

Home Aptitude Logical Verbal CA Current Affairs GK Engineering Interview Online Tests Puzzles

# **Online Aptitude Test:** Aptitude Test - Random

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Marks: 20/20

Total number of questions

Number of answered questions

Number of unanswered questions

: 20

Number of unanswered questions

: 0

### Test Review: View answers and explanation for this test.

1. The effective annual rate of interest corresponding to a nominal rate of 6% per annum payable half-yearly is:

■ A.6.06% **※** ■ B.6.07% **※** 

□ C.6.08% **×** 

☑ D.6.09%

Your Answer: Option D

Correct Answer: Option D

Explanation:

Amount of Rs. 100 for 1 year when compounded half-yearly  $= \text{Rs.} \begin{bmatrix} 100 \text{ x} \\ 1 + 100 \end{bmatrix} = \text{Rs.} \begin{bmatrix} 106.09 \\ 100 \end{bmatrix}$ 

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- 2. Three candidates contested an election and received 1136, 7636 and 11628 votes respectively. What percentage of the total votes did the winning candidate get?
  - **A.57%**
  - ■B.60% **※**
  - C.65% **3**
  - □ D.90% **※**

Your Answer: Option A

Correct Answer: Option A

Explanation:

Total number of votes polled = (1136 + 7636 + 11628) = 20400.

$$\therefore \text{ Required percentage} = \left(\frac{11628}{20400} \times 100\right) \%_0 = 57\%.$$

Learn more problems on : Percentage

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- 3. The population of a town increased from 1,75,000 to 2,62,500 in a decade. The average percent increase of population per year is:
  - A.4.37% **※**
  - ✓ B.5%
  - C.6% 💥
  - D.8.75% 💥

Your Answer: Option B

Correct Answer: Option B

Explanation:

Increase in 10 years = (262500 - 175000) = 87500.

Increase% = 
$$\binom{87500}{175000}$$
x 100 $\frac{1}{6}$ % = 50%.

$$\therefore \text{ Required average} = \begin{pmatrix} 50 \\ 10 \end{pmatrix} \%_0 = 5\%.$$

Learn more problems on : Percentage

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4. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

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Your Answer: Option D

Correct Answer: Option D

Explanation:

Here, 
$$S = \{1, 2, 3, 4, ..., 19, 20\}.$$

Let  $E = \text{ event of getting a multiple of 3 or 5} = \{3, 6, 9, 12, 15, 18, 5, 10, 20\}.$ 

∴ 
$$P(E) = \frac{n(E)}{n(S)} = \frac{9}{20}$$

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5.A, B, C rent a pasture. A puts 10 oxen for 7 months, B puts 12 oxen for 5 months and C puts 15 oxen for 3 months for grazing. If the rent of the pasture is Rs. 175, how much must C pay as his share of rent?

- A.Rs. 45
- B.Rs. 50 **×**
- C.Rs. 55 💥
- □ D.Rs. 60 💥

Your Answer: Option A

Correct Answer: Option A

Explanation:

A:B:C=
$$(10 \times 7)$$
: $(12 \times 5)$ : $(15 \times 3)$ = $70$ : $60$ : $45$ = $14$ : $12$ : $9$ .

: C's rent = Rs. 
$$\left(175 \times \frac{9}{35}\right)$$
 = Rs. 45.

Learn more problems on : Partnership

Discuss about this problem: Discuss in Forum

6.If 40% of a number is equal to two-third of another number, what is the ratio of first number to the second number?

- A.2:5 💥
- ■B.3:7 ※
- C.5:3
- D.7:3 💥

Your Answer: Option C

Correct Answer: Option C

$$\Rightarrow$$
  ${}_{5}^{2A} = {}_{3}^{2B}$ 

$$\Rightarrow_{\mathbf{B}}^{\mathbf{A}} = \begin{pmatrix} 2 & 5 \\ 3 & 2 \end{pmatrix} = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$$

$$A : B = 5 : 3.$$

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- 7. Father is aged three times more than his son Ronit. After 8 years, he would be two and a half times of Ronit's age. After further 8 years, how many times would he be of Ronit's age?
  - ✓ A.2 times
  - $\square$  B.2  $\frac{1}{2}$  times  $\aleph$
  - $\square$  C.2  $\frac{3}{4}$ times  $\aleph$
  - □ D.3 times **×**

Your Answer: Option A

Correct Answer: Option A

Explanation:

Let Ronit's present age be x years. Then, father's present age =(x + 3x) years = 4x years.

$$(4x+8) = \frac{5}{2}(x+8)$$

$$\Rightarrow$$
 8x + 16 = 5x + 40

$$\Rightarrow$$
 3 $x = 24$ 

$$\Rightarrow x = 8$$
.

Hence, required ratio = 
$$\frac{(4x+16)}{(x+16)} = \frac{48}{24} = 2$$
.

Learn more problems on : <u>Problems on Ages</u>

- 8. The curved surface area of a cylindrical pillar is 264 m<sup>2</sup> and its volume is 924 m<sup>3</sup>. Find the ratio of its diameter to its height.
  - A.3:7 💥
  - **△** B.7:3♥

### Explanation:

$$\frac{\Pi_r^2 h}{2\Pi_r h} = \frac{924}{264} \implies r = \left(\frac{924}{264} \times 2\right) = 7 \text{ m}.$$

And, 
$$2 \pi r h = 264$$
  $\Rightarrow$   $h = \left(264 \times \frac{7}{22} \times \frac{1}{2} \times \frac{1}{7}\right) = 6 \text{m}.$ 

$$\therefore$$
 Required ratio =  $\frac{2r}{h} = \frac{14}{6} = 7 : 3.$ 

Learn more problems on : Volume and Surface Area

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9. 
$$(17)^{3.5} \times (17)^{?} = 17^{8}$$

- A.2.29 💥
- B.2.75 💥
- C.4.25
- ✓ D.4.5

Your Answer: Option D

Correct Answer: Option D

#### Explanation:

Let 
$$(17)^{3.5}$$
 x  $(17)^x = 17^8$ .

Then, 
$$(17)^{3.5+x} = 17^8$$
.

$$3.5 + x = 8$$

$$\Rightarrow x = (8 - 3.5)$$

$$\Rightarrow x = 4.5$$

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- 10.A man walked diagonally across a square lot. Approximately, what was the percent saved by not walking along the edges?
  - A.20 💥
  - ■B.24 **※**
  - C.30
  - D.33 💥

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Then, 
$$AB + BC = 2x$$
 metres.

$$AC = 2x = (1.41x) \text{ m}.$$

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

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

Learn more problems on : Area

Discuss about this problem: Discuss in Forum

- 11. The product of two numbers is 2028 and their H.C.F. is 13. The number of such pairs is:
  - A.1 ¥
  - ☑ B.2
    ❷
  - C.3 💥
  - D.4 💥

Your Answer: Option B

Correct Answer: Option B

Explanation:

Let the numbers 13a and 13b.

Then,  $13a \times 13b = 2028$ 

$$\Rightarrow ab = 12.$$

Now, the co-primes with product 12 are (1, 12) and (3, 4).

[Note: Two integers a and b are said to be **coprime** or relatively prime if they have no common positive factor other than 1 or, equivalently, if their greatest common divisor is 1]

So, the required numbers are  $(13 \times 1, 13 \times 12)$  and  $(13 \times 3, 13 \times 4)$ .

Clearly, there are 2 such pairs.

Learn more problems on: <u>Problems on H.C.F and L.C.M</u>

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12.Goods were bought for Rs. 600 and sold the same for Rs. 688.50 at a credit of 9 months and thus gaining 2% The rate of interest per annum is:

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Your Answer: Option A

Correct Answer: Option A

Explanation:

S.P. = 102% of Rs. 
$$600 = \binom{102}{100} \times 600 = \text{Rs. } 612.$$

Now, P.W. = Rs. 612 and sum = Rs. 688.50.

$$T.D. = Rs. (688.50 - 612) = Rs. 76.50.$$

Thus, S.I. on Rs. 612 for 9 months is Rs. 76.50.

$$\therefore \text{ Rate} = \begin{bmatrix} 100 \times 76.50 \\ 612 \times 4 \end{bmatrix}_{0/6} = \frac{2}{1630}\%$$

Learn more problems on: True Discount

Discuss about this problem: Discuss in Forum

13. The true discount on Rs. 2562 due 4 months hence is Rs. 122. The rate percent is:

$$\square$$
B.13 $\frac{1}{3}\%$  **\*\***

Your Answer: Option C

Correct Answer: Option C

Explanation:

$$P.W. = Rs. (2562 - 122) = Rs. 2440.$$

S.I. on Rs. 2440 for 4 months is Rs. 122.

$$\therefore \text{ Rate} = \begin{bmatrix} 100 \text{ x } 122 \\ 2440 \text{ x}_3^1 \end{bmatrix}_{\%} = 15\%.$$

Learn more problems on: True Discount

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Your Answer: Option C

Correct Answer: Option C

Explanation:

Go on multiplying the number by 2 and adding 1 to it to get the next number.

So, 27 is wrong.

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- 15. Sakshi can do a piece of work in 20 days. Tanya is 25% more efficient than Sakshi. The number of days taken by Tanya to do the same piece of work is:
  - A.15 💥
  - ▼ B.16
  - C.18 🗱
  - D.25 💥

Your Answer: Option B

Correct Answer: Option B

Explanation:

Ratio of times taken by Sakshi and Tanya = 125 : 100 = 5 : 4.

Suppose Tanya takes *x* days to do the work.

$$5:4::20:x \Rightarrow x = \begin{pmatrix} 4 \times 20 \\ 5 \end{pmatrix}$$

 $\Rightarrow$  x = 16 days.

Hence, Tanya takes 16 days to complete the work.

Learn more problems on: Time and Work

- 16.A and B can complete a work in 15 days and 10 days respectively. They started doing the work together but after 2 days B had to leave and A alone completed the remaining work. The whole work was completed in:
  - A.8 days **※**
  - B.10 days ※
  - C.12 days

$$(A + B)$$
's 1 day's work =  $\begin{pmatrix} 1 & 1 \\ 15 & 10 \end{pmatrix} = \frac{1}{6}$ .

Work done by A and B in 2 days = 
$$\begin{pmatrix} 1 \\ 6 \end{pmatrix} \times 2 = \frac{1}{3}$$
.

Remaining work = 
$$\left(1 - \frac{1}{3}\right) = \frac{2}{3}$$
.

Now, 
$$\frac{1}{15}$$
 work is done by A in 1 day.

$$\frac{2}{3}$$
 work will be done by a in  $\left(15 \times \frac{2}{3}\right) = 10$  days.

Hence, the total time taken = 
$$(10 + 2) = 12$$
 days.

### 17.X can do a piece of work in 40 days. He works at it for 8 days and then Y finished it in 16 days. How long will they together take to complete the work?

$$\sim$$
 A.  $^{13}_{3}^{1}$  days

### Explanation:

Work done by X in 8 days = 
$$\begin{pmatrix} 1 \\ 40 \end{pmatrix} \times 8 = \frac{1}{5}$$
.

Remaining work = 
$$\left(1 - \frac{1}{5}\right) = \frac{4}{5}$$
.

Now, 
$$\frac{4}{5}$$
 work is done by Y in 16 days.

Whole work will be done by Y in 
$$\left(16 x_4^5\right) = 20$$
 days.

$$X$$
's 1 day's work = 1, Y's 1 day's work = 1

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Learn more problems on: Time and Work

Discuss about this problem: Discuss in Forum

- 18. The banker's discount on a bill due 4 months hence at 15% is Rs. 420. The true discount is:
  - 🗸 A.Rs. 400🔮
  - B.Rs. 360 **×**
  - C.Rs. 480 🗱
  - D.Rs. 320 💥

Your Answer: Option A

Correct Answer: Option A

Explanation:

T.D. = 
$$\begin{bmatrix} B.D. \times 100 \\ 100 + (R \times T) \\ 420 \times 100 \\ 100 + \left(15 \times \frac{1}{3}\right) \end{bmatrix}$$
  
= Rs.  $\begin{bmatrix} 420 \times 100 \\ 105 \\ 105 \end{bmatrix}$   
= Rs. 400.

Learn more problems on : Banker's Discount

Discuss about this problem: Discuss in Forum

The banker's gain on a certain sum due  $1\frac{1}{2}$  years hence is  $\frac{3}{25}$  of the banker's

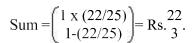
discount. The rate percent is:

- $\square A.5_{5}^{1}\%$
- B.91 %
- $\square C.8_8^1\%$
- $\Box D.6_{6}^{1}\% \times$

Your Answer: Option B

Correct Answer: Option B

Explanation:



S.I. on Rs.  $\frac{22}{3}$  for  $1\frac{1}{2}$  years is Re. 1.

$$\therefore \text{ Rate} = \begin{pmatrix} 100 \text{ x 1} \\ 22 \text{ x} \\ 3 \text{ x} \\ 2 \end{pmatrix}_{\%} = \frac{100}{11} = 9 \frac{1}{11} \%.$$

Learn more problems on: Banker's Discount

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Direction (for Q.No. 20):

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.

What is the area of the hall?

- I. Material cost of flooring per square metre is Rs. 2.50
- II. Labour cost of flooring the hall is Rs. 3500
- III. Total cost of flooring the hall is Rs. 14,500.
- A.I and II only 🛎

YouB: Amswell I Option C

C. All I, II and III

Correct Answer: Option C

Explanation:

- I. Material cost = Rs. 2.50 per  $m^2$
- II. Labour cost = Rs. 3500.
- III. Total cost = Rs. 14,500.

Let the area be A sq. metres.

- $\sim$  Material cost = Rs. (14500 3500) = Rs. 11,000.
- $\therefore \frac{5A}{2} = 11000 \iff A = \begin{pmatrix} 11000 \times 2 \\ 5 \end{pmatrix} = 4400 \text{ m}^2.$
- D.Any two of the three
- E. None of these **\*\***
- Thus, all I, II and III are needed to get the answer.