

# Logarithm

## Exercise 3.2 for Class IX

Q1. Find the common logarithm of the following numbers:

i. 232.92

ii. 29.326

iii. 0.00032

iv. 0.3206

Q2. If  $\log 31.09 = 1.4926$ , find the values of following:

i.  $\log 3.109$

ii.  $\log 310.9$

iii.  $\log 0.003109$

iv.  $\log 0.3109$

Q3. Find the numbers whose common logarithms are:

i. 3.5621

ii.  $\bar{1}.7427$

Q4. What replacement for the unknown in each of following will make the statement true?

i.  $\log_3 81 = L$

ii.  $\log_a 6 = 0.5$

iii.  $\log_5 n = 2$

iv.  $10^p = 40$

Q5. Evaluate

i.  $\log_2 \frac{1}{128}$

ii.  $\log 512$  to the base  $2\sqrt{2}$

Q6. Evaluate the value of 'x' from the following statements.

i.  $\log_2 x = 5$

ii.  $\log_{81} 9 = x$

iii.  $\log_{64} 8 = \frac{x}{2}$

iv.  $\log_x 64 = 2$

v.  $\log_3 x = 4$