



Class – 7

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)  $\frac{19}{17}$

Rough

$$\begin{array}{r} 1 \overline{) 289} \text{ ( 17} \\ \underline{1} \\ 27 \overline{) 189} \\ \underline{189} \\ 0 \end{array}$$

$$\begin{array}{r} 1 \overline{) 361} \text{ ( 19} \\ \underline{1} \\ 29 \overline{) 261} \\ \underline{261} \\ 0 \end{array}$$

$$\therefore \sqrt{\frac{289}{361}} = \frac{17}{19}$$

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

Rough

$$\begin{array}{r} 1 \overline{) 1.10\ 25} \quad ( 1.05 \\ \underline{1} \phantom{00} \\ 20 \phantom{0} \phantom{00} \\ \underline{20} \phantom{00} \\ 205 \phantom{00} \\ \underline{205} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\therefore \sqrt{1.1025} = 1.05$$

Ans : c) 1.05.

**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 ,

$$(x+1)^2 - (x)^2 = 19$$

$$\text{Or, } x^2 + 2x + 1 - x^2 = 19$$

$$\text{Or, } 2x + 1 = 19$$

$$\text{Or, } 2x = 19 - 1$$

$$\text{Or, } 2x = 18$$

$$\text{Or, } x = \frac{18}{2}$$

$$\text{Or, } x = 9$$

$$\therefore 1^{\text{st}} \text{ number} = 9$$

$$\therefore 2^{\text{nd}} \text{ number} = 9 + 1 = 10$$

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

Rough

$$\begin{array}{r|l} 0 & 0.\overline{01} \text{ ( } 0.1 \\ & 0 \\ \hline 1 & 01 \\ & 01 \\ \hline & 0 \end{array}$$

Ans : b) 0.1

**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) 7.14

Rough

$$\begin{array}{r} 7 \overline{) 50.69 \overline{44}} \quad ( 7.12 \\ \underline{49} \phantom{00} \\ 141 \phantom{00} \\ \underline{141} \phantom{00} \\ 2844 \\ \underline{2844} \\ 0 \end{array}$$

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)  $8\frac{2}{5}$

