Aptitude Questions

1. The value of $\dfrac{0.1 \times 0.1 \times 0.1 + 0.02 \times 0.02 \times 0.02}{0.2 \times 0.2 \times 0.2 + 0.04 \times 0.04 \times 0.04}$ is:

   A.   0.0125   B.   0.125

   C.   0.25   D.   0.5

Answer: Option **B**

Explanation:

Given expression $= \dfrac{(0.1)^3 + (0.02)^3}{2^3\,[(0.1)^3 + (0.02)^3]} = \dfrac{1}{8} = 0.125$

2. $\dfrac{(243)^{n/5} \times 3^{2n+1}}{9^n \times 3^{n-1}} = ?$

   A.   1   B.   2

   C.   9   D. 3^n

Answer: Option **C**

Explanation:

Given Expression $= \dfrac{(243)^{(n/5)} \times 3^{2n+1}}{9^n \times 3^{n-1}}$

$= \dfrac{(3^5)^{(n/5)} \times 3^{2n+1}}{(3^2)^n \times 3^{n-1}}$

$= \dfrac{(3^{5 \times (n/5)} \times 3^{2n+1})}{(3^{2n} \times 3^{n-1})}$

$= \dfrac{3^n \times 3^{2n+1}}{3^{2n} \times 3^{n-1}}$

$= \dfrac{3^{(n+2n+1)}}{3^{(2n+n-1)}}$

$= \dfrac{3^{3n+1}}{3^{3n-1}}$

$= 3^{(3n+1-3n+1)} = 3^2 = 9.$

Find out the wrong number in the series.

3. 1, 3, 10, 21, 64, 129, 356, 777

A.	10	B.	21
C.	64	D.	129
E.	356		

Answer: Option **E**

Explanation:

A x 2 + 1, B x 3 + 1, C x 2 + 1, D x 3 + 1 and so on.

So, 356 is wrong.

4. In how many ways can the letters of the word 'LEADER' be arranged?

A.	72	B.	144
C.	360	D.	720
E.	None of these		

Answer: Option **C**

Explanation:

The word 'LEADER' contains 6 letters, namely 1L, 2E, 1A, 1D and 1R.

$\therefore$ Required number of ways = $\dfrac{6!}{(1!)(2!)(1!)(1!)(1!)}$ = 360.

5. Albert invested an amount of Rs. 8000 in a fixed deposit scheme for 2 years at compound interest rate 5 p.c.p.a. How much amount will Albert get on maturity of the fixed deposit?

A.	Rs. 8600	B.	Rs. 8620
C.	Rs. 8820	D.	None of these

Answer: Option **C**

Explanation:

Amount = Rs. $\left[8000 \times \left(1 + \dfrac{5}{} \right)^2 \right]$

$$= \text{Rs.} \left[8000 \times \frac{21}{20} \times \frac{21}{20} \right]$$

= Rs. 8820.

Direction (for Q.No. 6):

Find the odd man out.

6. 10, 25, 45, 54, 60, 75, 80

A.	10	B.	45
C.	54	D.	75

Answer: Option **C**

Explanation:

Each of the numbers except 54 is multiple of 5.

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7. Two number are in the ratio 3 : 5. If 9 is subtracted from each, the new numbers are in the ratio 12 : 23. The smaller number is:

A.	27	B.	33
C.	49	D.	55

Answer: Option **B**

Explanation:

Let the numbers be $3x$ and $5x$.

Then, $\dfrac{3x - 9}{5x - 9} = \dfrac{12}{23}$

$\Rightarrow 23(3x - 9) = 12(5x - 9)$

$\Rightarrow 9x = 99$

$\Rightarrow x = 11.$

$\therefore$ The smaller number = (3 x 11) = 33.

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8. In a mixture 60 litres, the ratio of milk and water 2 : 1. If the this ratio is to be 1 : 2, then the quanity of water to be further added is:

A.	20 litres	B.	30 litres

C.   40 litres   D.   60 litres

Answer: Option **D**

Explanation:

Quantity of milk = $\left(60 \times \dfrac{2}{3}\right)$ litres = 40 litres.

Quantity of water in it = (60 - 40) litres = 20 litres.

New ratio = 1 : 2

Let quantity of water to be added further be x litres.

Then, milk : water = $\left(\dfrac{40}{20 + x}\right)$.

Now, $\left(\dfrac{40}{20 + x}\right) = \dfrac{1}{2}$

$\Rightarrow$ 20 + x = 80

$\Rightarrow$ x = 60.

$\therefore$ Quantity of water to be added = 60 litres.

9. The fourth proportional to 5, 8, 15 is:

    A.   18   B.   24

    C.   19   D.   20

Answer: Option **B**

Explanation:

Let the fourth proportional to 5, 8, 15 be x.

Then, 5 : 8 : 15 : x

$\Rightarrow$ 5x = (8 x 15)

$x = \dfrac{(8 \times 15)}{5} = 24.$

10. A sum of Rs. 12,500 amounts to Rs. 15,500 in 4 years at the rate of simple interest. What is the rate of interest?

    A.   3%   B.   4%

C. 5%   D. 6%

E. None of these

Answer: Option **D**

Explanation:

S.I. = Rs. (15500 - 12500) = Rs. 3000.

$$\text{Rate} = \left(\frac{100 \times 3000}{12500 \times 4}\right)_{\%} = 6\%$$

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11. A metallic sheet is of rectangular shape with dimensions 48 m x 36 m. From each of its corners, a square is cut off so as to make an open box. If the length of the square is 8 m, the volume of the box (in m^3) is:

A. 4830   B. 5120

C. 6420   D. 8960

Answer: Option **B**

Explanation:

Clearly, l = (48 - 16)m = 32 m,

b = (36 -16)m = 20 m,

h = 8 m.

∴ Volume of the box = (32 x 20 x 8) m^3 = 5120 m^3.

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12. The reflex angle between the hands of a clock at 10.25 is:

A. 180⁰   B. $192\,\frac{1}{2}^{0}$

C. 195⁰   D. $197\,\frac{1}{2}^{0}$

Answer: Option **D**

Explanation:

Angle traced by hour hand in $\dfrac{125}{12}$ hrs = $\left(\dfrac{360}{12} \times \dfrac{125}{12}\right)^{0} = 312\frac{1}{2}^{0}$.

Angle traced by minute hand in 25 min = $\left(\dfrac{360}{60} \times 25\right)^{0} = 150^{0}$.

$$\therefore \text{ Reflex angle } = 360^0 - \left(312\frac{1}{2} - 150\right)^0 = 360^0 - 162\frac{1}{2}^0 = 197\frac{1}{2}.$$

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13. The banker's discount on a sum of money for $1\frac{1}{2}$ years is Rs. 558 and the true discount on the same sum for 2 years is Rs. 600. The rate percent is:

   A.   10%   B.   13%

   C.   12%   D.   15%

Answer: Option **C**

Explanation:

B.D. for $\frac{3}{2}$ years = Rs. 558.

$$\text{B.D. for 2 years } = \text{Rs. } \left(558 \times \frac{2}{3} \times 2\right)$$

$$= \text{Rs. } 744$$

T.D. for 2 years = Rs. 600.

$$\therefore \text{ Sum } = \frac{\text{B.D. x T.D.}}{\text{B.D. - T.D}} = \text{Rs. } \left(\frac{744 \times 600}{144}\right) = \text{Rs. } 3100.$$

Thus, Rs. 744 is S.I. on Rs. 3100 for 2 years.

$$\therefore \text{ Rate } = \left(\frac{100 \times 744}{3100 \times 2}\right)\% = 12\%$$

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14. What was the day of the week on 28th May, 2006?

   A.   Thursday   B.   Friday

   C.   Saturday   D.   Sunday

Answer: Option **D**

Explanation:

28 May, 2006 = (2005 years + Period from 1.1.2006 to 28.5.2006)

Odd days in 1600 years = 0

Odd days in 400 years = 0

5 years = (4 ordinary years + 1 leap year) = (4 x 1 + 1 x 2) $\equiv$ 6 odd days

Jan. Feb. March April May
(31 + 28 + 31 + 30 + 28) = 148 days

$\therefore$ 148 days = (21 weeks + 1 day) $\equiv$ 1 odd day.

Total number of odd days = (0 + 0 + 6 + 1) = 7 $\equiv$ 0 odd day.

Given day is Sunday.

15. A can do a work in 15 days and B in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is :

A. $\dfrac{1}{4}$

B. $\dfrac{1}{10}$

C. $\dfrac{7}{15}$

D. $\dfrac{8}{15}$

Answer: Option **D**

Explanation:

A's 1 day's work = $\dfrac{1}{15}$;

B's 1 day's work = $\dfrac{1}{20}$;

(A + B)'s 1 day's work = $\left(\dfrac{1}{15} + \dfrac{1}{20} \right) = \dfrac{7}{60}$.

(A + B)'s 4 day's work = $\left(\dfrac{7}{60} \times 4 \right) = \dfrac{7}{15}$.

Therefore, Remaining work = $\left(1 - \dfrac{7}{15} \right) = \dfrac{8}{15}$.

Direction (for Q.No. 16):

Each of the questions given below consists of a statement and / or a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement(s) is / are sufficient to answer the given question. Read the both statements and

- Give answer (A) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.
- Give answer (B) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
- Give answer (C) if the data either in Statement I or in Statement II alone are sufficient to answer the question.
- Give answer (D) if the data even in both Statements I and II together are not sufficient to answer the question.
- Give answer(E) if the data in both Statements I and II together are necessary to answer the

question.

16. How much time will the leak take to empty the full cistern?

   I. The cistern is normally filled in 9 hours.

   II. It takes one hour more than the usual time to fill the cistern because of la leak in the bottom.

   A. I alone sufficient while II alone not sufficient to answer

   B. II alone sufficient while I alone not sufficient to answer

   C. Either I or II alone sufficient to answer

   D. Both I and II are not sufficient to answer

   E. Both I and II are necessary to answer

Answer: Option **E**

Explanation:

I. Time taken to fill the cistern without leak = 9 hours.

Part of cistern filled without leak in 1 hour = $\dfrac{1}{9}$

II. Time taken to fill the cistern in presence of leak = 10 hours.

Net filling in 1 hour = $\dfrac{1}{10}$

Work done by leak in 1 hour = $\left(\dfrac{1}{9} - \dfrac{1}{10} \right) = \dfrac{1}{90}$

∴ Leak will empty the full cistern in 90 hours.

Clearly, both I and II are necessary to answer the question.

∴ Correct answer is (E).

17. The value of $\log_2 16$ is:

   A. $\dfrac{1}{8}$

   B. 4

   C. 8

   D. 16

Answer: Option **B**

Explanation:

Let $\log_2 16 = n.$

Then, $2^n = 16 = 2^4 \quad \Rightarrow \quad n = 4.$

$\therefore \quad \log_2 16 = 4.$

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18. A 270 metres long train running at the speed of 120 kmph crosses another train running in opposite direction at the speed of 80 kmph in 9 seconds. What is the length of the other train?

    A.   230 m   B.   240 m

    C.   260 m   D.   320 m

    E.   None of these

Answer: Option **A**

Explanation:

Relative speed = (120 + 80) km/hr

$$= \left(200 \times \frac{5}{18} \right) \text{m/sec}$$

$$= \left(\frac{500}{9} \right) \text{m/sec}.$$

Let the length of the other train be x metres.

Then, $\dfrac{x + 270}{9} = \dfrac{500}{9}$

$\Rightarrow x + 270 = 500$

$\Rightarrow x = 230.$

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19. Two trains of equal length are running on parallel lines in the same direction at 46 km/hr and 36 km/hr. The faster train passes the slower train in 36 seconds. The length of each train is:

    A.   50 m   B.   72 m

    C.   80 m   D.   82 m

Answer: Option **A**

Explanation:

Let the length of each train be x metres.

Then, distance covered = $2x$ metres.

Relative speed = (46 - 36) km/hr

$$= \left(10 \times \frac{5}{18}\right) \text{m/sec}$$

$$= \left(\frac{25}{9}\right) \text{m/sec}$$

$$\therefore \quad \frac{2x}{36} = \frac{25}{9}$$

$$\Rightarrow 2x = 100$$

$$\Rightarrow x = 50.$$

20. A train overtakes two persons who are walking in the same direction in which the train is going, at the rate of 2 kmph and 4 kmph and passes them completely in 9 and 10 seconds respectively. The length of the train is:

A.	45 m	B.	50 m
C.	54 m	D.	72 m

Answer: Option **B**

Explanation:

$$2 \text{ kmph} = \left(2 \times \frac{5}{18}\right) \text{m/sec} = \frac{5}{9} \text{ m/sec.}$$

$$4 \text{ kmph} = \left(4 \times \frac{5}{18}\right) \text{m/sec} = \frac{10}{9} \text{ m/sec.}$$

Let the length of the train be x metres and its speed by y m/sec.

Then, $\left(\dfrac{x}{y - \dfrac{5}{9}}\right) = 9$ and $\left(\dfrac{x}{y - \dfrac{10}{9}}\right) = 10$.

$\therefore \quad 9y - 5 = x$ and $10(9y - 10) = 9x$

$\Rightarrow 9y - x = 5$ and $90y - 9x = 100$.

On solving, we get: $x = 50$.

$\therefore$ Length of the train is 50 m.

21.Find the greatest number that will divide 43, 91 and 183 so as to leave the same remainder in each case.

| | A. | 4 | | B. | 7 |

| | C. | 9 | | D. | 13 |

Answer: Option **A**

Explanation:

Required number = H.C.F. of (91 - 43), (183 - 91) and (183 - 43)

   = H.C.F. of 48, 92 and 140 = 4.

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22. Which of the following fraction is the largest ?

| | A. | $\dfrac{7}{8}$ | | B. | $\dfrac{13}{16}$ |

| | C. | $\dfrac{31}{40}$ | | D. | $\dfrac{63}{80}$ |

Answer: Option **A**

Explanation:

L.C.M. of 8, 16, 40 and 80 = 80.

$$\frac{7}{8} = \frac{70}{80} \; ; \quad \frac{13}{16} = \frac{65}{80} \; ; \quad \frac{31}{40} = \frac{62}{80}$$

Since, $\dfrac{70}{80} > \dfrac{65}{80} > \dfrac{63}{80} > \dfrac{62}{80}$, so $\dfrac{7}{8} > \dfrac{13}{16} > \dfrac{63}{80} > \dfrac{31}{40}$

So, $\dfrac{7}{8}$ is the largest.

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23. $\dfrac{.009}{?} = .01$

| | A. | .0009 | | B. | .09 |

Answer: Option **C**

Explanation:

Let $\dfrac{.009}{x} = .01;$ Then $x = \dfrac{.009}{.01} = \dfrac{.9}{1} = .9$

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24. The least perfect square, which is divisible by each of 21, 36 and 66 is:

  ☐   A.   213444   ☐   B.   214344

  ☐   C.   214434   ☐   D.   231444

Answer: Option **A**

Explanation:

L.C.M. of 21, 36, 66 = 2772.

Now, 2772 = 2 x 2 x 3 x 3 x 7 x 11

To make it a perfect square, it must be multiplied by 7 x 11.

So, required number = 2^2 x 3^2 x 7^2 x 11^2 = 213444

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25. If $x = \dfrac{3 + 1}{3 - 1}$ and $y = \dfrac{3 - 1}{3 + 1}$, then the value of $(x^2 + y^2)$ is:

  ☐   A.   10   ☐   B.   13

  ☐   C.   14   ☐   D.   15

Answer: Option **C**

Explanation:

$x = \dfrac{(3 + 1)}{(3 - 1)} \times \dfrac{(3 + 1)}{(3 + 1)} = \dfrac{(3 + 1)^2}{(3 - 1)} = \dfrac{3 + 1 + 23}{2} = 2 + 3.$

$y = \dfrac{(3 - 1)}{(3 + 1)} \times \dfrac{(3 - 1)}{(3 - 1)} = \dfrac{(3 - 1)^2}{(3 - 1)} = \dfrac{3 + 1 - 23}{2} = 2 - 3.$

$\therefore$ $x^2 + y^2 = (2 + 3)^2 + (2 - 3)^2$

$= 2(4 + 3)$

$= 14$

Direction (for Q.No. 6):

Each of the questions given below consists of a question followed by three statements. You have to study the question and the statements and decide which of the statement(s) is/are necessary to answer the question.

26. What is Arun's present age?

   I. Five years ago, Arun's age was double that of his son's age at that time.

   II. Present ages of Arun and his son are in the ratio of 11 : 6 respectively.

   III. Five years hence, the respective ratio of Arun's age and his son's age will become 12 : 7.

   ☐   A.   Only I and II

   ☐   B.   Only II and III

   ☐   C.   Only I and III

   ☐   D.   Any two of the three

   ☐   E.   None of these

   Answer: Option **D**

   Explanation:

   II. Let the present ages of Arun and his son be 11x and 6x years respectively.

   I. 5 years ago, Arun's age = 2 x His son's age.

   III. 5 years hence, $\dfrac{\text{Arun's Age}}{\text{Son's age}} = \dfrac{12}{7}$

   Clearly, any two of the above will give Arun's present age.

∴ Correct answer is (D).

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27. If A = *x*% of *y* and B = *y*% of *x*, then which of the following is true?

   ☐ A. A is smaller than B.   ☐ B. A is greater than B

   ☐ C. Relationship between A and B cannot be determined.   ☐ D. If *x* is smaller than *y*, then A is greater than B.

   ☐ E. None of these

Answer: Option **E**

Explanation:

$$x\% \text{ of } y = \left(\frac{x}{100} \times y \right) = \left(\frac{y}{100} \times x \right) = y\% \text{ of } x$$

∴ A = B.

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28. If 20% of *a* = *b*, then *b*% of 20 is the same as:

   ☐ A. 4% of *a*   ☐ B. 5% of *a*

   ☐ C. 20% of *a*   ☐ D. None of these

Answer: Option **A**

Explanation:

$$20\% \text{ of } a = b \implies \frac{20}{100}a = b.$$

$$\therefore \; b\% \text{ of } 20 = \left(\frac{b}{100} \times 20 \right) = \left(\frac{20}{100}a \times \frac{1}{100} \times 20 \right) = \frac{4}{100}a = 4\% \text{ of } a.$$

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29. 3 pumps, working 8 hours a day, can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?

   ☐ A. 9   ☐ B. 10

   ☐ C. 11   ☐ D. 12

Answer: Option **D**

Explanation:

Let the required number of working hours per day be *x*.

More pumps, Less working hours per day (Indirect Proportion)

Less days, More working hours per day (Indirect Proportion)

Pumps 4 : 3
Days   1 : 2 $\Big\}$ :: 8 : *x*

∴   4 x 1 x *x* = 3 x 2 x 8

$\Rightarrow x = \dfrac{(3 \times 2 \times 8)}{(4)}$

$\Rightarrow x = 12$.

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30. One pipe can fill a tank three times as fast as another pipe. If together the two pipes can fill the tank in 36 minutes, then the slower pipe alone will be able to fill the tank in:

  A.   81 min.   B.   108 min.

  C.   144 min.   D.   192 min.

Answer: Option **C**

Explanation:

Let the slower pipe alone fill the tank in *x* minutes.

Then, faster pipe will fill it in $\dfrac{x}{3}$ minutes.

∴ $\dfrac{1}{x} + \dfrac{3}{x} = \dfrac{1}{36}$

$\Rightarrow \dfrac{4}{x} = \dfrac{1}{36}$

$\Rightarrow x = 144$ min.

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31. A motorboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a

total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:

- ☐ A. 4
- ☐ B. 5
- ☐ C. 6
- ☐ D. 10

Answer: Option **B**

Explanation:

Let the speed of the stream be x km/hr. Then,

Speed downstream = $(15 + x)$ km/hr,

Speed upstream = $(15 - x)$ km/hr.

$$\therefore \frac{30}{(15 + x)} + \frac{30}{(15 - x)} = 4\frac{1}{2}$$

$$\Rightarrow \frac{900}{225 - x^2} = \frac{9}{2}$$

$$\Rightarrow 9x^2 = 225$$

$$\Rightarrow x^2 = 25$$

$$\Rightarrow x = 5 \text{ km/hr.}$$

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32. A man took loan from a bank at the rate of 12% p.a. simple interest. After 3 years he had to pay Rs. 5400 interest only for the period. The principal amount borrowed by him was:

- ☐ A. Rs. 2000
- ☐ B. Rs. 10,000
- ☐ C. Rs. 15,000
- ☐ D. Rs. 20,000

Answer: Option **C**

Explanation:

Principal = Rs. $\left(\dfrac{100 \times 5400}{12 \times 3} \right)$ = Rs. 15000.

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33. A man walked diagonally across a square lot. Approximately, what was the percent saved by not walking along the edges?

- ☐ A. 20
- ☐ B. 24

Answer: Option **C**

Explanation:

Let the side of the square(ABCD) be x metres.
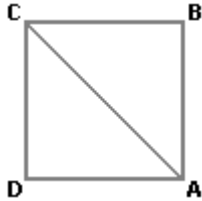
Then, AB + BC = $2x$ metres.

AC = $2x$ = (1.41x) m.

Saving on $2x$ metres = (0.59x) m.

Saving % = $\left(\dfrac{0.59x}{2x} \times 100 \right)_{\%}$ = 30% (approx.)

34.

By investing in $16\frac{2}{3}$% stock at 64, one earns Rs. 1500. The investment made is:

☐   A.   Rs. 5640   ☐   B.   Rs. 5760

☐   C.   Rs. 7500   ☐   D.   Rs. 9600

Answer: Option **B**

Explanation:

To earn Rs. $\dfrac{50}{3}$, investment = Rs. 64.

To earn Rs. 1500, investment = Rs. $\left(64 \times \dfrac{3}{50} \times 1500 \right)$ = Rs. 5760.

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35. A man buys a watch for Rs. 1950 in cash and sells it for Rs. 2200 at a credit of 1 year. If the rate of interest is 10% per annum, the man:

☐   A.   gains Rs. 55   ☐   B.   gains Rs. 50

☐   C.   loses Rs. 30   ☐   D.   gains Rs. 30

Answer: Option **B**

Explanation:

S.P. = P.W. of Rs. 2200 due 1 year hence

$$= \text{Rs.} \left[\frac{2200 \times 100}{100 + (10 \times 1)} \right]$$

= Rs. 2000.

∴ Gain = Rs. (2000 - 1950) = Rs. 50.

Direction (for Q.No. 16):

Find the odd man out.

36. 10, 25, 45, 54, 60, 75, 80

    ⬜   A.   10   ⬜   B.   45

    ⬜   C.   54   ⬜   D.   75

Answer: Option **C**

Explanation:

Each of the numbers except 54 is multiple of 5.

Direction (for Q.Nos. 17 - 19):

Find out the wrong number in the given sequence of numbers.

37. 582, 605, 588, 611, 634, 617, 600

    ⬜   A.   634   ⬜   B.   611

    ⬜   C.   605   ⬜   D.   600

Answer: Option **A**

Explanation:

Alternatively 23 is added and 17 is subtracted from the terms. So, 634 is wrong.

38. 36, 54, 18, 27, 9, 18.5, 4.5

　　A.　4.5　　　　　　　　　　　　　B.　18.5

　　C.　54　　　　　　　　　　　　　D.　18

Answer: Option **B**

Explanation:

The terms are alternatively multiplied by 1.5 and divided by 3. However, 18.5 does not satisfy it.

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39. 56, 72, 90, 110, 132, 150

　　A.　72　　　　　　　　　　　　　B.　110

　　C.　132　　　　　　　　　　　　D.　150

Answer: Option **D**

Explanation:

The numbers are 7 x 8, 8 x 9, 9 x 10, 10 x 11, 11 x 12, 12 x 13.

So, 150 is wrong.

Direction (for Q.No. 20):

Insert the missing number.

40. 8, 24, 12, 36, 18, 54, (....)

　　A.　27　　　　　　　　　　　　　B.　108

　　C.　68　　　　　　　　　　　　　D.　72

Answer: Option **A**

Explanation:

Numbers are alternatively multiplied by 3 and divided by 2.

So, the next number = 54 ÷ 2 = 27.

Q41.0.0024/.012*.006=

Q42.A square is inscribed in a circle , radius of the circle is 'a'.Area of the square=

Q43.The angle of a triangle is 1:2:2 then the triangleis

Q44.X's salary is 150% of Y, and Z's salary is 75% of Y, their total salary is

Q45.g[x]=1+x/2, then value of g[2x] in terms of g[x] is

Q46.If X<Y ,which of the following is greater than X and less than Y

Q47. For the sequence 4,8,6,18,15,.....,the next number is

Q48.to find the relationship between X & Y for the given value

Q49.(X*) is the largest integer but less than X.find the value of (5.2*) + (4*)-(2*)=?

Q50. Series of An is given by (An-1)^3,if first value of An is 1 find the series up to four steps

. In each of the following questions, find out which part of the sentence has an error. if there is no mistake the answer is 'no error'

Q51. My father is / in bad mood / today. / no error

       A   B   C   D

Q52: Both the civilians/ and army men / joined the First World War / today. / No error

       A   B   C   D

Q53. The school is / with in hundred yards / from my house / no error

A   B   C   D

Q54. As soon as the teacher entered / everyone fell /in a silence / no error

                    A   B   C   D

Q55. He took to / reading Times / for better knowledge / of the facts./ no error

             A   B   C   D   E

Q56.I will put on / a note in this regard / for your consideration / and necessary decision./ no error

             A   B   C   D   E

Q57;He has been working on /the problem from a long time /but is still not / able to solve it./ no error

             A   B   C   D   E

 In each question, a part of sentence is printed in italics. Below each sentence, some phrases are given which can substitute the italicized part of the sentence. If the sentence is correct as it is, the answer is 'No correction required'

 Q58. He *did many mischiefs*

    A. made many a mischiefs   B. Made much mischief

    C. Committed many mischiefs   D. No Correction required

Q59 Rohit is *as fast as* or perhaps faster than Manish.

    A. Equally fast   B. almost as fast   C. as fast   D. No Correction required

Q60 *All his family members* are in Kanpur.

    A. All of his family members

    B. All the family members if his

    C. All the members of his family

    D. No Correction required

Q61. I often see him *dancing* the top

    A. rotating

    B. encircling

    C. dodging

D. No Correction required

Q62: What is the time *in* your watch?

   A. on   B. by   C. from   D. No Correction required

Q63:. Columbus *invented* America

   A. searched   B. traced   C. discovered   D. No Correction required

Q64. Wise men *catch* time by the forelock.

   A. Hold   B. seize   C. take   D. No Correction required

Q65. A bird in hand is worth *two in bush*

   A. two in the bush   b. two at a bush   c. two on bush   D. No Correction required

Q66. There are 6561 balls out of them 1 is heavy. Find the min. no. of times the balls have to be weighed for finding out the heavy ball.

Q67. If I walk with 30 miles/hr i reach 1 hour before and if i walk with 20 miles/hr i reach 1 hour late. Find the distance between 2 points and the exact time of reaching destination is 11 am then find the speed with which it walks.

Q68. When u reverse the digits of age of father u will get the age of son. one year ago the age of father was twice that of son's age. what are the current ages of father and son?

Q69. In a class there are less than 500 students . when it is divided by 3 it gives a whole number. similarly when it is   divided by 4,5 or 7 gives a whole number. find the no. of students in the class

Q70. A coffee seller has two types of coffee Brand A costing 5 bits per pound and Brand B costing 3 bits per pound.   he mixes two brands to get a 40 pound mixture. he sold this at 6 bits per pound. the seller gets a profit of 33 1/2   percent. how much he has used Brand A in the mixture?

In each question below are given three Statements followed by three Conclusions numbered I, II and III. You have to take the given Statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given Conclusions logically follows from the given Statements disregarding commonly known facts.

Q71. Statements:
Some cycles are busses.
All cars are buses.
Some buses are trains.
Conclusions:

I. All cares are cycles.
II. Some trains are buses.
III. Some trains are cars.

(1) None follows
(2) Only I and II follow
(3) Only land III follow
(4) Only II and III follow
(5) None of these

Q72 Statements:
All pencils are sticks.
Some sticks are notes.
All diaries are notes.
Conclusions:
I. Some notes are diaries.
II. Some sticks are pencils.
III. Some diaries are sticks.

  (1) All follow
  (2) Only I follows
  (3) Only I and II follow
  (4) Only II follows
  (5) None of these

Q73 Statements:
Some buds are leaves.
No leaf is fruit.
Some fruits are buds.
Conclusions:
I. Some fruits are leaves.
II. All buds are fruits.
III. Some leaves are buds.

(1) Only I or II follows
(2) Only III follows
(3) Only II follows
(4) None follows
(5) None of these

Q74 Statements:
Some birds are animals.
All animals are rivers.
Some rivers are lions.
Conclusions:
I. Some lions are animals
II. Some rivers are birds
III. No animal is lion

  (1) Only II follows
  (2) Only either I or III follows
  (3) I and II follows
  (4) only either II or III follow
  (5) None of these

Q75 Statements:
All boxes are
pans   Some
boxes are jugs.
Some jugs are glasses.
Conclusions:
I. Some glasses are boxes
II. No glass is box
III. some jugs are
pans

IV. No jug is pan

> (1) Only I and II follows
> (2) Either I or II and III follows
> (3) Only III follows
> (4) Either I or II , and either III or IV follow
> (5) None of these

Use the following answer choices for the questions below.

> A. **Statement 1 alone is sufficient but statement 2 alone is not sufficient to answer the question asked.**
> B. **Statement 2 alone is sufficient but statement 1 alone is not sufficient to answer the question asked.**
> C. **Both statements 1 and 2 together are sufficient to answer the question but neither statement is sufficient alone.**
> D. **Each statement alone is sufficient to answer the question.**
> E. **Statements 1 and 2 are not sufficient to answer the question asked and additional data is needed to answer the statements**.

Q76 If the average size of 3 accounts is $1 million, is the smallest account less than $500,000?

> 1. The largest account is $1.3 million.
> 2. One of the accounts is $0.7 million.

Q77 Is the product of x and y greater than 60?

> 1. The sum of x and y is greater than 60.
> 2. Each of the variables is greater than 2.

Q78 What is the value of y?

> 1. $y - 3 = 2$
> 2. $y^2 = 25$

Q79 What was the percent increase of Company A's stock between June 1 and June 30, 2000?

> 1. The stock gained $5 in value during June 2000.

> 2.The stock rose 12% during the first half of the month

Q80 Which company reported the larger dollar increase in earnings?

1. Company A reported that its earnings increased by 5%.
2. Company B reported that its earnings increased by 7%.

Q81. Ramesh starting from a fixed point goes 15 km towards North and then after turning to his right he goes 15 km.   Then he goes 10, 15 and 15 metres after turning to his left each time. How far is he from his starting point?

(A) 5 metres
(B) 10 metres
(C) 20 metres
(D) 15 metres
(E) Can not be determined

Q82. Sonalika goes 12 km towards North from a fixed point and then she goes 8 km towards South from there. In   the end she goes 3 km towards east. How far and in what direction is she from her starting point?

(A) 7 km East
(B) 5 km West
(C) 7 km West
(D) 5 km North-East
(E) None of these

Q83. Kanchan goes 5 m towards east from a fixed point N and then 35 km after turning to her left. Again she goes 10   metres after turning to her right. After this she goes 35 m after turning to her right. How far is she from N ?

(A) 40 m
(B) At N
(C) 10 m
(D) 15 m
(E) None of these

Q84. Shri Prakash walked 40 metres facing towards North. From there he walked 50 metres after turning to his left.   After this he walked 40 metres after turning to his left. How far and in what direction is he now from his starting
   point?

(A)40 m, North
(B) 50 m, West
(C) 10 m, East
(D) 10 m, West
(E) None of these

Read the following information carefully and answer the questions given it.

There are six persons A B C D E and F in a school. Each of the teachers teaches two subjects, one compulsory subject and the other optional subject. D's optional subjects was History while there others have it as compulsory subject. E and F have Physics as one of their subjects. F's compulsory subject is Mathematics which is an optional subject of both C and E. History and English are A's subjects but in terms of compulsory and optional subjects, they are just reverse of

those of D's. Chemistry is an optional subject of only one of them. The only female teacher in the school has English as her compulsory subject.

Q85. What is C's compulsory subject?

   A) History   B) Physics   C) Chemistry   D) English   E) Mathematics

Q86. Who is a female member in the group?

   A) A   B) B   C) C   D) D   E) E

Q87. Which of the following has some compulsory and optional subjects as those of F's ?

   A) D   B) B   C) A   D) C   E) None of these

Q88. Disregarding which is the compulsory and which is the optional subject, who has the same two subject combination as F?

   A) A   B) B   C) E   D) D   E) None of these

Q89.Which of the following groups has History as the compulsory subject?

   A) A,C,D   B) B,C,D   C) C,D   D) A,B,C   E) A,D

In each question below is given a passage followed by several inference. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

mark your answer as :

A. if the inference is ' definitely true' i.e. , it directly follows from the facts given in the passage

B. if the inference is ' probably true' though not definitely true in the light of the facts given

C. if you think the data are in adequate i.e., from the facts given you cannot say whether the inference is likely to be true or false

 D. if you think the inference is ' probably false' though not definitely false in the light of the facts given; and

E. if you think inference is ' definitely false' i,e , it contradicts the given facts.

Passage I

A recent survey shows that India has the lowest death rate for blood cancer. China , Thailand and Myanmar (countries that have taste for spices) also have low rates. Higher rates are found in .S.A where spices are not used. The typical American food remains chicken rolls, butter and beef.

Q90. Americans are unorthodox in their food habits.

Q91. Americans dislike spices

Q92. Spices prevent blood cancer

Q93. Spices promote forms of cancer other than blood cancer

Q94 Chicken rolls , butter and beef promote cancer.