$  and variable charge/km is Rs.  $y$ .

As per the question,

$$x - 10y = 150 \text{ and } x + 15y = 220$$

On solving both the equations, we get  $5y = 220 - 150 = 70$

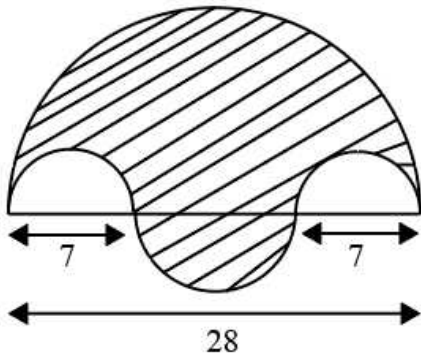
$$y = \text{Rs. } 14/\text{km} \text{ and } x = \text{Rs. } 10$$

$$\text{Charge for 25 km} = x + 25y$$

$$= 10 + 25 \times 14 = \text{Rs. } 360$$

C is the correct answer.

46. In the following diagram there are four semi circular arcs and a shaded region. The diameter of largest semi circle is 28cm and of the smallest is 7cm. The area of shaded region is

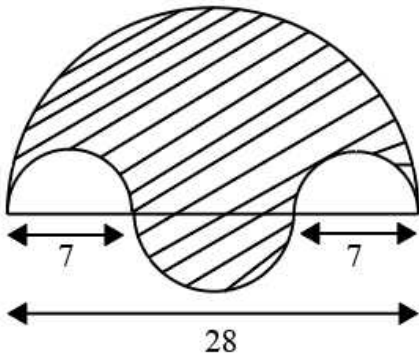


- A  $98.75 \pi$
- B  $120.5 \pi$
- C  $105.5 \pi$
- D  $110.25 \pi$

**Answer:** D

**Explanation:**

we have :



$$28 - 7 - 7 = 14$$

So we have 4 semicircles with diameters 28, 7, 7 and 14 .

Now area of shaded region = Area of bigger semicircle (radius 14 ) - 2 (Area of smaller semicircles with radius 3.5 ) + Area of semicircle with radius 7

$$\text{we get } \pi \frac{14^2}{2} - 2 \pi \frac{(3.5)^2}{2} + \pi \frac{(7)^2}{2}$$

$$= 98\pi + 24.5\pi - 12.25\pi = 110.25\pi$$

47. An umbrella is made by stitching 10 triangular pieces of cloth of two different colours each piece measuring 30cm, 60cm, 60cm. How much cloth of each colour is required for Umbrella?

- A  $1015\sqrt{45}$
- B  $1125\sqrt{15}$
- C  $1220\sqrt{45}$
- D  $1235\sqrt{15}$

**Answer:** B

**Explanation:**

$$s = \frac{a+b+c}{2} = \frac{30+60+60}{2} \text{ cm} = 75 \text{ cm}$$

Using Heron's formula

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \sqrt{75(75-60)(75-60)(75-30)}$$

$$= 225\sqrt{15} \text{ cm}$$

There are total 10 pieces

$$\text{First colour} = 5 * (225\sqrt{15}) = 1125\sqrt{15} \text{ cm}$$

$$\text{Second colour} = 5 * (225\sqrt{15}) = 1125\sqrt{15} \text{ cm}$$

B is the correct answer.

48. If  $R_c = m \ln \left(1 + \frac{R_m}{m}\right)$  then  $R_m$  is equal to

**A**  $R_m = \ln \left(1 + \frac{R_c}{m}\right)$

**B**  $R_m = \ln \left(1 + \frac{R_c}{e}\right)$

**C**  $R_m = m \left(e^{\frac{R_c}{m}} - 1\right)$

**D** Cannot be determined

**Answer: C**

**Explanation:**

$$R_c = m \ln \left(1 + \frac{R_m}{m}\right)$$

$$\frac{R_c}{m} = \ln \left(1 + \frac{R_m}{m}\right)$$

$$\frac{R_m}{m} + 1 = e^{\frac{R_c}{m}}$$

$$\frac{R_m}{m} = e^{\frac{R_c}{m}} - 1$$

$$R_m = m \left(e^{\frac{R_c}{m}} - 1\right)$$

C is the correct answer.

49. If a labour output function for laundry service is described by the following equation:  $O = (a^0 - 4L^0)^6$ , where L denotes Labour and O denotes output. Then, output .....

**A** Increases as labor increases

**B** Decreases as labor increases

**C** Remains constant irrespective of the amount of labor

**D** None of the option is correct

**Answer: C**

**Explanation:**

Here  $a^0$  and  $L^0$  are both constants.

So, the output is independent of Labour.

C is the correct answer.

50. Assume that the taxes on petrol is 125% of the price of petrol per litre as received by the retailer minus the taxes. If in the last week, the petrol prices per litre as received by the retailer minus the taxes was 35, 34, 35.5, 37, 37.5 and 38, the average amount of tax collected per litre of petrol is

- A 45.2
- B 46.1
- C 44
- D None of the option is correct

**Answer: A**

**Explanation:**

Sum of all (Petrol price per litre - taxes) in the last week =  $35+34+35.5+37+37.5+38$   
 = 217

Taxes on petrol = 1.25 times (the price of petrol - taxes)

$2.25 \times$  taxes on petrol = 1.25 times the price of petrol

The price of petrol = 1.8 times the taxes on petrol.

1.8 times the taxes on petrol - taxes on petrol = 217

0.8 times the taxes on petrol = 217

Taxes on petrol =  $\frac{217}{0.8} = 271.25$

The average amount of tax collected =  $\frac{271.25}{6}$

= 45.2

A is the correct answer.

51. **Big Bang Theory** cast wishes to find out the number of ways in which the word **ASTRONAUT** can be scrambled. They find that the number of ways in which it can be put in an unscrambling puzzle is?

- A 362880
- B 181440
- C 60480
- D 90720

**Answer: D**

**Explanation:**

Number of letters in **ASTRONAUT** = 9

Here A and T are repeated twice.

So the number of ways of arrangement =  $\frac{9!}{2! \times 2!}$

= 90720

D is the correct answer.

52. **Students of an MBA school** have got together to constitute a fund where each student has contributed Rs. 10000. This group of 20 students laid down certain rules for investment where it was agreed that 50 percent of the fund would be invested in riskless government securities while the rest 50 percent would be invested in equities. At the end of the year the group realizes that the crash in the stock market has left them with zero return on equities but 1 percent dividend gain on the shares bought. The return on the riskless government security has been 7.8 percent in the last year. If the gains are to be divided equally, the gain per student is

- A 2.2 percent

- B** 4.4 percent
- C** 6.6 percent
- D** None of the option is correct

**Answer:** B

**Explanation:**

Total fund collected by 20 students =  $20 \times 10000 = 2,00,000$

Investment in riskless government securities =  $2,00,000 \times \frac{50}{100} = 1,00,000$

Investment in equities =  $2,00,000 - 1,00,000 = 1,00,000$

Gain by equities =  $1,00,000 \times \frac{1}{100} = 1000$

Gain by riskless government securities =  $1,00,000 \times \frac{7.8}{100} = 7800$

Total gain =  $1000 + 7800 = 8800$

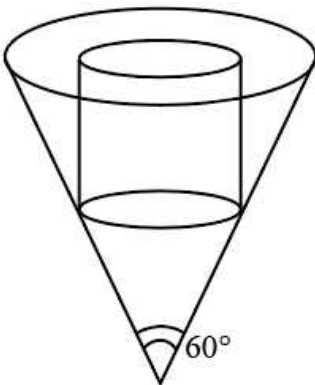
gain/student =  $\frac{8800}{20} = 440$

Gain% =  $\frac{440}{10000} \times 100$

= 4.4%

B is the correct answer.

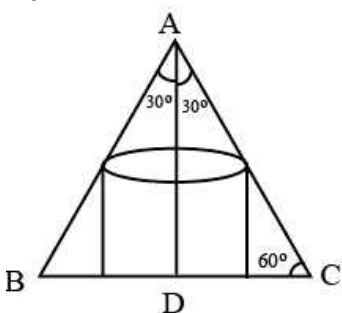
53. In the figure given below, a Cylinder is inserted into a cone and the vertical height of the cone is 30 cm. The diameter of the cylinder is 8 & radic is 3 cm. What is the volume of the cone? The base of the cylinder and the base of the cone are on the same plane.



- A**  $3000 \pi \text{ cm}^3$
- B**  $4860 \pi \text{ cm}^3$
- C**  $2800 \pi \text{ cm}^3$
- D** Cannot be determined

**Answer:** A

**Explanation:**



Given AD = 30 cm

In triangle ACD,

$$\tan \angle ACD = \frac{AD}{DC}$$

$$\sqrt{3} = \frac{30}{DC}$$

$$DC = 10\sqrt{3}$$

$$\text{radius of cone} = DC = 10\sqrt{3}$$

$$\text{Volume of cone} = \frac{1}{3}\pi r^2 h = \frac{1}{3}\pi (10\sqrt{3})^2 (30) = 3000\pi \text{ cm}^3$$

Answer is option A.

54. Nisha went to buy three types of stationery products, each of them were priced at Rs. 5, Rs. 2 and Rs. 1 respectively. She purchased all three types of products in more than one quantity and gave Rs. 20 to the shopkeeper. Since the shopkeeper had no change with him/her; he/she gave Nisha three more products of price Rs. 1 each. Find out the number of products with Nisha at the end of the transaction.

- A 8
- B 12
- C 11
- D 10

**Answer:** D

**Explanation:**

Let x, y, z be the number of items purchased by Nisha of price Rs. 5, 2, 1 respectively.

$$5x+2y+z = 20$$

Since the shopkeeper had no change with him/her; he/she gave Nisha three more products of price Rs. 1 each i.e Nisha purchased items of Rs. 17

$$5x+2y+z = 17$$

She purchased all three types of products in more than one quantity,

If she purchases three items of Rs. 5, she cannot purchase 2 items of Rs 2 and 1

So Nisha purchases 2 items of Rs. 5.

If Nisha purchases 3 items of Rs 2., then she cannot purchase more than 1 item of Rs. 1.

Hence she must have purchased 2 items of Rs. 2 and 3 items of Rs. 1.

The number of items Nisha will have at the end of the transaction = 2+2+3+3(due to no change)

$$= 10$$

D is the correct answer.

55. If the ratio of sides of a rectangle is 2 : 7 and perimeter is 360 m, then find out its length and breadth.

- A 140m, 40m
- B 144m, 36m
- C 160m, 20m
- D 135m, 45m

**Answer:** A

**Explanation:**

Let the sides of the rectangle be  $2x, 7x$

It is given that the perimeter = 360m

$$2(2x+7x) = 360$$

$$x = 20\text{m}$$

$$\text{Length} = 7 \times 20 = 140\text{m}, \text{breadth} = 2 \times 20 = 40\text{m}$$

A is the correct answer.

56. **If the price of Sugar increases by 20%, and Salman intends to spend only an additional 5% on Sugar, then find out the percentage decrease in his sugar consumption.**

**A** 5.25

**B** 12.5

**C** 11.75

**D** 10.25

**Answer: B**

**Explanation:**

Let the initial price and expenditure of sugar be  $100p, 100e$  respectively.

$$\text{Consumption} = \frac{\text{Expenditure}}{\text{Price}}$$

$$= \frac{e}{p}$$

The increased price of sugar =  $120p$

Increased expenditure on sugar =  $105e$

$$\text{Changed consumption} = \frac{105e}{120p}$$

$$= 0.875 \frac{e}{p}$$

$$\text{Percentage decrease in consumption} = \frac{(0.875-1)}{1} * 100$$

$$= 12.5$$

B is the correct answer.

57. **A man lends some money to his friend at 5% per annum of interest rate. After 2 years, the difference between the Simple and the compound interest on money is Rs. 50. What will be the value of the amount at the end of 3 years if compounded annually?**

**A** 21325.6

**B** 24512.5

**C** 22252.7

**D** 23152.5

**Answer: D**

**Explanation:**

If  $P$  is the principal and  $r$  is the rate of interest, then the difference between simple interest and compound interest for 2 years =  $\frac{Pr^2}{100^2}$

It is given that the difference is Rs 50 and the rate of interest is 5% per annum.

Principle  $P = \text{Rs. } 20000$

$$\text{Amount at the end of 3 years} = P \left(1 + \frac{5}{100}\right)^3$$

$$= 20000 \left(1 + \frac{5}{100}\right)^3$$

= Rs.23152.5

D is the correct answer.

58. Sham is trying to solve the expression:

$$\log \tan 1^\circ + \log \tan 2^\circ + \log \tan 3^\circ + \dots + \log \tan 89^\circ.$$

The correct answer would be?

A 1

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

C 0

D -1

Answer: C

Explanation:

$$\log \tan 1^\circ + \log \tan 2^\circ + \log \tan 3^\circ + \dots + \log \tan 89^\circ.$$

$$= \log \tan 1^\circ + \log \tan 89^\circ + \log \tan 2^\circ + \log \tan 88^\circ + \dots + \log \tan 45^\circ.$$

$$= \log (\tan 1^\circ \cdot \tan 89^\circ) + \log (\tan 2^\circ \cdot \tan 88^\circ) + \dots + \log (\tan 45^\circ)$$

$$\tan 45^\circ = 1$$

$$\log (\tan 45^\circ) = 0$$

$$\therefore \log \tan 1^\circ + \log \tan 2^\circ + \log \tan 3^\circ + \dots + \log \tan 89^\circ = 0$$

59. Sumit was doing a multiplication, but by mistake instead of taking 25 as one of the multiplier, he took 34. Now, because of this mistake, the answer was 405 more than the correct answer. Find out the answer that Sumit arrived at.

A 1530

B 1450

C 1350

D 1620

Answer: A

Explanation:

Let the other multiplier be p

Instead of calculating  $25 \cdot p$ , he calculated  $34 \cdot p$

It is given that because of the mistake, the answer was 405 more than the correct answer.

$$34p - 25p = 405$$

$$9p = 405$$

$$p = \frac{405}{9}$$

Now we have to find the value of  $34p$

$$= 34 \cdot \frac{405}{9}$$

$$= 1530$$

A is the correct answer.

60. How many different words can be formed with the word CUSTOM with a condition that the word should begin with M?

- A 720
- B 540
- C 120
- D 180

**Answer: C**

**Explanation:**

Number of different words that can be formed using the letters of the word CUSTOM and starting with M are

M \_ \_ \_ \_ \_

These 5 blanks have to be filled with the remaining 5 letters in  $5 \times 4 \times 3 \times 2 \times 1 = 120$  ways.

C is the correct answer.

61. The number of ways that 5 Marathi, 3 English and 3 Tamil books be arranged if the books of each language are to be kept together is

- A 25920
- B 9250
- C 5920
- D 7480

**Answer: A**

**Explanation:**

Marathi, English and Tamil books can be arranged in  $3!$  ways.

All the Marathi books can be arranged among themselves in  $5!$  ways.

Similarly, the English and Tamil books can be arranged among themselves in  $3!$  ways.

The total number of ways in which the books can be arranged =  $3! \times 5! \times 3! \times 3!$

=25920

A is the correct answer.

62. Excluding the halts, the speed of the bus is 50 km/ hr and including the halts it is 40 km/hr. For how many minutes does the bus stop per hour?

- A 12
- B 10
- C 15
- D 11

**Answer: A**

**Explanation:**

Due to stoppages, the bus will cover 10 km less.

Time taken to cover 10 km =  $\frac{10}{50} \times 60$  min

=12 min

A is the correct answer.

63. A is able to do a piece of work in 10 days and B can do the same work in 15 days. If they can work together for four days, what is the fraction of work left?

A  $\frac{1}{2}$

B  $\frac{2}{3}$

C  $\frac{3}{2}$

D  $\frac{1}{3}$

**Answer:** D

**Explanation:**

It is given that A can do a piece of work in 10 days and B can do the same work in 15 days.

Let the total work be LCM of (10, 15) = 30 units

$$\text{Amount of work done by A in one day} = \frac{30}{10} = 3 \text{ units}$$

$$\text{Amount of work done by B in one day} = \frac{30}{15} = 2 \text{ units}$$

Amount of work done by A and B together in one day = 3+2=5 units

So, together will complete 5\*4 units i.e 20 of work in four days.

The amount of work left out = 30-20=10 units

$$\text{The fraction of work left out} = \frac{10}{30} = \frac{1}{3}$$

D is the correct answer.

64. If 20% of  $x = y$ , then  $y\%$  of 20 is same as

A 10% of  $x$

B 20% of  $x$

C 15% of  $x$

D 4% of  $x$

**Answer:** D

**Explanation:**

It is given 20% of  $x = y$

$$x=5y$$

$$\text{We have to find } y\% \text{ of } 20 = \frac{y}{100} \times 20$$

$$= \frac{y}{5}$$

$$= \frac{x}{25}$$

$$= 4\% \text{ of } x$$

65. In a running race, when one runner allows another runner to stay ahead at the start of the race, then it is termed as startup and when runners reach the finishing line at the same time, then it is termed as dead heat. In a race of 4 km distance, Anu wins by 600m over Binu. Binu can give a startup of 200m to Caira in a 4 km race. By how much distance should Caira get startup so that the race between Anu and Caira ends in dead heat in the same race of 4 km?

- A 700m
- B 750m
- C 770m
- D 725m

**Answer: C**

**Explanation:**

Let Anu finishes the race in t hours.

$$\text{Speed of Anu} = \frac{4000}{t} \text{ m/hour}$$

$$\text{Speed of Bhanu} = \frac{(4000-600)}{t} \text{ m/hour}$$

Since Anu wins the race by 600m

Time taken by Bhanu to finish the race = Time taken by Caira to cover 3800m.

$$\text{Time taken by Bhanu} = \frac{4000}{t} = \frac{20}{17t}$$

$$\text{Speed of Caira} = \frac{3800}{17t} = \frac{3230}{t} \text{ m.hr.}$$

To finish the race at the same time Anu should give Caira a headstart of  $4000 - 3230 = 770\text{m}$

C is the correct answer.

66. **Mr. Sandeep was placing an order with his carpenter to make wooden boxes to pack his cotton toys which were to be delivered to his friend. Sandeep wanted 2 types of boxes. The larger one with a dimension of 25cm x 20cm x 5cm and the smaller box with a dimension of 15cm x 12cm x 5cm. Sandeep also told the carpenter that 5% of total surface area is required as extra to cover the overlaps. If the cost of the wood is Rs.4/- cm<sup>2</sup>, the cost of wood required for supplying 250 boxes of each type would be Rs.**

**[Note:-DO NOT include spaces in your answer)**

**Answer:2184000**

**Explanation:**

$$\text{Surface area of one bigger box} = 2(25 \times 20 + 20 \times 5 + 5 \times 25) = 1450 \text{ cm}^2$$

$$\text{By adding 5\% for overlaps} = 1450 + 72.5 = 1522.5 \text{ cm}^2$$

$$\text{Area for 250 bigger boxes} = 1522.5 \times 250 \text{ cm}^2$$

$$\text{Cost for 250 bigger boxes} = 1522.5 \times 250 \times 4 = \text{Rs.} 152250$$

$$\text{Surface area of smaller box} = 2(15 \times 12 + 12 \times 5 + 5 \times 15) = 630 \text{ cm}^2$$

$$\text{By adding 5\% for overlaps} = 630 + 31.5 = 661.5 \text{ cm}^2$$

$$\text{Area for 250 small boxes} = 661.5 \times 250 \times 4 = \text{Rs.} 66150$$

$$\text{Total cost} = 152250 + 66150 = \text{Rs.} 218400$$

67. **David is trying to solve the expression :-**

$$\frac{(4)^2 \times 2^{n+1} - 4 \times 2^n}{(4)^2 \times 2^{n+2} - 2 \times 2^{n+2}}$$

**And you help him to do the same and finally arrive at the answer with correct to one decimal which would be -**

**(Note:- DO NOT include spaces in your answer)**

**Answer:0.5**

**Explanation:**

$$\frac{(4)^2 \times 2^{n+1} - 4 \times 2^n}{(4)^2 \times 2^{n+2} - 2 \times 2^{n+2}}$$

$$\frac{(2)^4 \times 2^{n+1} - 2^2 \times 2^n}{(2)^4 \times 2^{n+2} - 2 \times 2^{n+2}}$$

$$\frac{(2)^3 \times 2^n \times 2 - 2 \times 2^n}{(2)^3 \times 2^n \times 2^2 - 2^n \times 2^2}$$

$$\frac{2^3 \times 2 - 2}{2^3 \cdot 2^2 - 2^2}$$

$$\frac{14}{28}$$

$$= 0.5$$

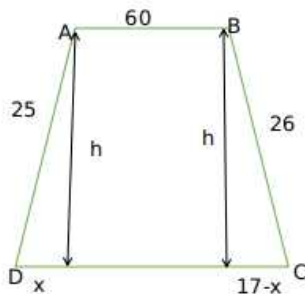
68. Mahesh has a toy which has the shape of a trapezium. The two sides which are parallel have a length of 60 cm and 77 cm and the other sides are 25 cm and 26 cm. He requests you to calculate the area and you help him to arrive at the correct answer which is sq.cm.

[Note:- DO NOT include spaces in your answer]

Answer:1644

Explanation:

We have :



$$\text{Now } h^2 + x^2 = 625$$

$$\text{and } h^2 + (17-x)^2 = 676$$

subtracting the equations we get

$$34x = 289 + 625 - 676$$

$$\text{we get } 34x = 238$$

$$\text{we get } x = 7$$

Therefore

$$\text{we get } h = 24$$

$$\text{Therefore area} = \frac{1}{2} (137)(24)$$

$$= 1644$$

69. Ramesh is trying to Simplify the expression

$$(p + q)^3 - (p - q)^3 - 6q(p^2 - q^2) \text{ and if } q = 1-$$

You helped him and the solution arrived was.....

Answer:8

Explanation:

$$(p^3 + 3p^2q + 3pq^2 + q^3) - (p^3 - 3p^2q + 3pq^2 - q^3) - (6q(p^2 - q^2))$$

$$= 6p^2q + 2q^3 - 6q(p^2 - q^2)$$

$$= 8q^3$$

$$= 8 \text{ (Since } q = 1)$$

8 is the correct answer.

70. In Roman Numerals, a number has been written as MMXVIII. In Arabic numbers it will be .....  
(Note:- DO NOT include spaces in your answer)

**Answer:**2018

**Explanation:**

In Roman numerals,

The values of M = 1000, D = 500, C = 100, L=50, X = 10, V = 5, I = 1.

The value of MMXVIII = 1000+1000+10+5+1+1+1 = 2018

2018 is the correct answer.

## General English

71. Find the odd man out

- A bemuse
- B reuse
- C bewilder
- D confuse

**Answer:** B

**Explanation:**

bemuse, bewilder and confuse all mean the same. Therefore, the odd one out is reuse.

The answer is option B.

72. Find the odd man out

- A epicurean
- B gourmet
- C gastronomist
- D hideous

**Answer:** D

**Explanation:**

epicurean - a person devoted to sensual enjoyment especially derived from food.

gourmet, gastronomist - a connoisseur of good food

The odd one out is hideous.

Answer is option D.

**Instructions [73 - 75 ]**

Choose the appropriate words from the options given to fill in the blanks in the given sentence.

73. The young man said that he had no \_\_\_\_ riches.

- A desire of
- B desire for
- C desirous of
- D desire on

**Answer: B**

**Explanation:**

'desire for' is the appropriate word for the give blank.

Sentence: The young man said that he had no desire for riches.

Answer is option B.

74. **She kept all her \_\_\_\_\_ in the bank locker.**

- A jewelery
- B jewelries
- C jewellery
- D jwellery

**Answer: C**

**Explanation:**

'jewellery' is correctly spelt among the given options.

Answer is option C.

75. **I wish that Harish was ill, I would have gone to see him.**

- A I was knowing
- B I had known
- C I know
- D I would have known

**Answer: B**

**Explanation:**

First sentence should be in past tense, i.e. I wish I had known that Harish was ill, I would have gone to see him.

Answer is option B.

**Instructions [76 - 78 ]**

Choose the correct meaning of the following idiom:

76. **Mea Culpa**

- A I love you
- B I'm capable
- C I will do it

**D** I'm to blame

**Answer: D**

**Explanation:**

Mea culpa, which means 'through my fault' in Latin. Among the given options, option D is the appropriate one.

Answer is option D.

77. Find a correct match of grammatical function with the usage of the word **STILL**

<b>Function</b>	<b>Usage</b>
1. Noun	a. Still waters run deep
2. Adjective	b. He wanted some stills for a magazine
3. Verb	c. The good news makes mestill my fears
4. Adverb	d. Will you still love me when I am old and grey?

**A** 1-d, 2-c, 3-b, 4-3

**B** 1-c, 2-a, 3-d, 4-b

**C** 1-b 2-a, 3-c, 4-d

**D** 1-a, 2-c, 3-b, 4-d

**Answer: C**

**Explanation:**

Still waters run deep. In this sentence, still represents the nature of water. Therefore, still is an adjective.

He wanted some stills for a magazine. In this sentence, stills is a noun.

The good news makes me still my fears. In this sentence, still is a verb

Answer is option C.

78. Find a correct match of grammatical function with the usage of the word **WELL**

<b>Function</b>	<b>Usage</b>
1. Verb	a. You never miss the watertill the well runs dry
2. Adjective	b. Tears well up in his eyes when he readsthe letter
3. Noun	c. The children behaved well
4. Adverb	d. They played hard. It was a well deserved victory

**A** 1-b, 2-d, 3-a, 4-c

**B** 1-a, 2-c, 3-d, 4-b

**C** 1-b, 2-a, 3-c, 4-d

**D** 1-a, 2-c, 3-b, 4-d

**Answer: A**

**Explanation:**

The children behaved well. In this sentence, well is describing a verb. Therefore, well is an adverb.

They played hard. It was a well deserved victory. In this sentence, well is describing victory. Therefore, well is an adjective.

Answer is option A.

79. Select the pair that best expresses the relationship similar to that expressed in this pair - **turmoil: confusion**

- A** caustic : sarcastic
- B** metamorphosis: transformation
- C** assassination : murder
- D** chaos : disorder

**Answer:** D

**Explanation:**

turmoil - confusion, uncertainty

assassination - planned killing of a known person, murder - killing of a person

metamorphosis is a form of transformation but is not exactly similar.

chaos - complete disorder, confusion

Answer is option D.

**Instructions [80 - 81 ]**

Directions for questions 80 and 81: Choose the correct conjunction:

80. **Do not eat the cake, wait your friends come.**

- A** when
- B** for
- C** till
- D** as

**Answer:** C

**Explanation:**

Correct sentence: Do not eat the cake, wait till your friends come.

Answer is option C.

81. **Study hard \_ you will not pass the exam.**

- A** for
- B** else
- C** then
- D** still

**Answer:** B

**Explanation:**

Second sentence is the consequence of the first sentence. In the given context, 'else' is the appropriate word to use.

Answer is option B.

82. **Choose the synonym of : Usurp**

- A** Abdicate
- B** Capitulate

**C** Adjudge

**D** Encroach

**Answer: D**

**Explanation:**

usurp - take a position of power illegally or by force.

encroach - taking a position on a person's territory or rights.

Answer is option D.

83. **Choose the synonym of : Flagrant**

**A** Meek

**B** Sweet smelling

**C** Blatant

**D** Flagship

**Answer: C**

**Explanation:**

flagrant - immoral actions which are so obvious

blatant - actions(bad behaviour) done openly, very obvious\

Answer is option C.

84. **Choose the antonym of : Ostentatious**

**A** Modest

**B** Pretentious

**C** Flamboyant

**D** Obtrusive

**Answer: A**

**Explanation:**

ostentatious, pretentious - showy, designed to impress

flamboyant - tending to attract attention

obtrusive - noticeable, showy

modest - relatively moderate, small

Answer is option A.

85. **Change the speech: "I have won the race!"**

**A** He said that he had won the race

**B** He said that he has won the race

**C** He said he have won the race

**D** He said that the race has been won

**Answer: A**

**Explanation:**

Given sentence is in direct speech form.

Indirect speech sentence would be 'He said that he had won the race'.

Answer is option A.

86. **Change the speech: "Wait there till I get back please." she told the boys.**

- A** She requested the boys to wait there till she would return
- B** She asked the boys to wait till I come back
- C** She requested the boys to wait there till she got back
- D** She requested the boys to wait there till she comes back

**Answer: C**

**Explanation:**

Given sentence is in direct speech form (simple present tense).

Indirect speech form should be in simple past tense, i.e. 'She requested the boys to wait there till she got back'.

Answer is option C.

**Instructions [87 - 88 ]**

: The options given below combine to form a meaningful sentence. Identify the erroneous statement from among the options:

87. **1. I am fully aware that**  
**2. my wife is one of those**  
**3. who is totally committed**  
**4. to the family and its wellbeing.**

- A** 1 is incorrect
- B** 2 is incorrect
- C** 3 is incorrect
- D** 4 is incorrect

**Answer: C**

**Explanation:**

In sentence 3, error in totally committed. Totally is incorrectly spelt.

Correct spelling: totally

Answer is option C.

88. **1. He made me to wait**  
**2. for him, while he**  
**3. changed his coat,**  
**4. as it was cold.**

- A** 1 is incorrect
- B** 2 is incorrect
- C** 3 is incorrect

**D** 4 is incorrect

**Answer:** A

**Explanation:**

Error is in first sentence, i.e. he made me to wait for him. 'to' is redundant in the given sentence.

Answer is option A.

**Instructions [89 - 90 ]**

Look at the underlined part of the sentence below. The sentence is given three possible substitutes for the underlined part. If one of them is better than the underlined part, mark that as the answer. If none of the substitutions improve the sentence, mark no improvement as your answer.

89. The winter was such severe that even water in the taps was frozen and this created a lot of inconvenience to everyone in the family.

**A** severe so much

**B** so severe

**C** severe such

**D** no improvement

**Answer:** B

**Explanation:**

'so severe' is better than the underlined part.

Answer is option B.

90. The members of his family are coming in this train and I am sure that it will be a memorable trip for all of them.

**A** on

**B** by

**C** with

**D** no improvement

**Answer:** B

**Explanation:**

'by' is the correct preposition to be used in the given context.

Answer is option B.

91. Some words are given below. In which order should they be arranged to give an affirmative sentence, so that the part of the day comes last?

AT / EVENING / AGAIN / LAST / MET / WE / HER / HOSPITAL / THE  
1            2            3            4            5            6            7            8            9

(Note:— DO NOT include spaces in your answer)

**Answer:**657319842

**Explanation:**

Sentence: We met her again at the hospital last evening.

Answer is 657319842.

92. In a class, Roll No 101 states that the plural of the word CRISIS is CRISES. Roll No 102 states that the plural is CRISISES, and Roll No 103 states that the plural is CRISIS itself. The Roll No of the student who gave the correct answer is  
[Notez- DO NOT include spaces in your answer)

**Answer:**101

**Explanation:**

Plural of crisis is crises.

Answer is 101.

93. There are 4 boards in a business school which have displayed the meaning of the term that means "A process in which an independent person makes an official decision that ends a legal disagreement without the need for it to be solved in court."

Board 1: ARBITRATION

Board 2: ARBITERATION

Board 3: ARBETRATION

Board 4: ARBITATION

The board that has displayed the correct spelling of the term is Board No:

(Note:- DO NOT include spaces in your answer)

**Answer:**1

**Explanation:**

Arbitration is correctly spelt word.

Answer is 1.

94. In an English Test, Column A gives a word, Column B gives its past participle and Column C gives the code of the pair as below:

Word	Past Participle	Code
WEAR	WEARING	1
WEAR	WEAR	2
WEAR	WORN	3
WEAR	WEARED	4

Which Code should Shamu choose, if he is asked to choose the correct pair of word and its corresponding past participle?

(Note:- DO NOT include spaces in your answer)

**Answer:**3

**Explanation:**

wear

past form - wore

past participle form - worn

Answer is 3.

95. Four friends 1, 2, 3 and 4 are arguing on who is right in stating an English proverb.

1. states that the correct proverb is "A swarm in May is worth a load of hay; a swarm in June is worth a full moon; but a swarm in July is not worth a fly."

2. states that the proverb is "A swarm in May is worth a load of hay; a swarm in June is worth a looney toon; but a swarm in July is not worth a fly."

3. states the proverb as "A swarm in May is worth a load of hay; a swarm in June is worth a silver spoon ; but a swarm in July is not worth a fly."

4. states that the proverb actually is "A swarm in May is worth a load of hay; a swarm in June is worth a golden boon; but a swarm in July is not worth a fly."

Who is correct in stating the proverb?

(Note:- DO NOT include spaces in your answer)

Answer:3

**Explanation:**

Correct proverb: A swarm in May is worth a load of hay; a swarm in June is worth a silver spoon ; but a swarm in July is not worth a fly.

Answer is 3.

**Instructions [96 - 100 ]**

Read the following passage and answer the questions that follow.

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Google wants to know where you go so badly that it records your movements even when you explicitly tell it not to. An Associated Press investigation found that many Google services on Android devices and iPhones store your location data even if you've used privacy settings that say they will prevent it from doing so. Computer science researchers at Princeton confirmed these findings at the AP's request. For the most part, Google is upfront about asking permission to use your location information. An app like Google Maps will remind you to allow access to location if you use it for navigating. If you agree to let it record your location over time, Google Maps will display that history for you in a "timeline" that maps out your daily movements. Storing your minute-by-minute travels carries privacy risks and has been used by police to determine the location of suspects - such as a warrant that police in North Carolina, served on Google last year to find devices near a murder scene. So the company will let you "pause" a setting called Location History. Google says this will prevent the company from remembering where you have been. Google's support page on the subject states. "You can turn off Location History at any time. With Location History off, the places you go are no longer stored". That isn't true. Even with Location History paused, some Google apps automatically store time - stamped location data without asking. For example, Google stores a snapshot of where you are when you merely open its Maps app. Automatic daily weather updates on Android phones pinpoint roughly where you are. And some searches that have nothing to do with location, like "chocolate chip cookies" or "kids science kits," pinpoint your precise latitude and longitude - accurate to the square foot and save it to the Google account. The privacy issue affects some two billion users of devices that run Google's Android operating software and hundreds of millions of world wide iPhone users who rely on Google for maps or search. Storing location data in violation of a user's preferences is wrong, said Ionathon Mayer, a Princeton computer scientist. A researcher from Mayer's lab confirmed the AP's findings; the AP conducted its own tests on several iPhones that found the same behaviour. "If you are going to allow users to turn off something called 'Location History', then all the places where you maintain 'Location History' should be turned off," Mayer said. "That seems like a pretty straightforward position to have". Google says it is being perfectly clear. "There are a number of different ways that Google may use location to improve people's experience, including: Location History, Web and App activity and through device-level Location Services" a Google spokesperson said. "We provide clear descriptions of these tools, and robust controls, so people can turn them on and off, and delete their histories at any time." To stop Google from saving these location markers, the company says, users can turn off another setting, one that does not specifically reference location information. Called "Web and App activity" and enabled by default, that setting stores a variety of information from Google apps and websites to your Google account. When paused, it will prevent activity on any device from being saved to your account But leaving "Web and App activity" on and turning "Location History" off only prevents Google from adding your movements to the "timeline", its visualization of your daily travels. It does not stop Google's collection of other location markers.

96. For the most part, Google is upfront about asking permission to use your location information. This sentence means:

A Google is not secretive about recording your movements

B Google is tracking your movements even if you don't want it to

C Google is quite candid about asking you to allow it to show you where you are located

**D** None of the option is correct

**Answer: C**

**Explanation:**

The given sentence means that the Google is asking you to allow it to show you where you are located.

Answer is option C.

97. **When the author says : 'That isn't true' to Google's claim that "you can turn off Location History at any time....and the places you go are no longer stored" ...he means**

**A** Although google declares that the places are no longer stored, they automatically store time stamped location data without asking.

**B** Google asks permission every time it stores data

**C** Google tracks your movements and tells you about it

**D** The author is paranoid.

**Answer: A**

**Explanation:**

He means that although Google declares that the places were no longer stored, they automatically store time stamped location data without asking.

Answer is option A.

98. **How many users does the privacy issue affect?**

**A** Half the world population

**B** Two billion users and hundreds of millions of iPhone users

**C** Data not available

**D** Everyone who owns a phone

**Answer: B**

**Explanation:**

As mentioned in the passage, two billion users and hundreds of millions of iPhone users are being affected by the privacy issue.

Answer is option B.

99. **What does the author mean when he says: 'It does not stop Google's collection of other location markers?'**

**A** Google only informs you of your location

**B** If Location history is off, Google does not collect the location markers

**C** If you leave 'Web and App Activity' on and turn 'Location History' off, Google can still collect the location markers

**D** None of the option is correct

**Answer: C**

**Explanation:**

Leaving "Web and App activity" on and turning "Location History" off only prevents Google from adding your movements to the "timeline", its visualization of your daily travels. It does not stop Google's collection of other location markers. This means Google can still collect the location makers.

Answer is option C.

100. **An appropriate title to this passage would be:**

- A** Android iPhones and Google
- B** Google snapshot
- C** Google tracks you, with or without your permission
- D** Smart phones are a boon

**Answer: C**

**Explanation:**

The passage is all about how Google tracks you with or without your permission.

Answer is option C.

**Instructions [101 - 105 ]**

Read the following passage and answer the questions that follow.

Frederic Bastiat, who was that rarest of creatures, a French free-market economist, wrote to this newspaper in 1846 to express a noble and romantic hope: "May all the nations soon throw down the barriers which separate them." Those words were echoed 125 years later by the call of John Lennon, who was not an economist but a rather successful global capitalist, to "imagine there's no countries". As he said in his 1971 song, it isn't hard to do. But despite the spectacular rise in living standards that has occurred as barriers between nations have fallen, and despite the resulting escape from poverty by hundreds of millions of people in those places that have joined the world economy, it is still hard to convince publics and politicians of the merits of openness. Now, once again, a queue is forming to denounce openness—i.e, globalisation. It is putting at risk the next big advance in trade liberalisation and the next big reduction in poverty in the developing countries. The world will find out, to some extent, next month when ministers from the 148 countries in the WTO meet in Hong Kong. The last time they gathered for such a crucial meeting was in September 2003 in Cancun, and the result was a shambles. There was a bitter row between rich countries and poor ones, and the meeting broke up in acrimony. At that stage, however, there was still plenty of time to repair the damage. For in effect, the deadline for the Doha round comes in June 2007, when the trade-negotiating authority granted by Congress to President Bush expires. But, although that leaves more than a year and a half after Hong Kong, the complexity of a negotiation involving 148 countries and scores of highly technical issues means that the deal really needs to be done during 2006, with the political framework for it set early on—which essentially means in Hong Kong. The case for selfish generosity Trade- liberalisation rounds are arcane affairs about which free-traders are often thought to cry wolf. The previous talks, known as the Uruguay round, went through lots of brinkmanship and delays before they were completed. The result was still disappointing in many ways, especially to developing countries, and yet, since the round's completion in 1993, the world economy has grown lustily and the biggest developing countries, China, India and Brazil, have all burst on to the global trading scene. Would the world really be hurt if the EU merely refuses to expose its farmers to more competition? The likeliest outcome both from the Hong Kong meeting and the eventual Doha agreement is a compromise—as always. The European position is feeble but not risible, for it has offered an overall average cut in its farm tariffs of 39%, up from 25% only a month ago, though with rather a lot of loop holes that could severely limit the benefits. France, and other European farm protectionists, may prove more flexible than they currently imply: this is hardly the first time they have promised to man the barricades shortly before striking a deal. Yet though some sort of fudge in Hong Kong must be likely, with the Americans lowering their ambition and the Europeans raising theirs a little, such an outcome would still represent both a missed opportunity and a risk. The missed opportunity is that Doha has offered the first proper chance to involve developing countries in trade negotiations—they now make up two- thirds of the WTO members—but also thereby to use a full exchange of agricultural, industrial and service liberalisations to make a big advance in free trade that could benefit a wide range of countries. Some of that progress may still be made, even in a fudged deal: Brazil, for example, stands to benefit hugely from freer trade in agriculture, so it should be willing to promote other concessions in return. India is reluctant to cut its own farm tariffs but has a big interest in liberalising trade in services, wanting more freedom in everything from finance to health care to entertainment. But if the rich world could gird itself to be more ambitious on agriculture, the gains would be even greater: help for the poorest countries, making the rich look generous; better access to the biggest and richest developing countries for western companies; and a rise in global income in a decade's time of \$300 billion a year (says the World Bank), which would thus help everyone. The risk is that failure to agree on a new wave of openness during a period [the past two years) in which the world economy has been growing at its fastest for three decades, with more countries sharing in that growth than ever before, will set a sour political note for what may well be tougher times ahead. A turn away from trade liberalisation just ahead of an American recession, say, or a Chinese economic slowdown, could open up a chance not just for a slowdown in progress but for a rollback. Currently, for example, the Schumer bill to put a penal tariff on Chinese goods looks unlikely to pass. If American unemployment were rising and world trade talks had turned acrimonious, that might change. So might the political wind in many developing countries. If so, that would be a tragedy for the whole world. Although the case for reducing poverty by sending more aid to the poorest countries has some merit, the experience of China, South Korea, Chile and India shows that the much better and more powerful way to deal with poverty is to use the solution that worked in the past in America, western Europe and Japan: open, trading economies, exploiting the full infrastructure of capitalism (including financial services) amid a rule of law provided by government. In other words, globalisation. To

paraphrase Samuel Johnson, anyone who is tired of that, is tired of life.

101. **According to the article, why is Frederic Bastiat called the "rarest of creatures"?**

- A** Because he was a German industrialist
- B** Because he was a French who promoted a free market economy
- C** Because he wrote to a newspaper
- D** Because he was a friend of John Lennon

**Answer: B**

**Explanation:**

Options A, C and D are not valid explanations to call him the rarest of creatures. Option B is appropriate reason.

Answer is option B.

102. **Who was John Lennon?**

- A** A writer
- B** An economist
- C** A singer
- D** An industrialist

**Answer: C**

**Explanation:**

As mentioned in the passage, John Lennon is a singer.

Answer is option C.

103. **According to the article, the better way to deal with poverty is:**

- A** By giving more aid to poor countries
- B** By reducing interest rates
- C** By moving away from democracy
- D** By exploiting the full infrastructure of capitalism

**Answer: D**

**Explanation:**

As mentioned in the last second line, the better way to deal with poverty is by exploiting the full infrastructure of capitalism (including financial services).

Answer is option D.

104. **"Trade-liberalisation rounds are arcane affairs". The adjective arcane means:**

- A** Well known
- B** International
- C** Incomprehensible

**D** Transparent

**Answer: C**

**Explanation:**

arcane - not known, secret

Among the given options, option C is the most appropriate one.

Answer is option C.

105. **As per the article, India's position with respect to the talks is:**

**A** Reduced taxes for agriculture and liberalisation for manufacturing sector

**B** Reduced taxes for agriculture and liberalisation for services sector

**C** Higher tariff for agriculture and liberalisation for manufacturing sector

**D** Higher tariff for agriculture and liberalisation for services sector

**Answer: D**

**Explanation:**

It is mentioned in the passage that India is reluctant to cut its own farm tariffs and has interest in liberalising trade in services.

Answer is option D.

## General knowledge

106. **The Statue of Unity, built as a tribute to the first was inaugurated on Oct 31, 2018.**

**A** Deputy Prime Minister of India

**B** Deputy Chief Minister of Gujarat

**C** President of India

**D** Vice President of India

**Answer: A**

107. **In August 2018, Intel was overtaken by as the world's largest chipmaker, has made a major move into the autonomous driving space, with its acquisition of Israeli visual sensor company Mobileye.**

**A** Google

**B** Samsung

**C** AMD

**D** Qualcomm

**Answer: B**

108. In 2017, Facebook acquired the video editing technology company named

- A Fayteq
- B BenQ
- C Instagram
- D Survival Vision

**Answer:** A

109. In October 2018, , the ex-director of Amazon joined as a Chief Technology and Product Officer (CTPO) for Chqbookcom., the Gurgaon based financial technology startup.

- A Sachin Arora
- B Prakash Malhotra
- C Rohit Bansal
- D Suresh Wadhvani

**Answer:** A

110. Recently the of the RBI Act came into spotlight amid the war between the Central government and the Reserve Bank of India (RBI). The provision in the RBI Act empowers the government to issue directions to the RBI.

- A Section 8
- B Section 7
- C Section 9
- D Section 10

**Answer:** B

111. The Prime Minister of India, on September 23, 2018, rolled out the , touted as the world's largest healthcare scheme. The insurance scheme provides an annual health cover of Rs 5 lakhs per family for secondary and tertiary care hospitalization.

- A Ayushman Bharat - Pradhan Mantri Jan Aarogya Yojana
- B Ayushman Desh - Pradhan Mantri Jan Aarogya Yojana
- C Ayushman jeevan - Pradhan Mantri Jan Aarogya Yojana
- D Ayushman Parivar - Pradhan Mantri Jan Aarogya Yojana

**Answer:** A

112. Recently, Tata Motor's, first SUV built on Land Rover's D8 architecture was developed in collaboration with Jaguar Land Rover. It is called

- A Tata Harrier
- B Tata Sierra

**C** Tata Hexa

**D** Tata Crux

**Answer: A**

113. **In September 2018, and were all set to acquire Aditya Birla Groups Food and grocery retail chain, even as investment bank exited the consortium.**

**A** Samara Capital, Amazon, Goldman Sachs

**B** Samara Capital, Alibabamazon, Barclays

**C** Soft Bank, Amazon, JP Morgan

**D** Softbank, Amazon, DeutscheBank

**Answer: A**

114. **The world's first holographic screen phone has a holographic screen that produces 3-D visuals without needing special glasses.**

**A** Hydrogen One

**B** Nitrogen One

**C** Carbon One

**D** Oxygen One

**Answer: A**

115. **Almost six months after chief economic advisor Arvind Subramanian left the finance ministry, the government has recently appointed to the post.**

**A** Krishnamurthy Subramanian

**B** Krishnan Subramanian

**C** Krishnakumar Subramanian

**D** Shaktikanta Das

**Answer: A**

116. **Assembly Polls were held in between November 2018 to December 2018.**

**A** Madhya Pradesh, Rajasthan, Chattisgarh, Mizoram and Telangana only

**B** Madhya Pradesh, Rajasthan, Chattisgarh and Mizoram only

**C** Madhya Pradesh, Rajasthan, and Chattisgarh only

**D** Madhya Pradesh, Rajasthan, Chattisgarh and Telangana only

**Answer: A**

117. The Political party floated by the actor turned politician Kamal Haasan is

- A Makkal Needhi Maiam
- B Makkal Munnetra Maiam
- C Makkal Munnetra Kazhagam
- D Makkal Kazhagam

**Answer:** A

118. In June 2018, was appointed MD and CEO of IDBI Bank in place of who took charge as Deputy Governor of Reserve Bank of India.

- A B Sriram, Mahesh Kumar Jain
- B R Raghuram, Vinnnet Kumar Jain
- C D Shriram, Rahul Kumar Jain
- D K Sridharan, Shyam Kumar Jain

**Answer:** A

119. In October 2018, received the Champions of the Earth, a top United Nations honour that recognises contribution in the field of environment and environment protection.

- A Shri Narendra Modi
- B Shri James Hansen
- C Shri Bill McKibben
- D Smt. Vandana Shiva

**Answer:** A

120. In September 2018, was appointed as the Vice Chairman of the University Grants Commission.

- A Prof. Satish Chandra
- B Prof. B. Ramachandra Rao
- C Prof. Rais Ahmed
- D Prof. Bhushan Patwardhan

**Answer:** D

121. In December 2017, bought Foodpanda India from its German parent Delivery in a stock deal pegged at about \$30 Million, entering a resurgent food-delivery market that has matured and become more competitive.

- A 01a, Hero
- B Swiggy, Siemens

- C Zomato, BOSCH
- D Uber, Volkswagen

**Answer:** A

122. In October 2018, Dish TV— India's first and largest direct-to-home (DTH) company, signed up as its brand ambassador as it is planning to woo the younger audience with its largest brand campaign.

- A Ranveer Singh
- B Sharukh Khan
- C Ayshman Khurana
- D Tiger Shroff

**Answer:** A

123. Who is the person shown in the picture below who won the Ramon Magsaysay Award 2018?



- A Sonam Wangchuk
- B Tenziz Ragbay
- C Rinzin Wangmo
- D Namgutzbhutia Dorji

**Answer:** A

124. The Nobel Peace Prize 2018 was awarded jointly to and for their efforts to end the use of sexual violence as a weapon of war and armed conflict;

- A Denis Mukwege, Naida Murad
- B Denis Margo, Naida Moralis
- C Denis Gurang, Nadia Posche
- D Denis Levis, Naida Johnes

**Answer:** A

125. From the beginning of 2018 which of these sectors has been allowed for automatic hundred per cent foreign direct investment (FDI) in India?

- A** Multi Brand Retailing
- B** Defence Manufacturing
- C** Banking
- D** Single Brand Retailing

**Answer: D**

126. **The 2018 Asian Games were held in how many cities of Indonesia?**  
(Note:- DO NOT include spaces in your answer)

**Answer:2**

127. **The Ministry of Agriculture and Farmer Welfare launched the Krishi Kalyan Abhiyan from the \_th month of 2018 which could lead and advise farmers on the means to improve their farming techniques.**  
(Note:- DO NOT include spaces in your answer)

**Answer:6**

128. **What was the rank of India in 2018 United Nation World Happiness Index Report?**  
(Note:- DO NOT include spaces in your answer)

**Answer:133**

129. **..... was the number of seats won by the party who got majority in Chhatisgarh in recent 2018 Vidhan Sabha elections.**  
(Note:-DO NOT include spaces in your answer)

**Answer:68**

130. **How many persons were awarded the Nobel Prize in Economic Sciences in 2018**  
(Note:- DO NOT include spaces in your answer)

**Answer:2**