

# Mathematics

(www.tiwariacademy.net)

(Chapter – 1) (Number Systems)(Exemplar Problems)

(Class – IX)

## Exercise 1.1

Write the correct answer in each of the following:

### Question 12:

The number obtained on rationalising the denominator of  $\frac{1}{\sqrt{7}-2}$  is

- (A)  $\frac{\sqrt{7}+2}{3}$       (B)  $\frac{\sqrt{7}-2}{3}$       (C)  $\frac{\sqrt{7}+2}{5}$       (D)  $\frac{\sqrt{7}+2}{45}$

### Answer 12:

- (A)  $\frac{\sqrt{7}+2}{3}$

Solution:

We have  $\frac{1}{\sqrt{7}-2}$

$$\frac{1}{\sqrt{7}-2} = \frac{1}{\sqrt{7}-2} \times \frac{\sqrt{7}+2}{\sqrt{7}+2} = \frac{\sqrt{7}+2}{7-4} = \frac{\sqrt{7}+2}{3}$$

