CBSE TEST PAPER-02

CLASS - IX MATHEMATICS (Number System)

1. Every natural number is [1]

   (i) not an integer (ii) always a whole number

   (iii) an irrational number (iv) not a fraction

2. Select the correct statement from the following [1]

   $(i)\frac{7}{9}>\frac{4}{5}$ $(ii)\frac{2}{6}<\frac{3}{9}$

   $(iii)\frac{-2}{3}>\frac{-4}{5}$ $(iv)\frac{-5}{7}<\frac{-3}{4}$

3. $7.\bar{2}$ is equal to [1]

   $(i)\frac{68}{9}$ $(ii)\frac{64}{9}$ $(iii)\frac{65}{9}$ $(iv)\frac{63}{9}$

4. 0.83458456……..is [1]

   (i) an irrational number (ii) rational number

   (iii) a natural number (iv) a whole number.

5. Evaluate $(i)\sqrt[3]{125}\,(ii)\sqrt[4]{1250}$ [2]

6. Find rationalizing factor of $\sqrt{300}$ [2]

7. Rationalize the denominator $\frac{1}{\sqrt{5+\sqrt{2}}}$ and subtract it from $\sqrt{5}-\sqrt{2}$ [2]

8. Shove that $\sqrt{7}-3$ is irrational [2]

9. Represent $\sqrt{3}$ on number line [3]

10. Simplify $\left(3\sqrt{2}+2\sqrt{3}\right)^2\left(3\sqrt{2}-2\sqrt{3}\right)^2$ [3]

11. Express $2.4\overline{178}$ in the from $\frac{p}{q}$ [3]

12. Simplify $(27)^{-\frac{2}{3}}\div 9^{\frac{1}{2}}.3^{-\frac{3}{2}}$ [3]

13. It $\sqrt{5}=2.236$ and $\sqrt{3}=1.732$ Find the value of $\frac{2}{\sqrt{5}+\sqrt{3}}+\frac{7}{\sqrt{5}-\sqrt{3}}$ [5]