

## Chapter – 1

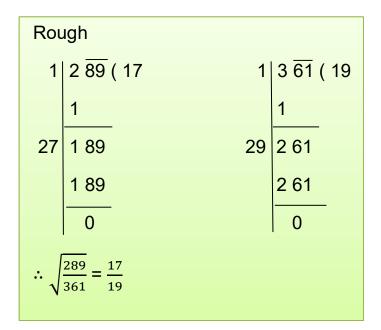
## **Rational and Irrational Number**

Lecture sheet – 10

#### MCQ

1. Which one of the following is the square root of  $\frac{289}{361}$ ?

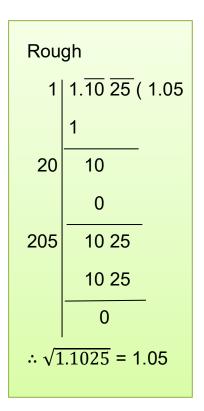
a)  $\frac{13}{19}$  b)  $\frac{17}{19}$  c)  $\frac{19}{13}$  d)  $\frac{19}{17}$ 

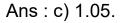


Ans : b)  $\frac{17}{19}$ .

## 2. Which one of the following is the square root of 1.1025?

a) 1.5 b) 1.005 c) 1.05 d) 0.05





# 3. A rational number is -

1)0 2)5 3) $\frac{5}{2}$ 

## Which one of the following is correct?

a) 1 b) 2 c) 2 & 3 d) 1, 2 & 3

The difference of square of two consecutive number is 19.

Answer to question no. 4 and 5 following the information:

- 4. If one of the number is 10, what is the other number?
  - a) 12 b) 11 c) 9 d) 8

Rough Let, 1<sup>st</sup> number = x 2<sup>nd</sup> number = x+1 ATQ,  $(x+1)^2 - (x)^2 = 19$ Or,  $x^2 + 2x + 1 - x^2 = 19$ Or, 2x + 1 = 19Or, 2x = 19 - 1Or, 2x = 18Or,  $x = \frac{18}{2}$ Or, x = 9∴ 1<sup>st</sup> number = 9 ∴ 2<sup>nd</sup> number = 9 + 1 = 10

Ans : c) 9.

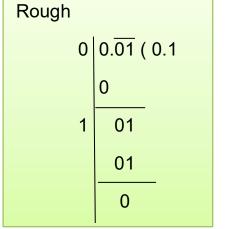
#### 5. What is sum of total of squares of the two numbers?

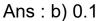
a) 181 b) 221 c) 164 d) 144 Rough  $(9)^2 + (10)^2 = 81 + 100 = 181$ 

Ans : a) 181.

## 6. Which of the following is the square root of 0.01?

a) 0.01 b) 0.1 c) 0.2 d) 1





7. If the digit in unit place of a number is either 2 or 8, the digit in unit place of its square will be-

a) 2 b) 4 c) 6 d) 8 Rough  $(2)^2 = 4$   $(8)^2 = 64$ Unit place = 4 Ans : b) 4.

8. By which number the multiplication or division of 3  $\times$  7  $\times$  5  $\times$  7  $\times$  3 will be perfect square number?

a) 3 b) 5 c) 7 d) 11

Ans : b) 5.

## 9. Which one of the following is irrational number?

a)  $\sqrt{2}$  b)  $\sqrt{9}$  c)  $\sqrt{16}$  d)  $\sqrt{25}$ Ans : a)  $\sqrt{2}$ 

10. Which one of the following is the square root of 50.6944?

a) 7.22 b) 7.12 c) 7.13 d) 7.14Rough 7 50.69 44 (7.12 49 141 169 141 28 44 28 44 0

Ans : b) 7.12.

# Exercise (Do yourself)

- 1. Which one of the following is the square root of  $\frac{144}{289}$ ?
  - a)  $\frac{12}{17}$  b)  $\frac{12}{289}$  c)  $\frac{144}{13}$  d)  $\frac{19}{17}$
- 2. Which one of the following is the square root of 1.21?
  - a) 1.01 b) 1.10 c) 1.11 d) 1.110

3. Which one of the following is the square root of 1.1025?

a) 0.9 b) 0.09 c) 0.009 d) 0.0009

4. What is the length of sides of square if the area of the square is  $a^2$ ?

a) a b) 2a c) 3a d) 4a

5. What is called the product of a number and itself?

a) Square root b) Square c) Cube root d) Cube

6. If the numerator and denominator of a fraction is perfect square then the fraction is called –

a) Square root fraction

b) Perfect square root

c) Cube root fraction

d) Square fraction

7. What is the square root of  $\frac{1}{49}$ ?

a)  $\frac{1}{7}$  b)  $\frac{1}{8}$  c)  $\frac{1}{9}$  d)  $\frac{1}{6}$ 

8. One garden has 8 rows of trees. How many trees are needed to plants 8 trees in each row?

a) 16 b) 46 c) 64 d) 61

9. What is the square root of 97969?

a) 303 b) 313 c) 323 d) 333

10. What is the square root of  $67\frac{6}{25}$ ?

a)  $8\frac{1}{5}$  b)  $8\frac{1}{7}$  c)  $8\frac{1}{8}$  d)  $8\frac{2}{5}$