

SNAP 2013

Quantitative Aptitude

1. Average of five numbers is 61. If the average of first and third number is 69 and the average of second and fourth number is 69, what is the fifth number ?

- A 31
- B 29
- C 25
- D 35

Answer: B

Explanation:

Let the five numbers be a, b, c, d, e in the given order.

$$a+b+c+d+e = 61 \times 5 = 305 \quad \text{--- Eq 1}$$

$$a+c = 69 \times 2 = 138$$

$$b+d = 69 \times 2 = 138$$

$$\text{From eq 1: } e = 305 - (138 + 138) = 305 - 276 = 29$$

B is the correct answer.

2. Kajal spends 55% of her monthly income on grocery, clothes and education in the ratio of 4 : 2 : 5 respectively. If the amount spent on clothes is Rs.5540/-, what is Kajal's monthly income?

- A Rs.55,400
- B Rs.54,500
- C Rs.55,450
- D Rs.55,650

Answer: A

Explanation:

Let the monthly income of Kajal be 100k

It is given that she spent 55% of the monthly income on grocery, clothes and education in the ratio of 4 : 2 : 5 respectively

i.e she spent 55k on grocery, clothes and education in the ratio of 4 : 2 : 5 respectively.

$$\text{Amount spent on clothes} = \frac{2}{11} \times 55k$$

$$10k = 5540 \text{ (given)}$$

$$\text{So } 100k = 55400$$

$$\text{Monthly income} = 100k = 55400$$

A is the correct answer.

3. The simple interest accrued on a sum of certain principal in 8 years at the rate of 13% per year is Rs.6500. What would be the compound interest accrued on that principal at the rate of 8% per year in 2 years?

- A Rs.1040

B Rs.1020

C Rs.1060

D Rs.1200

Answer: A

Explanation:

Simple Interest = $\frac{P \cdot T \cdot r}{100}$ where P is the principal, T is the time period and r is the rate of interest.

The simple interest accrued on a sum of certain principal in 8 years at the rate of 13% per year is Rs.6500

$$6500 = \frac{P \times 8 \times 13}{100}$$

$$P = \text{Rs. } 6250$$

$$\text{Compound Interest on 6250 for 2 years at 8\% rate of interest} = 6250 \left(1 + \frac{8}{100}\right)^2 - 6250$$

$$= \text{Rs. } 1040$$

A is the correct answer.

4. **8 men and 4 women together can complete a piece of work in 6 days. The work done by a man in one day is double the work done by a woman in one day. If 8 men and 4 women started working and after 2 days 4 men left and 4 new women joined, in how many more days will the work be completed?**

A 5 days

B 8 days

C 6 days

D 4 days

Answer: A

Explanation:

Let the work done by a woman in one day = x units

The work done by a man in one day = 2x units

8 men and 4 women together can complete a piece of work in 6 days.

$$\text{Total work} = (8 \times 2x + 4 \times x)6 = 120x \text{ units}$$

$$\text{Amount of work done by 8 men and 4 women in 2 days} = (8 \times 2x + 4 \times x)2 = 40x \text{ units}$$

The remaining 80x units will be done by 8 women and 4 men

$$\text{Number of days taken by 8 women to complete } 80x \text{ units of work} = \frac{80x}{16x}$$

$$= 5 \text{ days}$$

A is the correct answer.

5. **The cost of fencing a circular plot at the rate of Rs.15 per m is ` 3300. What will be the cost of flooring the plot at the rate of Rs.100 per sq m?**

A Rs.385000

B Rs.220000

C Rs.350000

D Cannot be determined

Answer: A

Explanation:

Let r be the radius of the circular plot

Perimeter of the plot = $2\pi r$

Cost of fencing the circular plot at Rs 15 per meter = $2\pi r * 15$

$$2\pi r * 15 = 3300$$

$$r = 35\text{m}$$

Cost of flooring per sq m = Rs 100

Area of the circular plot = πr^2

$$= 3850 \text{ sq m}$$

Cost of flooring the circular plot = $3850 * 100 = \text{Rs.} 385000$

A is the correct answer.

6. In an examination, Raman scored 25 marks less than Rohit. Rohit scored 45 more marks than Sonia. Rohan scored 75 marks which is 10 more than Sonia. Ravi's score is 50 less than, maximum marks of the test. What approximate percentage of marks did Ravi score in the examination, if he gets 34 marks more than Raman ?

A 90

B 70

C 80

D 60

Answer: B

Explanation:

Marks obtained by Rohan = 75

Marks obtained by Sonia = 65

Marks obtained by Rohit = $65 + 45 = 110$

Marks obtained by Raman = $110 - 25 = 85$

Marks obtained by Ravi = $85 + 34 = 119$

Maximum Marks = $119 + 50 = 169$

$$\text{Required percentage} = \frac{119}{169} \times 100$$

$$= 70\%$$

B is the correct answer.

7. An aeroplane flies with an average speed of 756 km/h. A helicopter takes 48 h to cover twice the distance covered by aeroplane in 9 h. How much distance will the helicopter cover in 18 h? (Assuming that flights are non-stop and moving with uniform speed.)

A 5010km

B 4875km

C 5760km

D 5103km

Answer: D

Explanation:

Speed of the aeroplane = 756 km/h.

It is given that twice the distance covered by the aeroplane in 9 hrs is equal to the distance covered by the helicopter in 48 hrs.

Distance covered by the aeroplane in 9 hrs = $756 \times 9 = 6804$ km.

Speed of the helicopter = $\frac{2 \times 6804}{48} = 283.5$

Distance covered by the helicopter in 18 hrs = $283.5 \times 18 = 5103$ km.

D is the correct answer.

8. Average weight of 19 men is 74 kgs, and the average weight of 38 women is 63 kgs. What is the average weight (rounded off to the nearest integer) of all the men and the women together?

- A 59kg
- B 65kg
- C 69kg
- D 67kg

Answer: D

Explanation:

The average weight of 19 men is 74 kgs

The average weight of 38 women is 63 kgs

The average weight of all the men and women together = $\frac{74 \times 19 + 63 \times 38}{19 + 38}$

= $\frac{3800}{57}$

= 66.66 kg

= approx 67 kg

D is the correct answer.

9. Mr Giridhar spends 50% of his monthly income on household items and out of the remaining he spends 50% on transport, 25% on entertainment, 10% on sports and the remaining amount of Rs. 900 is saved. What is Mr Giridhar's monthly income?

- A Rs.6000
- B Rs.12000
- C Rs.9000
- D Cannot be determined

Answer: B

Explanation:

Let the total monthly income of Mr Giridhar be 100g

The proportion of income he spends on household items = 50% i.e 50g

Of the remaining 50%, the proportion of income he spends on transport, entertainment and sports are 50%, 25%, 10%

15% of 50g = Amount saved

7.5g = 900(given)

100g = 12000

The monthly income of Mr Giridhar = Rs.12000

10. **A and B together can complete a task in 20 days. B and C together can complete the same task in 30 days. A and C together can complete the same task in 40 days. What is the respective ratio of the number of days taken by A when completing the same task alone to the number of days taken by C when completing the same task alone ?**

A 2 : 5

B 2 : 7

C 3 : 7

D 1 : 5

Answer: D

Explanation:

Let a, b, c be the amount of work done by A, B, C in 1 day and the total work be W units

$$(a+b) 20 = (b+c) 30 = (a+c) 40 = W$$

$$(a+b) 2 = (b+c) 3 = (a+c) 4$$

$$2a+2b = 3b+3c$$

$$b = 2a-3c$$

$$2a+2b = 4a+4c$$

$$2b = 2a+4c$$

$$2(2a-3c) = 2a+4c$$

$$2a=10c$$

$$a=5c$$

$$\text{Number of days taken by A to complete the work} = \frac{W}{a}$$

$$\text{Number of days taken by C to complete the work} = \frac{W}{c}$$

$$\text{Required ratio} = \frac{\frac{W}{a}}{\frac{W}{c}}$$

$$= 1:5$$

D is the correct answer.

11. **A certain amount was to be distributed among A, B and C in the ratio 2 :3 :4 respectively, but was erroneously distributed in the ratio 7:2:5 respectively. As a result of this, B got Rs.40 less. What is the amount ?**

A Rs.210

B Rs.270

C Rs.230

D Rs.280

Answer: A

Explanation:

Let the amount be. Rs x

$$\text{B's share in the ratio 2:3:4} = \frac{3}{9} \text{ of } x = \frac{x}{3}$$

$$\text{B's share in the ratio 7:2:5} = \frac{2}{14} \text{ of } x = \frac{x}{7}, \text{ therefore}$$

$$\frac{x}{3} - \frac{x}{7} = 40$$

$$\frac{4x}{21} = 40$$

$$x = (40 \times 21) / 4 = \text{Rs } 210$$

A is the correct answer.

12. Last year there were 610 boys in a school. The number decreased by 20 percent this year. How many girls are there in the school if the number of girls is 175 percent of the total number of boys in the school this year?

- A** 854
- B** 848
- C** 798
- D** 782

Answer: A

Explanation:

Number of boys in the school last year = 610

Number of boys in the school in the present year = 610×0.8 (It is given that the boys decreased by 20% this year)

$$= 488$$

Number of girls in the class = $1.75 \times \text{Number of boys}$

$$= 1.75 \times 488$$

$$= 854$$

A is the correct answer.

13. Rs.73,689/- are divided between A and B in the ratio 4 :7. What is the difference between thrice the share of A and twice the share of B?

- A** Rs.36,699
- B** Rs.46893
- C** Rs.20,097
- D** Rs.13,398

Answer: D

Explanation:

Rs.73,689/- are divided between A and B in the ratio 4 :7.

$$\text{Share of A} = \frac{4}{11} \times 73689 /- = 26796$$

$$\text{Share of B} = \frac{7}{11} \times 73689 /- = 46893$$

Now, we have to find the difference between thrice the share of A and twice the share of B

$$= 3 \times 26796 - 2 \times 46893 = \text{Rs. } 13398$$

14. The average marks in English subject of a class of 24 students is 56. If the marks of three students were misread as 44, 45 and 61 of the actual marks 48, 59 and 67 respectively, then what would be the correct average?

- A** 56.5

- B** 59
- C** 57.5
- D** None of these

Answer: D

Explanation:

Given,

Sum of the marks misread = $44+45+61 = 150$

Actual marks of the students = 48, 59 and 67

Actual marks sum = $48+59+67 = 174$

Difference = $174-150 = 24$

Correct average = $56 + \frac{24}{24}$

= 57

D is the correct answer.

15. The respective ratio between the present age of Manisha and Deepali is 5 : X. Manisha is 9 years younger than Parineeta. Parineeta's age after 9 years will be 33 years. The difference between Deepali's and Manisha's age is same as the present age of Parineeta. What will come in place of X?

- A** 23
- B** 39
- C** 15
- D** none of these

Answer: D

Explanation:

Let the present age of Manisha be $5a$

The present age of Deepali = Xa

The present age of Parineeta = $5a+9$

Parineeta's age after 9 years = $5a+18=33$

$5a=15$

$a=3$

The difference between Deepali's and Manisha's age is the same as the present age of Parineeta

$Xa-5a=5a+9$

$3X-15=15+9$

$3X=39 \implies X=13$

D is the correct answer.

16. Anand travelled 300 km by train and 200 km by taxi. It took him 5 h and 30 min. However, if he travels 260 km by train and 240 km by taxi, he takes 6 min more. The speed of the train is

- A** 100km/h
- B** 120km/h
- C** 80km/h

D 110km/h

Answer: A

Explanation:

1st case :

Distance travelled by train = 300km and by taxi = 200km

Let the speed of train be x km/hr and that of taxi be y km/hr.

Time taken by train = $\frac{300}{x}$ and time taken by taxi = $\frac{200}{y}$ hr

$$\frac{300}{x} = \frac{200}{y}$$

Total time taken = 5hrs 30 mins = $5\frac{1}{2}$ hrs

$$\frac{300}{x} + \frac{200}{y} = 5\frac{1}{2}$$

On solving we get : $600y + 400x = 11xy$ ---- Eq (1)

2nd case :

Distance travelled by train = 260 km and by taxi = 240 km

The speed of train and taxi will remain the same.

Time taken by train = $\frac{260}{x}$ hr and by taxi = $\frac{240}{y}$ hr

$$\frac{260}{x} + \frac{240}{y} = 5\text{hrs } 36\text{ mins}$$

$$\frac{260}{x} + \frac{240}{y} = 5\frac{3}{5} \text{ on solving we get,}$$

$1300y + 1200x = 28xy$ ---- Eq (2)

Solving 1 and 2 we get:

$x=100$ km/hr

Speed of the train = 100km/hr

A is the correct answer.

17. A certain number of people were supposed to complete a work in 24 days. The work, however, took 32 days, since 9 people were absent throughout. How many people were supposed to be working originally?

A 32

B 27

C 36

D 30

Answer: C

Explanation:

Let the total work be W units and the number of people employed to do it were 'x'

$$24 \times x = 32 \times (x-9)$$

$$3x = 4(x-9)$$

$$x=36$$

∴ Number of people who were supposed to work originally = 36

C is the correct answer.

18. Profit earned by an organization is distributed among officers and clerks where the individual amount received by them is in the ratio of 5 : 3. If the number of officers is 45 and the number of clerks is 80 and the amount received by each officer is Rs.25,000, what was the total amount of profit earned?

- A Rs.22 lakh
- B Rs.18.25lakh
- C Rs.18 lakh
- D Rs.23.25lakh

Answer: D

Explanation:

Profit received by each officer= Rs.25000

Therefore, Profit received by each clerk= $\frac{3}{5} \times 25000 = \text{Rs.}15000$

Therefore, Total earned profit

= Rs. (45×25000+80×15000)

= Rs.(1125000+1200000)

= Rs.23.25 lakh

D is the correct answer.

19. A shopkeeper labelled the price of his articles so as to earn a profit of 30% on the cost price. He, then sold the articles by offering a discount of 10% on the labelled price. What is the actual per cent profit earned in the deal?

- A 18%
- B 15%
- C 20%
- D none of these

Answer: D

Explanation:

Let the cost price of the article be Rs.100x.

Marked price = Rs.130x

S.P. of the article = $\frac{130x \times 90}{100} = \text{Rs.}117x$

Actual percent profit = $\frac{117-100}{100} \times 100$

=17%

D is the correct answer.

20. There are five boys and three girls who are sitting together to discuss a management problem at a round table. In how many ways can they sit around the table so that no two girls are together?

- A 1220
- B 1400
- C 1420
- D 1440

Answer: D

Explanation:

The five boys can be arranged on a round table in $(5-1)!$ ways i.e 24

Now there will be five spaces created between two boys.

So three girls can be seated in 5C_3 ways $\times 3! = 10 \times 6 = 60$

Total number of ways in which five boys and three girls can be seated = $24 \times 60 = 1440$

D is the correct answer.

21. **A pump can be operated both for filling a tank and for emptying it. The capacity of tank is 2400 m^3 . The emptying capacity of the pump is 10 m^3 per min higher than its filling capacity. Consequently, the pump needs 8 min less to empty the tank than to fill it. Find the filling capacity of the pump.**

A $45 \text{ m}^3/\text{min}$

B $30 \text{ m}^3/\text{min}$

C $50 \text{ m}^3/\text{min}$

D $55 \text{ m}^3/\text{min}$

Answer: C

Explanation:

Let the filling capacity of the pump be $x \text{ m}^3/\text{min}$

Then the emptying capacity of the pump = $(x+10) \text{ m}^3/\text{min}$

The time required for filling the tank = $\frac{2400}{x}$

The time required for emptying the tank = $\frac{2400}{x+10}$

The pump needs 8 min less to empty the tank than to fill it.

$$\frac{2400}{x} - \frac{2400}{x+10} = 8$$

$$\frac{300}{x} - \frac{300}{x+10} = 1$$

$$300(x+10) - 300(x) = x(x+10)$$

$$x^2 + 10x - 3000 = 0$$

$$(x+60)(x-50) = 0$$

$$x = 50 \text{ or } -60$$

Since x cannot be negative, $x = 50$

Filling capacity of the pump = $50 \text{ m}^3/\text{min}$

C is the correct answer.

22. **A plane left 30 min later than its scheduled time to reach its destination 1500 km away. In order to reach in time it increases its speed by 250 km/h. What is its original speed?**

A 1000km/h

B 750km/h

C 600km/h

D 800km/h

Answer: B

Explanation:

Let the usual speed of the plane be v kmph and the time taken by the plane to cover 1500m = t hrs

To reach the destination on time, the increased speed of the plane = $v+250$ kmph

Since he started 30 min later, the time taken should be $t - \frac{1}{2}$ hr

$$v \cdot t = (v+250)(t - \frac{1}{2})$$

$$v = (250t - 125) / 2$$

$$\frac{1500}{v+250} = t - \frac{1}{2}$$

$$\frac{1500}{500t - 250 + 250} = t - \frac{1}{2}$$

$$\frac{3}{t} = t - \frac{1}{2}$$

On solving for t , we get

$$t = 2 \text{ hrs}$$

$$\text{His original speed} = \frac{1500}{2} = 750 \text{ kmph}$$

B is the correct answer.

23. Mrs. X spends Rs. 535 in purchasing some shirts and ties for her husband. If shirts cost Rs. 43 each and the ties cost Rs.21 each, then what is the ratio of the shirts to the ties, that are purchased ?

A 1 : 2

B 2 : 1

C 2 : 3

D 3 : 4

Answer: B

Explanation:

Given,

Cost of each shirt = Rs. 43

Cost of each tie = Rs. 21

Let x, y be the number of shirts and ties purchased

$$x \cdot 43 + y \cdot 21 = 535$$

$$y = \frac{535 - 43x}{21}$$

when $x = 10$, y is an integer i.e $y = 5$

ratio of shirts to ties purchased = $10:5 = 2:1$

B is the correct answer.

24. A mixture of 12 kg of wheat flour costing Rs.16 per kg and 4 kg of corn flour costing Rs. 2 per kg is sold at Rs.16 per kg. What is the profit made in selling 40 kg of the mixture ?

A Rs.140

B Rs.280

C Rs.300

D Rs.420

Answer: A

Explanation:

The cost price of the mixture per kg = $\frac{12 \times 16 + 4 \times 2}{12 + 4}$

= Rs. 12.5

Selling price of the mixture per kg = Rs 16

Profit made on selling 1 kg of mixture = 16-12.5=Rs. 3.5

Profit made o selling 40 kg of mixture = 40*3.5=Rs. 140

A is the correct answer.

25. **The number of ways in which a committee of 3 ladies and 4 gentlemen can be appointed from a meeting consisting of 8 ladies and 7 gentlemen, if Mrs. X refuses to serve in a committee if Mr. Y is its member, is**

- A** 1960
- B** 3240
- C** 1540
- D** none of these

Answer: C

Explanation:

Here we have two cases:

Case 1: If Y is a member of the committee

We have to select 3 other gentlemen and 3 ladies from 8 ladies and 5 gentlemen (Since If Y is a member of the committee, X will not be a member of the committee)

$$= {}^7C_3 \times {}^6C_3 = 35 \times 20 = 700.$$

Case 2: If Y is not a member of the committee

We have to select 4 gentlemen and 3 ladies from 8 ladies and 6 gentlemen (Since Y is a member of the committee)

$$= {}^8C_3 \times {}^6C_4 = 56 \times 15 = 840$$

Total cases = 700+840 = 1540

C is the correct answer.

26. **A family consists of a grandfather, 5 sons and daughters and 8 grandchildren. They are to be seated in a row for dinner. The grandchildren wish to occupy the 4 seats at each end and the grandfather refuses to have a grandchild on either side of him. The number of ways in which the family can be made to sit is**

- A** 11360
- B** 11520
- C** 21530
- D** none of the these

Answer: D

Explanation:

Total no. of seats = 1 grandfather+ 5 sons and daughters + 8 grandchildren

= 14.

The grandchildren can occupy the 4 seats on either side of the table in ${}^8P_4 \cdot 4!$ ways
The grandfather can occupy a seat in $(5-1) = 4$ ways (4 gaps between 5 sons and daughter).

The remaining seats can be occupied in $5! = 120$ ways (5 seats for sons and daughter).

Total number of required ways = $8! \cdot 4 \cdot 120$

$= 8! \cdot 480$

D is the correct answer.

27. **After distributing the sweets equally among 25 children, 8 sweets remain. Had the number of children been 28, 22 sweets would have been left after equally distributing. What is the smallest possible total number of sweets ?**

- A** 328
B 348
C 358
D Data inadequate

Answer: C

Explanation:

Let the total number of chocolates be C

Let chocolates received by each child = x

After distributing the sweets equally among 25 children, the number of chocolates left = 8

$$25x + 8 = C \quad \text{--- Eq 1}$$

Had there been 28 children, the number of chocolates that would be required = 22

$$25x + 8 - 22 \text{ should be divisible by } 28 \quad \text{--- Eq 2}$$

$$25x - 14 \text{ should be divisible by } 28$$

$$28x - (3x + 14) \text{ should be divisible by } 28$$

$$(3x + 14) \text{ should be divisible by } 28.$$

$$\Rightarrow x = 14$$

$$\text{The total number of chocolates} = 25x + 8 = 25 \cdot 14 + 8 = 358$$

C is the correct answer.

28. **I have to reach a certain place at a certain time and I find that I shall be 15 min too late, if I walk at 4 km an hour, and 10 min too soon, if I walk at 6 km an hour. How far have I to walk?**

- A** 25 km
B 5 km
C 10 km
D none of these

Answer: B

Explanation:

Let the distance he has to travel to reach the place = x km

and the time given to reach the place = y minutes.

If he walks 4 km in an hour he is 15 minutes late ie if he walks with a speed 4 km/hour (4km/60min) he will take y+15 minutes

distance = time*speed

$$\text{ie } x = \frac{4}{60} \cdot (y+15)$$

$$60x = 4(y+15)$$

$$15x = y+15 \quad \text{-- Eq (1)}$$

if he walks 6km in an hour he is 10 minutes early ie if he walks with a speed of 6km/hour he will take $y-10$ minutes.

$$x = \frac{6}{60} * (y-10)$$

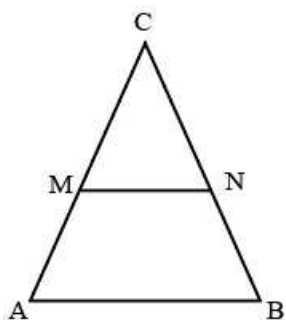
$$10x = (y-10) \quad \text{-- Eq (2)}$$

On solving Eq 1, 2, we get

$$y = 60 \text{ minutes}, x = 5 \text{ km}$$

B is the correct answer.

29. In the triangle ABC, MN is parallel to AB. Area of trapezium ABNM is twice the area of triangle CMN. What is ratio of CM : AM ?



A $\frac{1}{(\sqrt{3}+1)}$

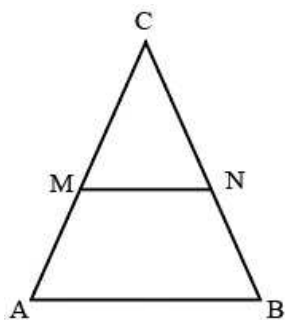
B $\frac{(\sqrt{3}-1)}{2}$

C $\frac{(\sqrt{3}+1)}{2}$

D none of these

Answer: C

Explanation:



We have $MN \parallel AB$

Now let area of CMN be A

so area of ABNM will be 2A

Now Area of triangle ABC will be 3A

Now since $MN \parallel AB$

so we can say CMN is similar to CAB

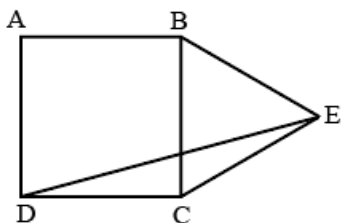
So we can say

$$\left(\frac{CM}{CA}\right)^2 = \frac{\text{Area of CMN}}{\text{Area of CAB}}$$

$$\text{so we can say } CM : CA = 1 : \sqrt{3}$$

$$\text{Now therefore } CM : AM = 1 : \sqrt{3} - 1 = \sqrt{3} + 1 : 2$$

30. If ABCD is a square and BCE is an equilateral triangle, what is the measure of the angle DEC?



- A 15°
- B 30°
- C 20°
- D 45°

Answer: A

Explanation:

$$\angle DCB = 90^0 \text{ (Since each angle in a square is } 90^0 \text{)}$$

$$\angle BCE = 60^0 \text{ (Since each angle in an equilateral triangle is } 60^0 \text{)}$$

$$\angle DCE = 90^0 + 60^0 = 150^0$$

In $\triangle DCE$, the sides DC and CE are equal, so the angles opposite to them are equal.

$$\begin{aligned} \angle DCE = \angle CDE &= \frac{180-150}{2} \\ &= 15^0 \end{aligned}$$

A is the correct answer.

31. what is the value of $\frac{\log_{27} 9 \times \log_{16} 64}{\log_4 \sqrt{2}}$?

- A $\frac{1}{6}$
- B $\frac{1}{4}$
- C 8
- D 4

Answer: D

Explanation:

$$\frac{\log_{27} 9 \times \log_{16} 64}{\log_4 \sqrt{2}} \quad ?$$

$$= \frac{\log_3 3^2 \times \log_2 2^6}{\log_{(\sqrt{2})^4} \sqrt{2}}$$

$$= \frac{\frac{2}{3} \times \frac{6}{4}}{\frac{1}{4}}$$

$$= 4$$

D is the correct answer.

32. At a college football game, $\frac{4}{5}$ of the seats in the lower deck of the stadium were sold. If $\frac{1}{4}$ of all the seating in the stadium is located in the lower deck, and if $\frac{2}{3}$ of all the seats in the stadium were sold, then what fraction of the unsold seats in the stadium was in the lower deck?

A $\frac{3}{20}$

B $\frac{1}{6}$

C $\frac{1}{5}$

D $\frac{1}{3}$

Answer: A

Explanation:

Let the number of seats in the stadium = x

Number of seats in the lower deck = a and the number of seats in the upper deck be b

$$x = a + b$$

$$a = \frac{x}{4} \text{ and } b = \frac{3x}{4}$$

Now in the lower deck $\frac{4a}{5}$ seats were sold and $\frac{a}{5}$ seats were unsold.

$$\text{Number of total seats sold in the stadium} = \frac{2x}{3}$$

$$\text{Number of unsold seats in the lower deck} = \frac{a}{5} = \frac{x}{20}$$

$$\text{Number of unsold seats in the stadium} = \frac{x}{3}$$

$$\text{Required fraction} = \frac{\frac{x}{20}}{\frac{x}{3}}$$

$$= \frac{3}{20}$$

A is the correct answer.

33. A train starts from Delhi at 6 : 00 AM and reaches Ambala Cantt at 10 AM. The other train starts from Ambala Cantt at 8 AM and reaches Delhi at 11:30 AM. If the distance between Delhi and Ambala Cantt. is 200 km, then at what time did the two trains meet each other ?

A 8 : 56 AM

B 8 : 46 AM

C 7 : 56 AM

D 8 : 30 AM

Answer: A

Explanation:

Let t be the start time

A starts at t, while B starts at (t-2)

Total distance covered = 200 km

As they are travelling in the opposite direction,

$$\text{Relative distance covered i.e } 200 = ((200/4)*t) + ((400/7)*(t-2))$$

$$t = 176 \text{ min i.e } 2 \text{ hrs } 56 \text{ min from start (6 am)}$$

Therefore they meet at 8.56 am.

A is the correct answer.

34. A ship, 40 km from the shore, springs a leak which admits $3\frac{3}{4}$ tonnes of water in 15 min. 60 tonnes would suffice to sink her, but the ship's pumps can throw out 12 tonnes of water in one hour. Find the average rate of sailing, so that it may reach the shore just as it begins to sink.

- A** $1\frac{1}{2}$ km/h
B $2\frac{1}{2}$ km/h
C $3\frac{1}{2}$ km/h
D 2 km/h

Answer: D

Explanation:

Quantity of water let in by the leak in 1 hr = 15 tonnes

Quantity of water thrown out by the pumps in 1 hr = 12 tonnes

Net quantity of water filled in the ship in 1 hour = $15 - 12 = 3$ tonnes

60 tonnes water is filled in = $60/3 = 20$ hours

Required speed = $40/20 = 2$ kmph

35. Three persons start walking together and their steps measure 40 cm, 42 cm and 45 cm respectively. What is the minimum distance each should walk so that each can cover the same distance in complete steps?

- A** 25 m 20 cm
B 50 m 40 cm
C 75 m 60 cm
D 100 m 80 cm

Answer: A

Explanation:

Minimum distance will be LCM of 40 cm, 42 cm and 45 cm

$$40 = 2^3 \times 5$$

$$42 = 2 \times 3 \times 7$$

$$45 = 3^2 \times 5$$

$$\text{LCM} = 2^3 \times 3^2 \times 5 \times 7 = 2520 \text{ cm}$$

$$= 25 \text{ m } 20 \text{ cm}$$

A is the correct answer.

36. Let x denote the greatest 4-digit number which when divided by 6, 7, 8, 9 and 10 leaves a remainder of 4, 5, 6, 7 and 8 respectively. Then, the sum of the four-digits of x is

- A** 25
B 18
C 20
D 22

Answer: A

Explanation:

The least number which when divided by 6, 7, 8, 9 and 10 leaves a remainder of 4, 5, 6, 7 and 8 respectively is $\text{LCM}(6, 7, 8, 9, 10) - 2$
 $= 2520 - 2 = 2518$

The number will be in the form of $k * \text{LCM}(6, 7, 8, 9, 10) - 2$

When $k = 3$, the value of $x = 7558$

When $k = 4$, the value of $x = 10078$

So the value of $x = 7558$

Sum of the digits of $x = 7 + 5 + 5 + 8 = 25$

A is the correct answer.

37. What is the maximum sum of the terms in the arithmetic progression $25, 24\frac{1}{2}, 24, \dots$?

A $637\frac{1}{2}$

B 625

C $662\frac{1}{2}$

D 650

Answer: A

Explanation:

It is a decreasing AP $25, 24.5, 24, 23.5, \dots$

The sum will be largest, if n th term is zero then

$$25 + (n-1)(-.5) = 0$$

$$\Rightarrow n = 51$$

after 51 terms AP contains -ve terms

so, max sum will be obtained upto 50/51th term

$$S = \frac{51}{2} * (25 + 0) = 637.5$$

Instructions [38 - 40]

In a team there are 240 members (males and females). Two-third of them are males. Fifteen percent of males are graduates. Remaining males are non-graduates. Three-fourth of the females are graduates. Remaining females are non-graduates

38. What is the difference between the number of females who are non-graduates and the number of males who are graduates?

A 2

B 24

C 4

D 116

Answer: C

Explanation:

Total members : 240

Males = $\frac{2}{3} (240) = 160$

so Females = $240 - 160 = 80$

Graduate Males = $160(0.15) = 24$

Non graduate males = $160 - 24 = 136$

Graduate Females = $(0.75) 80 = 60$

So non graduate females = $80 - 60 = 20$

Now difference between the number of females who are non-graduates and the number of males who are graduates : $24 - 20 = 4$

39. What is the sum of the number of females who are graduates and the number of males who are non-graduates?

A 184

B 96

C 156

D 196

Answer: D

Explanation:

Total members = 240

Number of males = $\frac{2}{3} \times 240 = 160$

Number of males who are non-graduates = $\frac{85}{100} \times 160 = 136$

Number of females = $\frac{1}{3} \times 240 = 80$

Number of females who are graduates = $\frac{3}{4} \times 80 = 60$

Sum of male non graduates and female graduates = $136 + 60 = 196$

D is the correct answer.

40. What is the ratio between the total number of males and the number of females who are non-graduates?

A 6:1

B 8:1

C 8:3

D 5:2

Answer: B

Explanation:

Total members in the team = 240

Males = $\frac{2}{3} \times 240 = 160$

Females = $\frac{1}{3} \times 240 = 80$

Number of females who are non graduates = $\frac{1}{4} \times 80 = 20$

ratio between the total number of males and the number of females who are non-graduates

= 160:20

= 8:1

B is the correct answer.

Reasoning

41. In a certain code language, 'DRINK' is coded as 'JMHQC' and 'BLOTS' is coded as 'RSNKA'. In the same code language, 'HONEY' will be coded as '.....'

A XDMOG

B GNMDX

C XDMNG

D DXMGN

Answer: C

Explanation:

The pattern is as follows:

Previous alphabets of DRINK is CQHMJ respectively, now they have reversed the order, interchanged the first term with last, the second term with second last and so on.

So the term "DRINK" will be=JMHQC

Similarly, HONEY will be XDMNG.

Option C

Instructions [42 - 43]

Twenty students are standing in a straight line facing north. Rina is standing sixth from the left end. There are only three students between Rina and Shweta. Radha is standing exactly between Shweta and Rina. Tina is standing sixth to the right of Radha. Anita is standing fourth from the right end of the line. There are more than four students between Rina and Tina.

42. How many people are standing between Anita and Tina

A one

B two

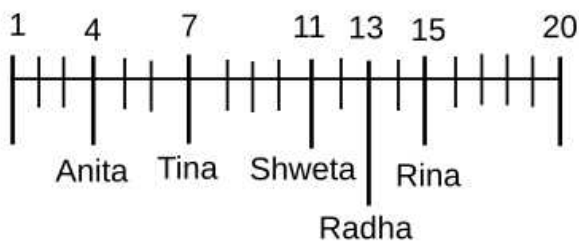
C three

D none

Answer: B

Explanation:

We can make the following diagram:



2 people are standing between Anita and Tina.

Option B

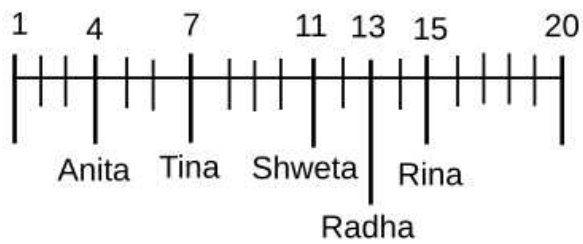
43. What is Shweta's position with respect to Anita?

- A** Sixth to the left
- B** Eighth to the left
- C** Seventh to the left
- D** Ninth to the left

Answer: C

Explanation:

We can make the following diagram:

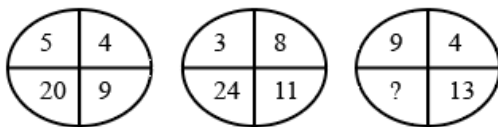


Option C is correct.

Instructions [44 - 45]

What number will replace the question mark (?) in the questions below :

1	2	3	2	10	12
2	5	12	10	16	13
1	2	1	?	10	24



44. choose the correct answer for figure 2

- A** 36
- B** 117
- C** 52
- D** 26

Answer: A

Explanation:

$$5 \times 4 = 20$$

$$3 \times 8 = 24$$

$$9 \times 4 = 36$$

Option A

45. choose the correct answer for figure 1

- A** 5
- B** 11
- C** 13
- D** 8

Answer: C

Explanation:

Sum of each column:

4, 9, 16, __, 36....

Thus the sum of column 4 = 25

$$2+10+x=25$$

$$x=13$$

Thus, Option C is correct.

46. **A cube has six sides each of a different colour. The red side is opposite black. The green side is between red and black. The blue side is adjacent to white and the brown side is adjacent to blue. The red side is face down. The side opposite brown is**

- A** red
- B** black
- C** white
- D** green

Answer: C

Explanation:

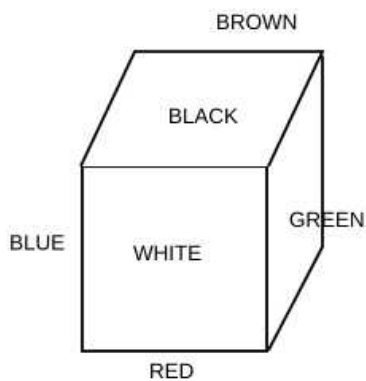
The red side is opposite black.

The green side is between red and black.

The blue side is adjacent to white and the brown side is adjacent to blue.

The red side is face down.

We can draw the following figure:



The side opposite brown is white.

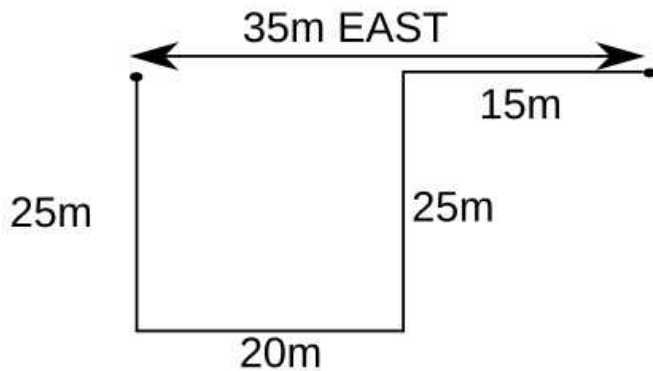
Option C

47. **Rajesh walked 25 metres towards South. Then he turned to his left and walked 20 metres. He then turned to his left and walked 25 metres. He again turned to his right and walked 15 metres. At what distance is he from the starting point and in which direction?**

- A** 60 metres - East
- B** 35 metres - East
- C** 35 metres - North
- D** 40 metres - East

Answer: B

Explanation:



The final distance will be 35m.

OPTION B

48. In these questions, there are four groups of letters, words or numbers listed as (a), (b), (c) and (d). One of the groups does not belong to the same category as others. Find the odd one out. Unscramble the letters in the given words and find the odd one out

- A** UMRSME
- B** EIWNTR
- C** PIGRSN
- D** LCUOD

Answer: D

Explanation:

UMRSME=Summer

EIWNTR= Winter

PIGRSN= Spring

LCUOD=cloud

The last word is the odd one out.

Option D

49. Shyam's house, his office and his gym are all equidistant from each other. The distance between any 2 of them is 4 km. Shyam starts walking from his gym in a direction parallel to the road connecting his office and his house and stops when he reaches a point directly east of his office. He then reverses direction and walks till he reaches a point directly south of his office. The total distance walked by Shyam is

- A** 9 km

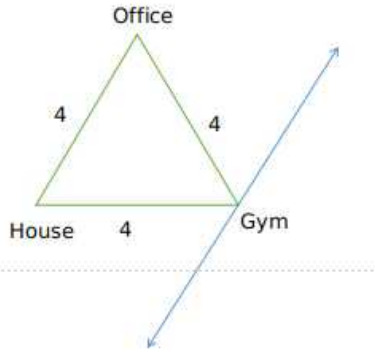
- B** 6 km
- C** 16 km
- D** 12 km

Answer: D

Explanation:

The house , the gym and the office forms an equilateral triangle with each side = 4Km.

Now The path covered by shyam will be :



The distance covered will be $4+4+4 = 12\text{km}$

Instructions [50 - 51]

In each of the questions below, one term in the given number series is wrong. Find out the wrong term

50. 11, 5, 20, 12, 40, 26, 74, 54

- A** 5
- B** 20
- C** 40
- D** 26

Answer: C

Explanation:

Every even term increases by 7,14,28...subsequently.

Similarly, every odd term will increase by 9,18,36... if the fifth term is replaced by 38.

Option C

51. 8, 14, 26, 48, 98, 194, 386

- A** 14
- B** 48
- C** 98
- D** 194

Answer: B

Explanation:

Every subsequent term is two less than the double of the previous term.

So

$$14 = 2 \times 8 - 2$$

$$26 = 2 \times 14 - 2$$

$$50 = 2 \times 26 - 2$$

Option B

Instructions [52 - 53]

In each of these questions two statements are given followed by two conclusions numbered I and II. Consider the two given statements to be. True even if they seem to be absurd. Mark answer as

52. **Statements: All bulbs are birds. Some birds are butterflies.**

Conclusions:

I. All butterflies are bulbs.

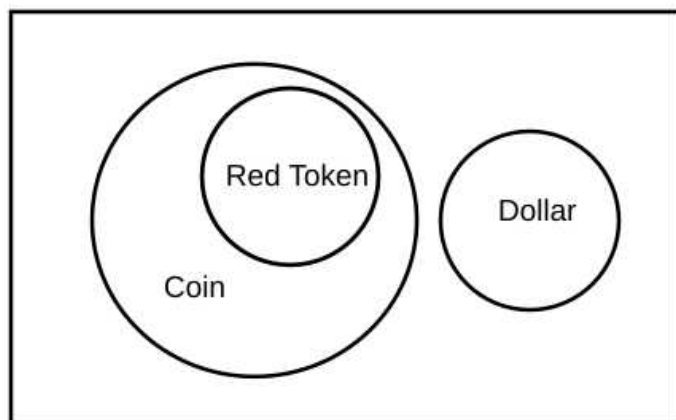
II. Some bulbs are butterflies.

- A** if only conclusion II follows
- B** if only conclusion I follows
- C** if either conclusion I or II follows
- D** if neither conclusion I nor II follows

Answer: B

Explanation:

Here **Statements:** No coin is a dollar. Red token is a coin.



- I. Red token is not a dollar: This statement is definitely true.
- II. Red token may not be a dollar: Ambiguous statement

Option B

53. **Statements: No coin is a dollar. Red token is a coin.**

Conclusions:

I. Red token is not a dollar.

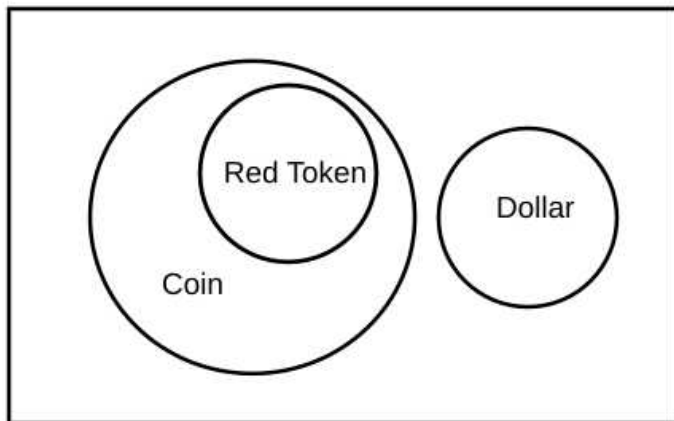
II. Red token may not be a dollar

- A** if only conclusion II follows
- B** if only conclusion I follows
- C** if either conclusion I or II follows
- D** if neither conclusion I nor II follows

Answer: B

Explanation:

Here **Statements:** No coin is a dollar. Red token is a coin.



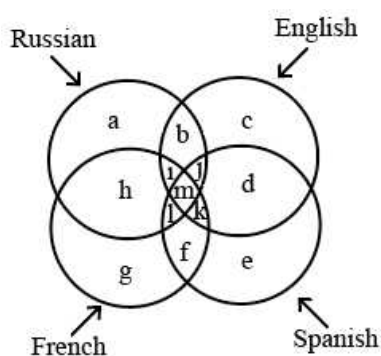
I. Red token is not a dollar: This statement is definitely true.

II. Red token may not be a dollar: Ambiguous statement

Option B

Instructions [54 - 58]

Staff employed in a UNESCO office in Paris are represented by four intersecting circles as in the given diagram. Each circle represents people who can read and write English, French, Spanish and Russian. Strength of people in each circle is also shown alongside. Study the diagram to answer the questions that follow.



$$a = 40 \quad c = 2a \quad e = \frac{1}{2}a \quad g = 2E$$

54. How many people know only Spanish ?

A 10

B 20

C 40

D 60

Answer: B

Explanation:

e is the set of people who only know Spanish.

$$e = \frac{1}{2}a$$

$$e = 20$$

Option B

55. How many people can read and write any one language except French ?

A 100

B 160

C 140

D 120

Answer: C

Explanation:

People who can read and write any one language except French= $a+c+e$

$a=40$

$c=2a$

$e=(1/2)a$

i.e $40+80+20=140$

Option C

56. People who can read and write all the language except Spanish, are represented by

A k

B g

C b

D i

Answer: D

Explanation:

'i' can read and write only in Spanish.

Option D

57. People who cannot read and write Russian, English and French, are represented by :

A l

B j

C h

D e

Answer: D

Explanation:

'e' represents the staff who speak & write only Spanish

Option D

58. People who cannot read and write Spanish and French but are conversant with English and Russian are represented by:

- A** b
- B** j
- C** m
- D** k

Answer: A

Explanation:

b represents the staff who can speak & write English and Russian but cannot in Spanish and French

Option A is correct.

59. **A watch is a minute slow at 1 p.m. on Tuesday and 2 minutes fast at 1 p.m. on Thursday. When did it show the correct time ?**

- A** 1:00 a.m. on Wednesday
- B** 5:00 a.m. on Wednesday
- C** 1:00 p.m. on Wednesday
- D** 5:00 p.m. on Wednesday

Answer: B

Explanation:

A watch is a minute slow at 1 p.m. on Tuesday and 2 minutes fast at 1 p.m. on Thursday.

So the watch gains 3 minutes in 48 hours.

It will show the exact time when it would have gained 1 minute from the initial state.

$$1/3 = x/48$$

$$x = 16 \text{ hours.}$$

i.e at 5:00 am Wednesday

Option B

60. **If NOR is coded as 2-3-6, then how should REST be coded in the same code language?**

- A** 6-19-6-7
- B** 5-19-5-8
- C** 6-19-7-8
- D** 6-18-5-8

Answer: C

Explanation:

NOR is coded as 2-3-6, then how should REST

$$M=1$$

$$N=2$$

$$O=3$$

$$P=4$$

..

..

REST=6-19-7-8

61. In a certain code language, '3a, 2b, 7c' means 'Truth is Eternal', '7c, 9a, 8b, 3a' means 'Enmity is not Eternal' and '9a, 4d, 2b, 8b' means 'Truth does not perish'. Which of the following means 'Enmity' in that language?

A 3a

B 7c

C 8b

D 9a

Answer: C

Explanation:

'3a, 2b, 7c' means 'Truth is Eternal'

'7c, 9a, 8b, 3a' means 'Enmity is not Eternal'

'9a, 4d, 2b, 8b' means 'Truth does not perish'.

Eternal= 7c

is = 3a

not = 9a

'Enmity' in that language 8b

Option C

62. If 'CONSTABLE' is coded as 91, what will be the code number for 'STABLE' ?

A 97

B 59

C 79

D 75

Answer: B

Explanation:

The sum of the alphabetical order of CONSTABLE =91

STABLE= 19+20+1+2+12+5= 59

Option B

63. Ravi has Rs 3 more than Ramu, but then Ramu wins on the horses and triples his money so that he now has Rs 2 more than the original amount of money that the two boys had between them. How much money did Ravi and Ramu have between them before Ramu's win?

A Rs 9

B Rs 11

C Rs 13

D Rs 15

Answer: C

Explanation:

Ramu has x rupees.

Ravi has $x+3$ rupees.

Total $=2x+3$

Ramu wins on the horses and triples his money so that he now has Rs 2 more than the original amount of money that the two boys had between them.

$$3x = 2x+5$$

$$\Rightarrow x=5$$

Total =13

Option C

64. A woman introduces a man as the son of the brother of her mother. How is the man related to the woman ?

A Nephew

B son

C cousin

D uncle

Answer: C

Explanation:

Brother of her mother will be Uncle.

Son of **Brother of her mother** will be Cousins.

Option C

Instructions [65 - 66]

In a school the periodical examinations are held every month. In a session during April 'X'- March 'X + 1', Rakesh a student of class IV, section B appeared for each of the periodical exams. The maximum total marks in each periodical exam is 50. The aggregate marks obtained by him in each periodical exam are given below.

Year X											Year X + 1	
Months	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Marks	35	37	38	38	41	43	45	45	46	47	48	49

65. The total marks obtained in December X is what per cent more than the total marks obtained in June X ?

A 12.8%

B 20.05%

C 24.05%

D 21.05%

Answer: D

Explanation:

Total marks obtained in December X = 46

The total marks obtained in June X = 38

Per cent increase= $(46-38)/38= 21.05\%$

Option D

66. (In which periodical exams did Rakesh obtain the highest percentage increase in marks over the previous periodical exams?)

- A** May
- B** October
- C** December
- D** September

Answer: A

Explanation:

The highest percentage increase in marks over the previous periodical exams:

May: 2/35

October: 2/43

December: 1/45

September: 2/41

So may have the highest percentage increase.

Option A

Instructions [67 - 69]

India is a multi-religion, multi-language and multi-cultural country where people belonging to different religions join in celebrating the festivities together. The Indian Government declares such big occasions as public holidays to enable the citizens to enjoy and foster the feelings of brotherhood. Five broad-minded persons belonging to different religions were asked to give their preferences of four such festivals which they would like to enjoy with likeminded brethren. Their options are

- A. Holi, Dussehra, Diwali, Guru Nanak Birthday
- B. Shivratri, Christmas, Onam, Eid
- C. Holi, Shivratri, Christmas, Diwali
- D. Holi, Dussehra, Guru Nanak Birthday, Eid
- E. Christmas, Diwali, Onam, Guru Nanak Birthday

67. Which pair celebrates Christmas and Onam but not Dussehra and Holi?

- A** A and C
- B** A and E
- C** B and D
- D** B and E

Answer: D

Explanation:

- A. Holi, Dussehra, Diwali, Guru Nanak Birthday
- B. Shivratri, Christmas, Onam, Eid
- C. Holi, Shivratri, Christmas, Diwali
- D. Holi, Dussehra, Guru Nanak Birthday, Eid
- E. Christmas, Diwali, Onam, Guru Nanak Birthday

Among the given option Pair B and C celebrates Christmas and Onam but not Dussehra and Holi.

Option D

68. Which pair does not participate in Eid and Onam but joins in Holi?

A A and B

B A and C

C C and D

D D and E

Answer: B

Explanation:

A. Holi, Dussehra, Diwali, Guru Nanak Birthday

B. Shivratri, Christmas, Onam, Eid

C. Holi, Shivratri, Christmas, Diwali

D. Holi, Dussehra, Guru Nanak Birthday, Eid

E. Christmas, Diwali, Onam, Guru Nanak Birthday

A and C does not participate in Eid and Onam but joins in Holi.

69. Who enjoys Holi and Eid but not Diwali and Christmas?

A B

B C

C D

D E

Answer: C

Explanation:

A. Holi, Dussehra, Diwali, Guru Nanak Birthday

B. Shivratri, Christmas, Onam, Eid

C. Holi, Shivratri, Christmas, Diwali

D. Holi, Dussehra, Guru Nanak Birthday, Eid

E. Christmas, Diwali, Onam, Guru Nanak Birthday

D enjoys Holi and Eid but not Diwali and Christmas

70. Which of the following expressions will be true if the expression $R > O = A > S < T$ as definitely true?

A $O > T$

B $S < R$

C $T < A$

D $S = O$

Answer: B

Explanation:

From the given series $R > O = A > S$ part will be $R > S$ is a true statement.

Instructions [71 - 73]

Read the following Passage carefully and answer the questions below:

A TED talk (the acronym stands for Technology, Entertainment, and Design) is one of the routes to academic stardom that didn't exist a decade ago. (The 30th anniversary celebration aside, curators only began posting fame-making free online videos in 2006.) Although TED plays an inordinate role in setting the tone for how ideas are conveyed—not only because of the reach of its videos but also through spinoffs like regional “TEDx” events and the TED Radio Hour, one of the few places nonpolicy intellectuals get substantial on-air time—it's just one of a number of platforms that are changing the ecology of academic celebrity. These include similar ideas-in-nuggets conclaves, such as the Aspen Ideas Festival and PopTech, along with huge online courses and—yes, still—blogs. These new, or at least newish, forms are upending traditional hierarchies of academic visibility and helping to change which ideas gain purchase in the public discourse.

In a famous essay, “The Unbearable Ugliness of Volvos,” first published in the early 90s, the literary scholar Stanley Fish wrote that “the flourishing of the lecture circuit has brought with it new sources of extra income ... [and] an ever-growing list of stages on which to showcase one's talents, and geometric increase in the availability of the commodities for which academics yearn, attention, applause, fame, and ultimately, adulation of a kind usually reserved for the icons of popular culture.” Fish was Exhibit A among professors taking advantage of such trends, and his trailblazing as a lit-crit celebrity inspired the dapper, globe-trotting littheory operator Morris Zapp, a character in David Lodge's academic satire *Small World*. But the world Fish was describing, where no one could live-tweet the lectures, let alone post the talks for worldwide distribution, now seems sepia-toned. “If David Lodge's Morris Zapp were alive and kicking today,” observes John Holbo, an associate professor of philosophy at the National University of Singapore, and blogger at Crooked Timber and the Valve, “he'd be giving a TED talk, not an MLA talk. Which is to say: He wouldn't be doing Theory. He probably wouldn't be in an English department.”

71. The passage is mainly about:

- A Technology, Entertainment, and Design
- B Turning over the conventional.
- C Gaining popular adulation.
- D Changing presentations

Answer: B

72. The phrase “sepia-toned” implies:

- A The end of an era.
- B The way things were.
- C The brown pigment
- D The time bound nature of things.

Answer: A

73. Which of the following cannot be inferred from the passage?

- A TED is the future
- B Theory can no longer be counted on
- C Philosophy is best understood through demos
- D TED is irreplaceable.

Answer: D

Instructions [74 - 77]

Read the following Passage carefully and answer the questions below:

A spectre is haunting the world, just as Karl Marx and Friedrich Engels wrote in the Communist Manifesto of 1848. This time, however, it is not the spectre of communism but that of neoliberalism. Just as Marx and Engels reported of 'a holy alliance to exorcise this spectre,' there is once again an alliance, whether holy or unholy, that has formed to chase the ghost of neoliberalism from the world stage. In any case, it is a curious alliance that has committed to fighting neoliberalism: Religious leaders and artists, environmental activists and globalisation critics, politicians of the left and the right as well as trade unionists, commentators and academics. They all share a passion to unmask neoliberalism as an inhuman, anti-social, and potentially misanthropic ideology or as a cynical exercise by strangely anonymous forces that wish to exploit the world to their own advantage.

The members of this colourful alliance against neoliberalism are as united in their opposition to neoliberalism as they are diverse. This suggests that neoliberalism cannot be too clearly defined as a concept. Rather, it is a broad umbrella under which very different groups with various points of view can meet. In the church of anti-neoliberalism, there is a place for anyone who believes that neoliberalism stands in the way of reaching his or her political goals. This may also explain the lack of any clear and coherent definition of neoliberalism among its dissenters.

Yet the most curious characteristic of neoliberalism is the fact that these days hardly anyone self-identifies as a neoliberal. In former times, ideological debates were fought between, say, conservatives and socialists, collectivists and individualists. While there may not have been any other agreement between these opposing groups, at least they would have agreed about their respective identities. A socialist would not have felt offended by a conservative calling him a socialist and vice-versa. In present-day debates around neoliberalism, on the other hand, most accused of holding 'neoliberal' views would not accept being called 'neoliberal.' Either they would insist on being something else (whether it is 'liberal,' 'classical liberal,' or 'libertarian'), or they would simply claim to be misunderstood by their opponents. In any case, scarcely anybody wants to be a 'neoliberal' any more. For example, in an online survey of the readers of Andrew Norton's blog, out of more than 1,200 participants not a single person selfidentified with the term, while 'classical liberal,' 'conservative,' and 'libertarian' were strong responses. These are strange debates indeed when the enemy you are fighting claims he does not exist.

74. According to the passage, the spectre, is being chased by all except which one of the following:

- A Religious leaders and artists
- B Environmental activists and globalisation critics.
- C Communists and socialists.
- D Politicians and trade unionists

Answer: C

75. Why, according to the passage, is there an association against the phenomenon of neoliberalism?

- A Because they cannot face it alone
- B Because it is easy to collaborate against it.
- C Because they resent its spread.
- D Because they fear the misuse of the world.

Answer: D

76. The author implies:

- A That neoliberalism defies conceptualization
- B That neoliberalism is vague

- C** That neoliberalism has not been accepted
- D** That neoliberalism has not been understood by people

Answer: D

77. The word 'libertarian' used in the passage can be best substituted with

- A** neoliberal
- B** libertine- immoral
- C** conservative
- D** liberal- favouring individual liberty

Answer: D

Instructions [78 - 83]

Each of the following items is followed by four words or group of words. Fill in the blanks with the appropriate word or group of words.

78. His remarks were filled with _____, which sounded lofty but presented nothing new to the audience.

- A** aphorisms
- B** platitudes
- C** bombast
- D** adages

Answer: B

79. When indecision grips a nation, free men feel the need for an _____ruler and are prepared to throw democracy overboard

- A** optimistic
- B** autocratic
- C** eccentric
- D** energetic

Answer: B

80. A great literary or artistic work is known as_____.

- A** par excellence
- B** bete noire
- C** peccadillo
- D** magnum opus

Answer: D

81. The carriage foundered in a snowdrift and it took two hours to ____ it.

- A exert
- B pillage
- C exacerbate
- D extricate

Answer: D

82. The influence of the environment on man is revealed by an ____ study

- A anthropological
- B ecological
- C epigraphic
- D numismatic

Answer: B

83. Alexander Solzhepitsyn's works will be ____ by every lover of liberal thought and they will bring home to him how restrictive freedom is in the Russian system.

- A rejected
- B skimmed
- C compiled
- D perused

Answer: D

Instructions [84 - 85]

Select the most appropriate set of words from the given choices to fill in the blanks

84. The flood of brilliant ideas has not only ____ us, but has also encouraged us to ____ the last date for submission of entries.

- A overwhelmed, extend
- B enjoyed, stretch
- C dismayed, decide
- D scared, scrap

Answer: A

85. The high cutoff marks this year have ____ college admissionseekers to either ____ for lesser known colleges or change their subject preferences

- A** cajoled, ask
- B** pressured, sit
- C** forced, settle
- D** strained, compromise

Answer: C

Instructions [86 - 88]

Choose the option which is similar in meaning to the word given below:

86. **FURLOUGH**

- A** Soldiers holiday
- B** Wild growth
- C** Wooden plough
- D** Till

Answer: A

87. **PUNCTILIOUS**

- A** Prude
- B** Wasteful
- C** Meticulous
- D** Timid

Answer: C

88. **ENCOMIUM**

- A** Verve
- B** Eulogy
- C** Doggerel
- D** Force

Answer: B

Instructions [89 - 91]

Choose the option which is nearly opposite in meaning to the word given below:

89. **TRITE**

- A** Hackneyed

B Correct

C Original

D Certain

Answer: C

90. **COMPASSIONATE**

A Indecisive

B Unsympathetic

C Unlawful

D Untrustworthy

Answer: B

91. **RESTIVE**

A Buoyant

B Placid

C Resistant

D Insolent

Answer: B

Instructions [92 - 93]

Choose the word that does NOT match with the two given words

92. **Inordinate, Huge**

A Excessive

B Considerable

C Insatiable

D Enormous

Answer: C

93. **Laconic, Succinct**

A Terse

B Brief

C Concise

D Abrupt

Answer: D

Instructions [94 - 98]

Each of the questions below consists of statements having four phrases (a), (b), (c) and (d). One of the phrases is grammatically incorrect. Identify the incorrect phrase

94. (a) However, the advantages of teamwork can be minimized
(b) and the benefits increased
(c) if members (particularly those who lead them)
(d) is aware of the methods for improving performance and making decisions

A a

B b

C c

D d

Answer: D

95. (a) When assertion is used with the win-win approach
(b) and with others who also uses the win-win approach
(c) each party can consider the needs of the other and
(d) move towards a solution that satisfies as many needs as possible

A a

B b

C c

D d

Answer: B

96. (a) It is always
(b) been hard to change
(c) the Indian car buyer's perception
(d) When it comes to designs

A a

B b

C c

D d

Answer: A

97. (a) In a conflict, speak in a pleasant way
(b) send appropriate non-verbal messages to the other person
(c) and match your non-verbal behaviour
(d) to the spoken message

A a

B b

C c

D d

Answer: C

98. (a) To live, to love
(b) to serve, and
(c) also admiration are what
(d) I aspire for

A a

B b

C c

D d

Answer: C

Instructions [99 - 101]

Each question has a sentence that has been scrambled and the scrambled parts have been marked A, B, C, D and E. Find the correct order of the parts to reconstruct the sentence.

99. **A. in different regions of that federation**
B. that was Yugoslavia
C. the fundamental cause has been the very large difference in the quality of life
D. although the dismemberment of the federation
E. is seen more as the result of an ethnic conflict

A ABCDE

B CEBDA

C BCEDA

D ABDEC

Answer: D

100. **A. but there is some merit in it**
B. as distinct from consumption
C. bifurcation of plan and non-plan funds
D. in so far as it focuses attention on development expenses
E. in the budget is artificial

A ABCDE

B CDBEA

C CEABD

D DEACB

Answer: C

101. **A.** like the industrialized countries
B. as if they are to be suffered as relics of a backward post
C. we have specially driven attention to the non-motorized transport modes
D. because they are completely overlooked in transport planning
E. till replaced by faster petroleum fuelled transport

A DEACB

B CDEBA

C CBADE

D CDBEA

Answer: D

Instructions [102 - 103]

In each of these questions, each sentence has four words or phrases in braces marked A, B, C and D. Choose one word or phrase that must be changed for the sentence to be correct.

102. Drug abuse {have} **(A)** become {one of} **(B)** our {most} **(C)** serious social {problems}. **(D)**

A A

B B

C C

D D

Answer: A

103. Alexander Calder, who was {originally} **(A)** interested {in} **(B)** mechanical engineering {later} **(C)** became {a sculpture}. **(D)**

A A

B B

C C

D D

Answer: D

Instructions [104 - 106]

A sentence has been broken into four parts. Choose the part that has an error

104. **(a)** The sound was taken up by another dog, and then another and another,
(b) till, borne on the wind which now sighed softly through the pass,
(c) a wild howling began, which seemed to come from all over the country,
(d) as far as the imagination could grasp them through the gloom of the night.

A a

B b

C c

D d

Answer: B

105. (a) At last there came a time when the driver went
(b) further afield than he had yet gone,
(c) and during its absence, the horses began to tremble
(d) worse than ever and to snort and scream with fright

A a

B b

C c

D d

Answer: C

106. (a) The house was silent when we got back,
(b) save for some poor creature who was
(c) screaming away in one of the distant ward,
(d) and a low, moaning sound from Vinod's room

A a

B b

C c

D d

Answer: B

Instructions [107 - 108]

In each of the following questions, a sentence has been given in Direct/Indirect Speech. Out of the four alternatives suggested select the one which best expresses the same sentence in Indirect/Direct Speech

107. He said, "Where shall I be this time next year?"

- A** He asked that where should he be that time next year
B He wondered where he should be that time the following year
C He contemplated where shall he be that time the following year.
D He wondered where he would be that time the following year

Answer: D

108. She said to him, "Why don't you go today?"

- A** She said to him that why he don't go today
- B** She asked him if he was going that day
- C** She asked him why he did not go today
- D** She asked him why he did not go that day.

Answer: D

Instructions [109 - 110]

In the following quesitons groups of four words are given. In each group one word is correctly spelt. Find the correctly spelt word

109. (a) rennassance
(b) renassance
(c) renaissance
(d) renaissance

- A** a
- B** b
- C** c
- D** d

Answer: B

110. (a) irrepairable
(b) irreparable
(c) irreparrrable
(d) irepairable

- A** a
- B** b
- C** c
- D** d

Answer: B

General knowledge

111. How many members can be nominated to both the Houses of the Parliament by the President ?

- A** 14
- B** 16
- C** 10
- D** 12

Answer: A

112. Under which Article of the Constitution can an individual move to the Supreme Court directly in case of any violation of Fundamental Rights ?

- A Article 31
- B Article 32
- C Article 28
- D Article 29

Answer: B

113. The Dandi March of Gandhi-is an example of

- A Non-Coopefation
- B Direct Action
- C Boycott
- D Civil Disobedience

Answer: D

114. Inflation is caused by

- A decrease in production
- B increase in money supply and decrease in production
- C increase in money supply
- D increase in production

Answer: B

115. Dumping is a form of price discrimination at

- A local level
- B within industry
- C national level
- D international level

Answer: D

116. The equilibrium of a firm under perfect competition will be determined when

- A Marginal Cost > Average Cost
- B Marginal Revenue > Average Cost

C Marginal Revenue > Average Revenue

D Marginal Revenue = Marginal Cost

Answer: D

117. Match correctly the following, deserts and their location by choosing the correct response: Desert Location

A. Kalahari	1. South America
B. Atacama	2. Australia
C. Thar	3. Africa
D. Great Victoria	4. Asia

A A-3, B-1, C-4, D-2

B A-2, B-3, C-1, D-4

C A-4, B-3, C-2, D-1

D A-3, B-2, C-1, D-4

Answer: A

118. Which one of the following institutes in List I is wrongly matched with its location indicated in List II ?

A Central Institute of Mining Dhanbad and Fuel Research

B Central Building Research Roorkee Institute

C Central Arid Zone Jodhpur Research Institute

D Central Drug Research Kanpur Institute

Answer: D

119. In which one of the following films did Pran act as a character artist and not in the role of a villain?

A Himalaya Ki Godh Mein

B Ram aur Shyam

C Zanjeer

D Madhumati

Answer: C

120. Who was the first posthumous recipient of Bharat Ratna?

A M.G. Ramachandran

B B.R. Ambedkar

C K. Kamraj

D Lal Bahadur Shastri

Answer: D

121. Which country won the ICC Women's World Cup held in February 2013 ?

- A** India
- B** New Zealand
- C** England
- D** Australia

Answer: D

122. Which country's currency is Ngultrum ?

- A** Bhutan
- B** Laos
- C** Bangladesh
- D** Nepal

Answer: A

123. Which of the following is not a characteristic of the Indian economy ?

- A** Primacy of agriculture
- B** Balance between heavy industry and wage goods
- C** Population pressure
- D** Low per capita income

Answer: B

124. Term 'Federal' has been used in the Indian Constitution in:

- A** Part-III
- B** Article-368
- C** Nowhere in the Constitution
- D** Preamble

Answer: C

125. An employment situation where the marginal productivity of agricultural labour is zero is known as :

- A** Seasonal unemployment
- B** Cyclical unemployment

- C** Disguised unemployment
- D** Disguised employment

Answer: D

126. Which one of the following National Park/Sanctuary is not in Rajasthan ?

- A** Sariska National Park
- B** Sambar Wildlife Sanctuary
- C** Rajaji National Park
- D** Ranthambore National Park

Answer: C

127. The National Income of a country is

- A** the annual revenue of the Government
- B** sum total of factor incomes
- C** surplus of PSU'S
- D** export minus Import

Answer: B

128. Inflation in India is measured on which of the following indexes / indicators?

- A** Cost of Living Index (CLI)
- B** Consumer Price Index (CPI)
- C** Gross Domestic Product (GDP)
- D** Wholesale Price Index (WPI)

Answer: D

129. TRIPS (Trade Related Aspects of Intellectual Property Rights) agreement is administered by

- A** UNCTD
- B** UNO
- C** WTO
- D** World Bank

Answer: C

130. Which one of the following Institutions publishes the report of 'World Economic Outlook' ?

- A** IMF
- B** World Bank
- C** RBI
- D** UNCTAD

Answer: A

131. Which one of the following is the correct sequence of the countries having foreign Exchange Reserve from high to low ?

- A** China - Russia - India - France
- B** China - France - India - Russia
- C** France - China - Russia - India
- D** France - China - India - Russia

Answer: A

132. Which one of the following is correctly matched?

- A** Kospi Index: South Korea
- B** TSEC Weighted Index: Thailand
- C** SET Index: China
- D** All of the above

Answer: A

133. Which of the following is not a chief organ of the United Nations Organisations?

- A** International Labour Organisation
- B** Security Council
- C** International Court of Justice
- D** General Assembly

Answer: A

134. Permanent Secretariat to coordinate the implementation of SAARC programme is located at

- A** Dhaka
- B** Kathmandu
- C** Colombo
- D** New Delhi

Answer: B

135. Which of the following describe correctly the Group of Seven Countries (G-7)?

- A** They are industrialised countries
- B** They are developing countries
- C** They are holding Atomic Bomb technology
- D** They are countries who can launch their own satellites

Answer: A

136. Which of the following countries is not a member of Group 15 developing countries?

- A** Mexico
- B** Brazil
- C** Malayasia
- D** Bolivia

Answer: D

137. The headquarters of Food and Agriculture Organisation is in

- A** Madrid
- B** Rome
- C** Washington
- D** Paris

Answer: B

138. The headquarters of the UNESCO is at

- A** Geneva
- B** Rome
- C** Paris
- D** New York

Answer: C

139. Amnesty International is an organisation associated with which of the following fields?

- A** Protection of Cruelty to animals
- B** Protection of human rights

C Protection of historic monuments

D Environment protection

Answer: B

140. The United Nations Conference on Trade and Development (UNCTAD) is located at which of the following places?

A Vienna

B Geneva

C Rome

D Paris

Answer: B

141. 'Dans le harem de Kadhafi' is a book written by:

A Lewis Hamilton

B Annick Cojean

C Barak Obama

D Vladimir Putin

Answer: B

142. 12th Five year plan will be for the period of

A 2010-2015

B 2015-2020

C 2011-2016

D 2012-2017

Answer: D

143. Which one of the following is an important historical novel written during the latter half of the nineteenth century?

A Rast Goftar

B Durgesh Nandini

C Maratha

D Nibandhamala

Answer: B

144. The river Sone is a tributary of which one of the following rivers ?

A Ganga

- B** Yamuna
- C** Narmada
- D** Mahanadi

Answer: A

145. **When you travel in certain parts of India, you will notice red soil. What is the main reason for this colour?**

- A** Abundance of magnesium
- B** Accumulated humus
- C** Presence of ferric oxides
- D** Abundance of phosphates

Answer: C

146. **Ankaleshwar and Navagaon are two oil fields in**

- A** Gujarat
- B** Bihar
- C** West Bengal
- D** Assam

Answer: A

147. **The award is given in the field of agriculture**

- A** Bhatnagar Award
- B** Bourlog Award
- C** Dhanwantari Award
- D** Kaling Award

Answer: B

148. **Name the Tennis Legend who has been honoured with her name inclusion in Tennis hall of fame**

- A** Tracy austin
- B** Martina Hingis
- C** Hana Mandlikova
- D** Bjorn Borg

Answer: B

149. **The Golden Globe Awards are presented by**

- A** National Academy of Recording Arts and Sciences
- B** Hollywood Foreign Press Association (HFPA)
- C** American Theatre Wing and The Broadway League
- D** Academy of Motion Picture Arts and Sciences

Answer: B

150. **Which one of the following is not a football tournament?**

- A** I-League
- B** Irani Trophy
- C** Bardoloi Trophy
- D** Durand Cup

Answer: B