G. N. National Public School, Gorakhnath, GKP.

Class- IX MATHS CHAPTER-1 Number Systems

Assignment (Revision) Part-1

Q.-1 Simplify $\left[\{(256)^{-\frac{1}{2}}\}^{-\frac{1}{4}}\right]^2$

Q.2 Evaluate $\dfrac{2^n + 2^{n-1}}{2^{n+1} - 2^n}$

Q.3 If $10^x = 64$, find the value of $10^{\left(\frac{x}{2}+1\right)}$

Q.4 If $\sqrt{10} = 3.162$, find the value of $\dfrac{1}{\sqrt{10}}$

Q.5 Simplify $\left(\dfrac{3125}{243}\right)^{\frac{4}{5}}$

Q.6 Simplify $\sqrt[4]{81x^8y^4z^{16}}$

Q.7 $\left(\dfrac{2}{5}\right)^{2x-2} = \dfrac{32}{3125}$, find the value of x.

Q.8 Give an example of a number x such that x^2 is an irrational number and x^3 is a rational number.

Ch-1 Number System Assignment Part-2

Q-9 π is an irrational number but the value of π, $\frac{22}{7}$ is a rational number, why?

Q-10 Find the length of period of $\frac{1}{7}$.

Q-11 If $x = 2 - \sqrt{3}$ then find the value of $x^2 + \frac{1}{x^2}$.

Q-12 Find the simplest rationalisation factor of $\sqrt[3]{500}$

Q-13 Find the value of

$$\sqrt[3]{2} \times \sqrt[4]{2} \times \sqrt[12]{32}$$

Q-14 ~~Find~~ Find the value of

$$\sqrt[4]{\sqrt[3]{4096}}$$