

CLAT 2019

TEST SERIES PLAN

BY NLU & NUJS TOPPERS

35
FULL LENGTH
TESTS

₹ **1799**

JOIN NOW

by

TestZone

INDIA'S LEAST PRICED TEST SERIES

- Brilliant Test Analysis
- Excellent Content
- Unmatched Explanations

JOIN NOW

Maths Questions for CLAT Exam.

CLAT Maths Quiz 36

Directions: Read the following Questions carefully and choose the right answer:

1. Each member in a kitty party contributed twice as many rupees as the total number of members present and total collection was Rs. 9248. The number of members present in the party was?

- A. 68 B. 56 C. 42 D. 66

2. The product of two numbers is 2560 and their HCF is 16. The LCM of the numbers will be?

- A. 150 B. 160 C. 48 D. 75

3. Average salary of all the workers in a factory is Rs. 20,000. The average salary of 10 accountants is Rs. 25,000 and the average salary of all the remaining workers is Rs. 15,000. Find the total number of workers in the factory?

- A. 25 B. 22 C. 20 D. 18

4. The ratio of the income of Ravi and Supal is 5 : 3 and their respective expenditure is 9 : 5. If they save Rs. 5200 and Rs. 3600 respectively, find the income of Supal?

- A. 9000 B. 10,000 C. 9600 D. 10,800

5. Ravi is flying a kite with a 300 meter long thread. If the thread (assuming thread to be in straight line) of Kite makes an angle of 60° with the plane surface, find the height of the kite from the ground?

- A. $75\sqrt{3}$ B. $150\sqrt{3}$ C. 150 D. 180

6. If 70 % of students in a school are boys and the number of girls be 1008. Find the number of boys in the same school.

- A. 2352 B. 2450 C. 2682 D. 2500

7. A sum was lent at simple interest at a certain rate for 2 years. Had it been lent for 3% higher rate, it would have fetched Rs. 600 more. The original sum of money was?

- A. 10,000 B. 9000 C. 9500 D. 11000

8. Profit after selling a commodity for Rs. 5240 is same as loss after selling it for Rs. 4520. Find the cost price of the commodity?

- A. 5000 B. 5120 C. 4680 D. 4880

9. Vinayak has to cover a distance of 6 km in 45 min. If he covers one-half of the distance in 2/3rd time, what should be his speed to cover the remaining distance in the remaining time?

A. 15 km/h

B. 12 km/h

C. 8 km/h

D. 20 km/h

10. A tap can fill a tank in 6 hours and another tap can empty it in 12 hours. If both the taps are open, the time taken to fill the tank will be?

A. 11 hours

B. 12 hours

C. 15 hours

D. 16 hours

Correct Answers:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| A | B | C | C | B | A | A | D | B | B |

Explanations:

1. Let the number of members in the party be x.

As, per the given condition:

Each member has given twice as many rupees as number of members,

$$\therefore x \times 2x = 9248$$

$$2x^2 = 9248$$

$$x^2 = 4624$$

Taking square root of both the sides,

$$x = 68.$$

Option A, is hence the correct answer.

2. As,
HCF \times LCM = Product of two numbers

So,

$$16 \times \text{LCM} = 2560$$

$$\text{LCM} = \frac{2560}{16}$$

$$= 160$$

So, the LCM of the given numbers= 160

Option B, is hence the correct answer.

3. Average salary of all the workers = 20,000
Let the remaining number of workers be x.

$$\frac{10 \times 25000 + x \times 15000}{10 + x} = 20,000$$

$$10 \times 25000 + 15,000x = 20,000(10 + x)$$

$$1000 \times (250 + 15)x = 20,000(10 + x)$$

$$250 + 15x = 20(10 + x) = 200 + 20x$$

$$250 - 200 = 20x - 15x$$

$$5x = 50$$

$$x = 10$$

So, the total number of workers = 10 + 10 = 20

Option C, is hence the correct answer.

4. Let the income of Ravi and Supal be 5x and 3x and their expenditure be 9y and 5y respectively.

As,

Income – expenditure = Saving

So,

$$5x - 9y = 5200 \dots\dots\dots(i)$$

$$3x - 5y = 3600 \dots\dots\dots(ii)$$

Solving both the equations,

We get,

$$15x - 27y = 15,600 \dots\dots\dots(iii)$$

$$15x - 25y = 18,000 \dots\dots\dots(iv)$$

Subtracting,

$$-2y = -2400$$

$$y = 1200$$

Putting value of y in equation (i),

We get,

$$5x - 9 \times 1200 = 5200$$

$$5x = 5200 + 10800$$

$$5x = 16000$$

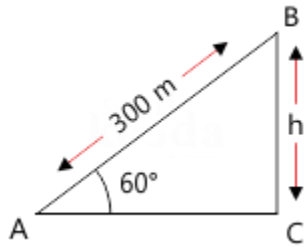
$$x = 3200$$

Income of Supal = 3x = 3 × 3200 = 9600

Income of Supal = 9600

Option C, is hence the correct answer.

5.



In ΔABC

$$\sin 60^\circ = \frac{BC}{AB}$$

$$\text{As, } \sin 60^\circ = \frac{\sqrt{3}}{2} = \frac{BC}{300}$$

BC = Height of tower = H

$$\frac{\sqrt{3}}{2} = \frac{H}{300}$$

$$H = 300 \times \frac{\sqrt{3}}{2}$$

$$H = 150\sqrt{3}$$

Option B, is hence the correct answer.

6. As, boys in the school are 70 % and therefore the remaining 30% must be girls.
 $\therefore 30\% = 1008$

$$\begin{aligned} \text{So, } 100\% &= 1008 \times \frac{100}{30} \\ &= 3360 \end{aligned}$$

Number of boys in the school = $3360 - 1008 = 2352$

Option A, is hence the correct answer.

7. At 3 % higher rate for 2 years the interest fetched is 600
so, for 1 year it should be Rs. 300
As, 3 % for 1 year is Rs. 300, therefore 1 % must be equal to Rs. 100
As, 1% of the principal is equal to 100 so the principal (100%) = $100 \times 100 = 10,000$
Option A, is hence the correct answer.

8. Let the cost price of the commodity be x .

Now,

$$5240 - x = x - 4520$$

$$5240 + 4520 = 2x$$

$$x = 4880$$

So the cost price of the article is 4880.

Option D, is hence the correct answer.

9. As per the question,

$$\text{Remaining distance that has to be covered} = 6 - \frac{1}{2} \times 6 = 3 \text{ km}$$

$$\text{Remaining time} = 45 - \frac{2}{3} \times 45$$

$$= 45 - 30 = 15 \text{ min}$$

$$= \frac{1}{4} \text{ hour}$$

$$\text{Thus, required speed to cover the remaining distance in the remaining time} = \frac{3}{1/4} = 12 \text{ km/h}$$

Hence, option B is correct.

10.

$$\text{Part of Cistern filled in one hour} = \frac{1}{6}$$

$$\text{Part of the cistern emptied in one hour} = \frac{1}{12}$$

When, both the pipes are opened simultaneously, part of cistern filled in one hour

$$= \frac{1}{6} - \frac{1}{12} = \frac{1}{12}$$

Hence, the cistern will be filled in 12 hours.

Option B, is hence the correct answer.

CLAT 2019

TEST SERIES PLAN

BY NLU & NUJS TOPPERS

35
FULL LENGTH
TESTS

₹ **1799**

JOIN NOW

by

TestZone

INDIA'S LEAST PRICED TEST SERIES

- Brilliant Test Analysis
- Excellent Content
- Unmatched Explanations

JOIN NOW