



**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF MATHEMATICS**



Subject : Mathematics      Topic 3 : Playing with Numbers      Date of Worksheet : 24/5/17

Resource Person: Mrs. Jayalakshmi Ratish

Date : 5/6/17

Name of the Student : \_\_\_\_\_

Class & Division : VI

Roll Number : \_\_\_\_

**Section A - Basic Skills**

- 1 Write even numbers between 13 and 24.
- 2 Write the first five multiples of 13.
- 3 Find HCF of given numbers by prime factorization -      (a) 36, 150      (b) 12, 18, 46
- 4 Find the common factors of 60, 75 and 105.
- 5 Write all the prime numbers between 1 and 30.

**Section B**

- 6 Find the prime factors of  
(a) 8624      (b) 540
- 7 The product of two numbers is 15870 and their HCF is 23. Find their LCM.
- 8 Find the greatest number which divides 290 and 538 leaving remainders 3 and 5 respectively.
- 9 State true (T) or false (F)-
  - a) If a number is divisible by 4, then it must be divisible by 8.
  - b) If a number is divisible by 9, then it must be divisible by 3.
  - c) If a number is divisible by 3 and 8 both, it must be divisible by 12.
  - d) The sum of  $24 + 42$  is divisible by 4.
  - e) The difference of  $75 - 40$  is divisible by 5.
- 10 45 roses, 65 carnations and 50 tulips are used to prepare identical flower arrangements. What is the maximum number of such arrangements that can be prepared?
- 11 Using divisibility test, determine which of the following numbers are divisible by 9.  
(a) 89145      (b) 678277
- 12 Using divisibility test, determine which of the following numbers are divisible by 11.  
(a) 10000001      (b) 96010837
- 13 Three persons start their morning walk from the same line at the same time and in the same direction. Their steps measure 90 cm, 80 cm, and 85 cm. At what distance from the starting line will they be in the same line again?

- 14 Find the greatest number which divides 290 and 538 leaving remainders 3 and 5 respectively.
- 15 Find the greatest 4-digit number which is exactly divisible by each 12, 18 and 30.
- 16 Find the smallest 5-digit number which is exactly divisible by 15, 24 and 40.
- 17 Find the least number which when divided by 12, 16 and 36 leaves a remainder 7 in each case.
- 18 Find the least number which on adding 10 is exactly divisible by 14, 35, 40 and 56.

### **Section C – HOTS**

- 19 At an international airport, planes take off from five different runways at 3, 4, 8, 12 and 15 minutes interval. At 7:30 am, planes took off from all five runways simultaneously. When will they next take off together again?
- 20 An advertisement board displays letters in green colored lights and pictures in yellow colored lights. The green lights come on every 10 seconds and the yellow lights come on every 15 seconds. If both the lights are turned on at the same time, after how many seconds will they come on together again?