

Online Aptitude Test :: Aptitude Test 6

Marks : 16/20

Total number of questions	:	20
Number of answered questions	:	20
Number of unanswered questions	:	0

Test Review : View answers and explanation for this test.

1. The greatest number of four digits which is divisible by 15, 25, 40 and 75 is:

- ☐ A. 9000 ✗
☐ B. 9400 ✗
☒ C. 9600 ✓
☐ D. 9800 ✗

Your Answer: Option C

Correct Answer: Option C

Explanation:

Greatest number of 4-digits is 9999.



M. of 15, 25, 40 and 75 is 600.



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2.If the sum of two numbers is 55 and the H.C.F. and L.C.M. of these numbers are 5 and 120 respectively, then the sum of the reciprocals of the numbers is equal to:

- ☒ A. $\frac{55}{601}$ ✗
☐ B. $\frac{601}{55}$ ✗
☐ C. $\frac{11}{120}$ ✓
☐ D. $\frac{120}{11}$ ✗

Your Answer: Option A

Correct Answer: Option C

Explanation:

Let the numbers be a and b .

Then, $a + b = 55$ and $ab = 5 \times 120 = 600$.

$$\therefore \text{The required sum} = \frac{1}{a} + \frac{1}{b} = \frac{a+b}{ab} = \frac{55}{600} = \frac{11}{120}$$

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3. If $a = 0.1039$, then the value of $4a^2 - 4a + 1 + 3a$ is:

- ☐ A. 0.1039 ✗
☐ B. 0.2078 ✗
☒ C. 1.1039 ✓
☐ D. 2.1039 ✗

Your Answer: Option C

Correct Answer: Option C

Explanation:

$$4a^2 - 4a + 1 + 3a = (1)^2 + (2a)^2 - 2 \times 1 \times 2a + 3a$$

$$= (1 - 2a)^2 + 3a$$

$$= (1 - 2a) + 3a$$

$$= (1 + a)$$

$$= (1 + 0.1039)$$

$$= 1.1039$$



4. The product of two numbers is 9375 and the quotient, when the larger one is divided by the smaller, is 15. The sum of the numbers is:

- ☐ A. 380 ✖
☐ B. 395 ✖
☒ C. 400 ✔
☐ D. 425 ✖

Your Answer: Option C

Correct Answer: Option C

Explanation:

Let the numbers be x and y .

Then, $xy = 9375$ and $\frac{x}{y} = 15$.

$$\frac{xy}{(x/y)} = \frac{9375}{15}$$

$$\Rightarrow y^2 = 625.$$

$$\Rightarrow y = 25.$$

$$\Rightarrow x = 15y = (15 \times 25) = 375.$$

$$\therefore \text{Sum of the numbers} = x + y = 375 + 25 = 400.$$

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Direction (for Q.No. 5):

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.

5. What is the two-digit number?

- I. The difference between the two-digit number and the number formed by interchanging the digits is 27.
II. The difference between the two digits is 3.
III. The digit at unit's place is less than that at ten's place by 3.

- ☐ A. I and II only ✖
☐ B. I and III only ✖
☒ C. All I, II and III ✖
☐ D. I, and either II or III ✖
☐ E. Even with all I, II and III, answer cannot be give. ✔

Your Answer: Option C

Correct Answer: Option E

Explanation:

Let the tens and units digit be x and y respectively.

$$\therefore (10x + y) - (10y + x) \Leftrightarrow x - y = 3.$$



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Thus, even all the given three statements together do not give the answer.

∴ Correct answer is (E).

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6. Present ages of Sameer and Anand are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Anand's present age in years?

- ☒ A. 24 ✓
☐ B. 27 ✗
☐ C. 40 ✗
☐ D. Cannot be determined ✗
☐ E. None of these ✗

Your Answer: Option A

Correct Answer: Option A

Explanation:

Let the present ages of Sameer and Anand be $5x$ years and $4x$ years respectively.

$$\text{Then, } \frac{5x + 3}{4x + 3} = \frac{11}{9}$$

$$\Rightarrow 9(5x + 3) = 11(4x + 3)$$

$$\Rightarrow 45x + 27 = 44x + 33$$

$$\Rightarrow 45x - 44x = 33 - 27$$

$$\Rightarrow x = 6.$$

∴ Anand's present age = $4x = 24$ years.

Learn more problems on : [Problems on Ages](#)

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Direction (for Q.No. 7):

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.

✓



- ☐ 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 ✔

Your Answer: Option E

Correct Answer: Option E

Explanation:

$$\text{I. } S = 5D \Rightarrow D = \frac{S}{5} \dots (i)$$

$$\text{II. } S - 5 = 25(D - 5) \Leftrightarrow S = 25D - 120 \dots (ii)$$

$$\text{Using (i) in (ii), we get } S = \left(25 \times \frac{S}{5}\right) - 120$$

$$\Rightarrow 4S = 120.$$

$$\Rightarrow S = 30.$$

Thus, I and II both together give the answer. So, correct answer is (E).

Learn more problems on : [Problems on Ages](#)

Discuss about this problem : [Discuss in Forum](#)

8. If $3^{(x-y)} = 27$ and $3^{(x+y)} = 243$, then x is equal to:

- ☐ A. 0 ✖
☐ B. 2 ✖
☒ C. 4 ✔
☐ D. 6 ✖

Your Answer: Option C

Correct Answer: Option C

Explanation:

$$3^{x-y} = 27 = 3^3 \Leftrightarrow x - y = 3 \dots (i)$$

$$3^{x+y} = 243 = 3^5 \Leftrightarrow x + y = 5 \dots (ii)$$

On solving (i) and (ii), we get $x = 4$.

Learn more problems on : [Surds and Indices](#)

Discuss about this problem : [Discuss in Forum](#)

9. Some articles were bought at 6 articles for Rs. 5 and sold at 5 articles for Rs. 6. Gain percent is:

- ☐ A. 30% ✖
☒ B. $33\frac{1}{3}\%$ ✔



Correct Answer: Option D

Explanation:

Suppose, number of articles bought = L.C.M. of 6 and 5 = 30.

$$\text{C.P. of 30 articles} = \text{Rs.} \left(\frac{5}{6} \times 30 \right) = \text{Rs.} 25.$$

$$\text{S.P. of 30 articles} = \text{Rs.} \left(\frac{6}{5} \times 30 \right) = \text{Rs.} 36.$$

$$\therefore \text{Gain \%} = \left(\frac{11}{25} \times 100 \right) \% = 44\%.$$

Learn more problems on : [Profit and Loss](#)

Discuss about this problem : [Discuss in Forum](#)

Direction (for Q.No. 10):

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.

10. What is the length of a running train?

I. The train crosses a man in 9 seconds.

II. The train crosses a 240 metre long platform in 24 seconds.

- ☐ 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 ✔

Your Answer: Option E

Correct Answer: Option E

Explanation:

$$\text{Time taken by train to cross a man} = \frac{\text{Length of train}}{\text{Speed of train}} \Rightarrow \text{Speed} = \frac{l}{9} \dots (i)$$

$$\checkmark \quad \text{Time taken by train to cross a platform} = \frac{(\text{Length of train} + \text{Length of platform})}{\text{Speed of train}} \Rightarrow \text{Speed} = \frac{l + 240}{24} \dots (ii)$$



∴ The correct answer is (E).

Learn more problems on : [Problems on Trains](#)

Discuss about this problem : [Discuss in Forum](#)

Direction (for Q.No. 11):

Each of these questions is followed by three statements. You have to study the question and all the three statements given to decide whether any information provided in the statement(s) is redundant and can be dispensed with while answering the given question.

11. At what time will the train reach city X from city Y?

- I. The train crosses another train of equal length of 200 metres and running in opposite directions in 15 seconds.
- II. The train leaves city Y at 7.15 a.m. for city X situated at a distance of 558 km.
- III. The 200 metres long train crosses a signal pole in 10 seconds.

- ☐ A. I only ✖
- ☐ B. II only ✖
- ☐ C. III only ✖
- ☒ D. II and III only ✔
- ☐ E. All I, II and III are required. ✖

Your Answer: Option D

Correct Answer: Option D

Explanation:

From the statement I, we get length of the train is 200 metres (Redundant info while comparing with Statement III). The rest of the info given in this statement cannot be used for calculating the speed of the train, because the two trains might run at different speed.

$$\text{III gives, speed} = \frac{200}{10} \text{ m/sec} = 20 \text{ m/sec} = \left(20 \times \frac{18}{5}\right) \text{ km/hr} = 72 \text{ km/hr.}$$

$$\text{II gives, time taken} = \left(\frac{558}{72}\right) \text{ hrs} = \frac{31}{4} \text{ hrs} = 7 \frac{3}{4} \text{ hrs} = 7 \text{ hrs } 45 \text{ min.}$$

So, the train will reach city X at 3 p.m.

Hence II and III only gives the answer.

Learn more problems on : [Problems on Trains](#)

Discuss about this problem : [Discuss in Forum](#)

Direction (for Q.No. 12):

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.

12. What is the speed of the boat in still water?

- ✓ I. The speed downstream is 12 kmph.
- II. The speed upstream is 4 kmph



- ☐ C.III, and either I or II
☐ D.Any two of the three ✓
☐ E. None of these ✗

Your Answer: Option A

Correct Answer: Option D

Explanation:

From I and II, speed of boat in still water $= \frac{1}{2}(12 + 4) \text{ km/hr} = 8 \text{ km/hr}$.

From II and III, we get:

Using average speed $= \frac{2xy}{x+y}$, we get: $\frac{2 \times 4 \times y}{4+y} = 6$

$$\Rightarrow 8y = 24 + 6y$$

$$\Rightarrow y = 12.$$

∴ Required speed $= \frac{1}{2}(12 + 4) \text{ km/hr} = 8 \text{ km/hr}$.

Similarly, I and III also give the answer.

∴ Correct answer is (D).

Learn more problems on : [Boats and Streams](#)

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13.Mr. Thomas invested an amount of Rs. 13,900 divided in two different schemes A and B at the simple interest rate of 14% p.a. and 11% p.a. respectively. If the total amount of simple interest earned in 2 years be Rs. 3508, what was the amount invested in Scheme B?

- ☒ A.Rs. 6400 ✓
☐ B.Rs. 6500 ✗
☐ C.Rs. 7200 ✗
☐ D.Rs. 7500 ✗
☐ E. None of these ✗

Your Answer: Option A

Correct Answer: Option A

Explanation:

Let the sum invested in Scheme A be Rs. x and that in Scheme B be Rs. $(13900 - x)$.

$$\text{Then, } \left(\frac{x \times 14 \times 2}{100} \right) + \left(\frac{(13900 - x) \times 11 \times 2}{100} \right) = 3508$$

$$\Rightarrow 28x - 22x = 350800 - (13900 \times 22)$$

$$\Rightarrow 6x = 45000$$

✓



Learn more problems on : [Simple Interest](#)

Discuss about this problem : [Discuss in Forum](#)

Direction (for Q.No. 14):

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.

14. What is the principal sum?

- I. The sum amounts to Rs. 690 in 3 years at S.I.
- II. The sum amounts to Rs. 750 in 5 years at S.I.
- III. The rate of interest is 5% p.a.

- ☐ A.I and III only ✖
- ☐ B.II and III only ✖
- ☐ C.I and II only ✖
- ☒ D.I and III only, or II and III only ✖
- ☐ E. Any two of the three ✔

Your Answer: Option D

Correct Answer: Option E

Explanation:

Clearly, any two of the three will give us the answer.

∴ Correct answer is (E).

Learn more problems on : [Simple Interest](#)

Discuss about this problem : [Discuss in Forum](#)

15.66 cubic centimetres of silver is drawn into a wire 1 mm in diameter. The length of the wire in metres will be:

- ☒ A.84 ✔
- ☐ B.90 ✖
- ☐ C.168 ✖
- ☐ D.336 ✖

Your Answer: Option A

Correct Answer: Option A

Explanation:

Let the length of the wire be h .

Radius = $\frac{1}{2}$ mm = $\frac{1}{20}$ cm. Then,

$$\Rightarrow \frac{22}{7} \times \frac{1}{20} \times \frac{1}{20} \times h = 66.$$

$$\Rightarrow h = \left(\frac{66 \times 20 \times 20 \times 7}{22} \right) = 8400 \text{ cm} = 84 \text{ m.}$$

✓



16. How many times in a day, are the hands of a clock in straight line but opposite in direction?

- ☐ A. 20 ✖
☒ B. 22 ✔
☐ C. 24 ✖
☐ D. 48 ✖

Your Answer: Option B

Correct Answer: Option B

Explanation:

The hands of a clock point in opposite directions (in the same straight line) 11 times in every 12 hours. (Because between 5 and 7 they point in opposite directions at 6 o'clock only).

So, in a day, the hands point in the opposite directions 22 times.

Learn more problems on : [Clock](#)

Discuss about this problem : [Discuss in Forum](#)

17. The cost price of a Rs. 100 stock at 4 discount, when brokerage is $\frac{1}{4}\%$ is:

- ☐ A. Rs. 95.75 ✖
☐ B. Rs. 96 ✖
☒ C. Rs. 96.25 ✔
☐ D. Rs. 104.25 ✖

Your Answer: Option C

Correct Answer: Option C

Explanation:

$$\text{C.P.} = \text{Rs.} \left(100 - 4 + \frac{1}{4} \right) = \text{Rs. } 96.25$$

Learn more problems on : [Stocks and Shares](#)

Discuss about this problem : [Discuss in Forum](#)

18. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?

- ☐ A. 564 ✖
☐ B. 645 ✖
☐ C. 735 ✖
☒ D. 756 ✔
☐ E. None of these ✖

Your Answer: Option D

Correct Answer: Option D

✓ Explanation:



$$\begin{aligned}
 & \left(3 \times 2 \times 1 \times 2 \times 1 \right) \\
 &= 525 + \left(\frac{7 \times 6 \times 5}{3 \times 2 \times 1} \times 6 \right) + \left(\frac{7 \times 6}{2 \times 1} \right) \\
 &= (525 + 210 + 21) \\
 &= 756.
 \end{aligned}$$

Learn more problems on : [Permutation and Combination](#)

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19. The true discount on a bill due 9 months hence at 16% per annum is Rs. 189. The amount of the bill is:

- ☐ A.Rs. 1386 ✖
☒ B.Rs. 1764 ✔
☐ C.Rs. 1575 ✖
☐ D.Rs. 2268 ✖

Your Answer: Option B

Correct Answer: Option B

Explanation:

Let P.W. be Rs. x .

Then, S.I. on Rs. x at 16% for 9 months = Rs. 189.

$$\therefore x \times 16 \times \frac{9}{12} \times \frac{1}{100} = 189 \text{ or } x = 1575.$$

$$\therefore \text{P.W.} = \text{Rs. } 1575.$$

$$\therefore \text{Sum due} = \text{P.W.} + \text{T.D.} = \text{Rs. } (1575 + 189) = \text{Rs. } 1764.$$

Learn more problems on : [True Discount](#)

Discuss about this problem : [Discuss in Forum](#)

Direction (for Q.No. 20):

Find the odd man out.

20. 41, 43, 47, 53, 61, 71, 73, 81

- ☐ A.61 ✖
☐ B.71 ✖
☐ C.73 ✖
☒ D.81 ✔

Your Answer: Option D

Correct Answer: Option D

Explanation:

Each of the numbers except 81 is a prime number.

Learn more problems on : [Odd Man Out and Series](#)



