CBSE TEST PAPER-03
CLASS - IX MATHEMATICS (Number System)

1) Define a rational number with example.

2) Find a rational number between - 1/4 and - 1/3

3) Is every integer is a rational number? Give reason.

4) Express $0.\overline{53}$ as a vulgar fraction.

5) 5. Simplify $(9/25)^{-3/2}$

6) Write an irrational number between 2 and 3

7) Rationalize the denominator $\frac{1}{\sqrt{3}+\sqrt{7}}$

8) Prove with help of two examples product of a rational and irrational number may be rational or irrational.

9) Rationalize the denominator $\frac{3-\sqrt{7}}{3-4\sqrt{7}}$

10) Represent 0.93 in rational form.

11) Represent $1.\overline{23}$ on number line by successive magnification

12) Represent $0.9\overline{3}$ on number line

13) If $a = 1 - \sqrt{2}$ find $(a-\frac{1}{a})^3$

14) If $x = 3+2\sqrt{2}$ find $x^4 + \frac{1}{x4}$

15) If $x = \frac{1}{2-\sqrt{3}}$, prove that $x^3 - 2x^2 - 7x + 5 = 3$