## <u>Class 10</u>

## **Mathematics**

## Chapter 1-Real Number

1.Write whether the rational number  $\frac{15}{1500}$  will have a terminating decimal expansion or a non-terminating repeating decimal expansion.

2. Find the [*HCF* & *LCM*] for the numbers 100and 190.

3. Find the HCF of 32265 and 625 using Euclid Lemma

4. Prove that  $3+\sqrt{2}$  is an irrational number.

5. Prove that  $\sqrt{5}$  is an irrational number.

6.Use Euclid's Division Lemma to show that the square of any positive integer is either of the form 3m or (3m+1) for some integer m.

7. Show that the square of any positive odd integer is of the form 8m+1, for some integer m.

- 8. Prove that  $\sqrt{2}$  is irrational
- 8. Prove that 7+3 $\sqrt{2}$ is not a rational number.
- 9. Prove that  $2-3\sqrt{5}$  is an irrational number.