Sub-(Maths) Class- 9th

Important Question

One Mark Question-

Q.1- Is zero a rational number? if yes, explain.

Q.2- Write the vulgar fraction of $3.\overline{13}$

Q.3- Classify the following number as rational or irrational

a) $\sqrt{961}$ b) $\sqrt{29}$

Q.4- Divide $10\sqrt{35}$ by $5\sqrt{20}$

Q.5- Write the rationalizing factor of $\sqrt{200}$

Two Mark Question

Q1-Find the fourth root of 24010000

Q.2-Solue $[16x^{0}]^{-2}$ $5^{-1} - 6^{-1}]$

Q.3-Simplify

a) $\sqrt[4]{2401} + \sqrt[2]{1521} - 3\sqrt[6]{216}$

b) $\frac{\sqrt[2]{3}-\sqrt{2}}{\sqrt[2]{3}+\sqrt{2}}$

Q.4- Multiply $\sqrt{200}$ x $\sqrt{32}$

Q.5 Visualize line up to 5 decimal places.

Three Mark Question

Q.1- If $\frac{1}{x} = \sqrt{2}+1$ find

a) $x+\frac{1}{x}$ b) $x^{2}+\frac{1}{x^{2}}$

Q.2 – Simplify $\frac{7^{34}+7^{32}+7^{36}}{7^{24}+7^{28}+7^{26}}$

Q.3- Simplify $(\frac{1}{x^{b-a}})$ a+b $(\frac{1}{x^{c-b}})$ b+c $(\frac{1}{x^{a-c}})$c-a

Q.4- Find the value of a and b.

$\frac{\sqrt{3}}{\sqrt{3}+\sqrt{2}} \frac{\sqrt{2}}{} =$ a- $\sqrt[b]{6}$ +9

Q.5- Represent $\sqrt{11}$ on the number line.

Q.6- $\left(\frac{81}{16}\right)^{-3/4} x \left(\frac{64}{27}\right)^{-1/3}$

Q.7- $\frac{\sqrt{32}+\sqrt{48}}{\sqrt{8}-\sqrt{12}}$

Q.8- $\left(\frac{81}{16}\right)^{-3/4} x \left(\frac{25}{9}\right)^{-3/2} \left(\frac{5}{2}\right)^{-3}$

Q.9-If x=$\frac{\sqrt{3}}{\sqrt{3}+\sqrt{2}}$ $\frac{\sqrt{2}}{}$ and y=$\frac{\sqrt{3}}{\sqrt{3}+\sqrt{2}}$ $\frac{\sqrt{2}}{}$ find $x^{2}+y^{2}$

Four Mark Question-

Q.1- Represent $\sqrt{8.7}$ and $3\sqrt{2}$ on number line.

Q.2- Rationalize the denominator of the followings

a) $\frac{2}{\sqrt{5}-\sqrt{3}}$ b) $\frac{\sqrt{2}+\sqrt{5}}{2\sqrt{2}+\sqrt{5}}$

Q.3-Write five rational number b/w $\frac{5}{7}$ and $\frac{8}{3}$

Q.4- Write five rational number b/w $\sqrt{2}$ and $\sqrt{3}$

Q.5- Draw the spiral square root till $\sqrt{8}$

Q.6- $3\sqrt{2}X\sqrt[4]{2}X\sqrt[12]{32}$

Q.7- 4+ $\frac{4}{4-\sqrt{5}}\sqrt{5} + \frac{4}{4+\sqrt{5}}\sqrt{5}$

Q.8-

$$\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-\sqrt{2}}$$