### **CLASS-VI(MATHS)**

# PLAYING WITH NUMBERS (CHAPTER-4)

General direction for the students: whatever be the questions solved, everything must be copied in the maths copy and then do the Home work in the same copy.

Q.1. Lowest common multiple (LCM):- It is the smallest number from the common multiples of given numbers.

#### Q.2. Find the LCM Of 6 and 8.

Ans:- the multiples of 6 are 6, 12, 18, 24, 30, 36,42, 48......

The multiples of 8 are 8, 16, 24, 32, 40, 48 ......

The common multiples of 6 and 8 are 24, 48.......

The least number from the common multiple is 24.

The least number from the common multiple is 24.

Hence LCM of 6 and 8 is 24.

## Q.3. Find LCM of 28 and 42 with the help of prime factorisation method.

Ans:- prime factorisation of the given numbers are-

28= 2×2×7

 $42 = 2 \times 3 \times 7$ .

Notice that 2 occurs as a prime factor maximum 2 times , 3 one time and 7 one time. Thus the LCM of 28 and 42 is=  $2\times2\times3\times7=84$ .

# Q.4. Can two numbers have 12 as their HCF and 234 as their LCM? Give reason to justify your answer.

ANS:- On dividing 234 by 12 we are getting 19 as remainder. Thus 234 is not exactly divisible by 12. Thus HCF and LCM of two numbers cannot be 12 and 234 respectively.

Reason:- LCM of two numbers is always exactly divisible by their HCF.

HOME WORK:- EXERCISE (4.5) QUESTION NUMBER (10), (11), (15), (8).