Class – IV

Subject – Mathematics

Chapter – 6 (Tests of divisibility)

Note :- Write your notes in fair copy and do practice of remaining questions in rough copy.

Divisibility rules

Divisibility by 2 :- A number is divisible by 2 if ones place digit is an even number.

Ex :- 18, 210, 342, 3464

Divisibility by 3 :- A number is divisible by 3 if the sum of the digits of the number is divisible by 3.

Ex :- 207 , 1728

Divisibility by 4 :- A number is divisible by 4 if the last two digits are zeros or if the number formed by the last two digits is divisible by 4.

Ex :- 216, 300

Divisibility by 5 :- A number is divisible by 5 if the digit in the ones place is either 0 or 5.

Ex :- 50, 265

Divisibility by 6 :- A number is divisible by 6 if it is divisible by both 2 and 3.

Ex :- 48, 246

Divisibility by 9 :- A number is divisible by 9 if the sum of the digits of the number is divisible by 9.

Ex :- 72, 456

<u>Divisibility by 10</u> :- A number is divisible by 10 if the digit in the ones place is 0.

Ex :- 80, 1120

Exercise – 1

1. **Encircle the numbers which are divisible by 2.**
   Do it in book
2. **Encircle the numbers which are divisible by 5.**
   Do it in book
3. **Encircle the numbers which are divisible by 10.**
   Do it in book
4. **Check whether the following numbers are divisible by 3:**
   (a)   39

   <u>Divisibility by 3</u> :- A number is divisible by 3 if the sum of the digits of the number is divisible by 3.

   Sum of the digits of 39 = 3 + 9 = 12

   12is divisible by 3, thus 39 is also divisible by 3.

   (d) 866

   <u>Divisibility by 3</u> :- A number is divisible by 3 if the sum of the digits of the number is divisible by 3.

   Sum of the digits of 866= 8 + 6 + 6 = 20

   20 is not divisible by 3, thus 866 is also not divisible by 3.

(e) 4284

Divisibility by 3 :- A number is divisible by 3 if the sum of the digits of the number is divisible by 3.

Sum of the digits of 4284 = 4 + 2 + 8 + 4 = 18

18 is divisible by 3, thus 4284 is also divisible by 3

Practice (b) and (c)

5. **Check whether the following numbers are divisible by 4 :**
   (a)   7004

   Divisibility by 4 :- A number is divisible by 4 if the last two digits are zeros or if the number formed by the last two digits is divisible by 4.

   In 7004, the number formed by last two digits of 7004 is 04,

   Which is divisible by 4, Thus 7004 is divisible by 4.

   (c) 8000

   Divisibility by 4 :- A number is divisible by 4 if the last two digits are zeros or if the number formed by the last two digits is divisible by 4.

   In 8000, the number formed by last two digits of 8000 is 00.

   Thus 8000 is divisible by 4.

(e) 1982

Divisibility by 4 :- A number is divisible by 4 if the last two

digits are zeros or if the number formed by the last two digits

is divisible by 4.

In 1982, the number formed by last two digits of 1982 is 82,

Which is not divisible by 4.

Thus 1982 is not divisible by 4.

Practice (b) and (d)

6. Check whether the following numbers are divisible by 6:

(a)   426

Divisibility by 6 :- A number is divisible by 6 if it is divisible by

both 2 and 3.

Divisibility by 2 :- A number is divisible by 2 if ones place digit is

an even number.

In 426, ones place digit is 6, which is even, thus 426 is divisible

by 2.

Divisibility by 3 :- A number is divisible by 3 if the sum of the

digits of the number is divisible by 3.

Sum of the digits of 426 = 4 + 2 + 6 = 12

12 is divisible by 3 , thus 426 is also divisible by 3.

Thus 426 is divisible by both 2 and 3 so it is divisible by 6.

(e)3826

<u>Divisibility by 6</u> :- A number is divisible by 6 if it is divisible by both 2 and 3.

<u>Divisibility by 2</u> :- A number is divisible by 2 if ones place digit is an even number.

In 3826, ones place digit is 6, which is even, thus 3826 is

Divisible by 2.

<u>Divisibility by 3</u> :- A number is divisible by 3 if the sum of the digits of the number is divisible by 3.

Sum of the digits of 3826 = 3 + 8 + 2 + 6 = 19

19 is not divisible by 3, thus 3826 is not divisible by 3.

Thus 3826 is divisible by 2 but it is not divisible by 3, so 3826 is

not divisible by 6.

Practice (b), (c), and (d)

1. **Check whether the following numbers are divisible by 9:**
   (a)   216

   <u>Divisibility by 9</u> :- A number is divisible by 9 if the sum of the digits of the number is divisible by 9.

   Sum of the digits of 216 = 2 + 1 + 6 = 9

   9 is divisible by 9, thus 216 is also divisible by 9.

(e) 6715

Divisibility by 9 :- A number is divisible by 9 if the sum of the
digits of the number is divisible by 9.

Sum of the digits of 6715 = 6 + 7 + 1 + 5 = 19

19 is not divisible by 9, thus 6715 is also not divisible by 9.

Practice (b), (c) and (d).