



ARMY PUBLIC SCHOOL - BHUJ

WORKSHEET -1 (2020-21)

SUB: MATHEMATICS

Class : 10

M. M. : 40

Chap: 1, 2, 4

I Section - A (1 Marks)

- i) Write in decimal $\therefore \frac{13}{8}$ or $\frac{6}{15}$
- ii) Write a quadratic equation with given no. as the sum and product of its zeroes: $-1, 1$.
- iii) Find HCF of 60 & 84.
- iv) Check it is quadratic or not: $(x+1)^2 = 2(x-3)$

II Section - B (2 Marks)

- i) Given that $HCF(306, 657) = 9$, find LCM.
- ii) Prove $3+2\sqrt{5}$ is irrational.
- iii) Find zeroes: $x^2 - 2x - 8$.
- iv) Find the values of k , they have two real equal roots: $2x^2 + kx + 3 = 0$.

III Section - C (3 Marks)

- i) Using Euclid's division algorithm find HCF of 135 and 225
- ii) Find 'q' & 'r' of: $x^3 - 3x^2 + 5x - 3$, $x^2 - 2$
- iii) Find two numbers whose sum is 27 and product is 18.
- iv) Find the roots of: $\sqrt{2}x^2 + 7x + 5\sqrt{2} = 0$.

IV Section - D (4 Marks)

- i) Sum of the areas of two squares is 468 m^2 . If the diff. of their Perimeter is 24 m. Find the sides of the two sqs.
- ii) Find the roots of $\therefore \frac{1}{x+4} - \frac{1}{x-7} = \frac{11}{30}$
- iii) Obtain all the zeroes of $3x^4 + 6x^3 - 2x^2 - 10x - 5$, if two of its zeroes are $\sqrt{3}$ and $-\sqrt{3}$.
- iv) Prove that $\sqrt{5}$ is irrational.

★ — ★ — ★ — ★