Chapter 1

ASSIGNMENT

SUBJECTIVE EX. 1.1

1. Use Euclid's division algorithm to find the HCF of :
(i) 56 and 814 (ii) 6265 and 76254

2. Find the HCF and LCM of following using Fundamental Theorem of Arithmetic method.
(i) 426 and 576 (ii) 625, 1125 and 2125

3. Prove that $\sqrt{3}$ is an irrational number. **[CBSE - 2008]**

4. Prove that $\sqrt{5}$ is irrational number. **[CBSE - 2008]**

5. Prove that $5+\sqrt{2}$ is irrational.

6. Prove that $\sqrt{2}+\sqrt{3}$ is irrational.

7. Can we have any $n \in N$, where 7^n ends with the digit zero.

8. Without actually performing the long division, state whether the following rational number will have a terminating decimal expansion or non - terminating decimal expansion :
(i) $\frac{77}{210}$ (ii) $\frac{15}{1600}$

9. An army contingent of 616 members is to march behind and army band of 32 members in a parade. The two groups are to march in the same number of columns. What is the maximum number of columns in which they can march?

10. There is a circular path around a sports field. Sonia takes 18 minutes to drive one round of the field, while Ravi takes 12 minutes for the same. Suppose they both start at the same point and at the same time, and go in the same direction. After how many minutes will they meet again at the starting point ?

11. Write a rational number between $\sqrt{2}$ and $\sqrt{3}$. **[CBSE - 2008]**

12. Use Euclid's' Division Lemma to show that the square of any positive integer is either of the form 3m of 3m + 1 for some integer m. **[CBSE - 2008]**