CHAPTER – 6
<u>INTEGERS</u>

- We have seen that there are times when we need to use numbers with a negative sign. This is when we want to go below zero on the number line. These are called negative numbers. Some examples of their use can be in temperature scale, water level in lake or river, level of oil in tank etc. They are also used to denote debit account or outstanding dues.

- The collection of numbers..., – 4, – 3, – 2, – 1, 0, 1, 2, 3, 4, ... is called integers. So, – 1, – 2, – 3, – 4, ... called negative numbers are negative integers and 1, 2, 3, 4, ... called positive numbers are the positive integers.

- We have also seen how one more than given number gives a successor and one less than given number gives predecessor.

- We observe that

  (a) When we have the same sign, add and put the same sign.

  (i) When two positive integers are added, we get a positive integer [e.g. (+3) + (+2) = + 5].

  (ii) When two negative integers are added, we get a negative integer [e.g. (–2) +(–1)= – 3].

  (b) When one positive and one negative integers are added we subtract them as whole numbers by considering the numbers without their sign and then put the sign of the bigger number with the subtraction obtained. The bigger integer is decided by ignoring the signs of the integers [e.g. (+4) + (–3) = + 1 and (–4) + (+3) = – 1].

  (c) The subtraction of an integer is the same as the addition of its additive inverse.

- We have shown how addition and subtraction of integers can also be shown on a number line.