Chapter – 3

Playing with Numbers

Worksheet – 1

1. Which of the following is divisible by 11?
   a. 140
   b. 250
   c. 301
   d. 319
2. Which of the following is divisible by both 8 and 10?
   a. 20
   b. 24
   c. 30
   d. 40
3. Which of the following is divisible by 2, 3 and 5?
   a. 20
   b. 24
   c. 30
   d. 40
4. Which of the following is divisible by 4, 6 and 9?
   a. 30
   b. 36
   c. 40
   d. 44
5. Highest common factor is also known as –
   a. Greatest common divisor
   b. Least common multiple
   c. Greatest common factor
   d. Least common factor
6. If LCM and HCF of two numbers are 180 and 2, then find the product of those two numbers?
   a. 90
   b. 180
   c. 240
   d. 360

7. Which of the following are the first three multiples of 19?
   a. 19, 28, 37
   b. 19, 24, 36
   c. 19, 38, 47
   d. 19, 38, 57
8. Which of the following are pairs of twin prime numbers less than 30 that have a difference of 2 among them?
   a. (3, 5), (5, 7), (11, 13), (17, 19), (23, 29)
   b. (3, 5), (5, 7), (11, 13), (13, 17), (17, 19)
   c. (3, 5), (5, 7), (11, 13), (17, 19),
   d. (3, 5), (7, 11), (11, 13), (23, 29)
9. Match the column:

Column A	Column B
a. 14641	i. Divisible by 13
b. 12363	ii. Divisible by 11
c. 323	iii. Divisible by 19
d. 1919	iv. Divisible by 17

10. State true or false in the following:
    a. Product of HCF and LCM is always equal to the product of their numbers.
    b. When a number is divided by its factor it does not leave a remainder.
    c. Any number whose last digit is 1 is divisible by 11.
    d. If the sum of last 2 digits of a number is divisible by 13 then the number itself is divisible by 13.

11. Find the greatest number which divide numbers 365, 423 and 547 and leave remainders 5, 3 and 7 respectively?
12. Solve:
    $50 + [30 - \{36 \div 6 + 4 \times 18 - (36 \div 18)\}]$
13. Find the LCM of 11 and 13?
14. Find the LCM of 17 and 19?
15. Raju wants to distribute 18 mint, 36 strawberry and 42 mango candies among his friends in boxes. But each box should have equal number of candies and of the same flavor. How many candies should he put in a single box and how many boxes would he need?

16. Check whether 104026 is divisible by 13 or not?
17. Find the product of the HCF of two pair of numbers: 18, 42 and 21, 24?
18. Divide the LCM of 18 and 40 with the LCM of 20 and 30?
19. Find the difference between largest 5-digit number and smallest 4-digit number?
20. Find out the numbers which are divisible by 11, 13, 17 or 19 from 121, 169, 204, 228, 231, 234, 272 and 304 and write them separately in their own group?