# KLINE MEMORIAL SCHOOL OF UBS

**Subject- Mathematics**

**Class- VIII**

***<u>Do As Directed :-</u>***

**Q.1)** If $x = 3 + \sqrt{3}$ , find the value of $24x + x^2 - x^3$

**Q.2)** Compare i) $\sqrt{2}$. And $\sqrt[3]{3}$ .

ii) $\sqrt[3]{5}$ and $\sqrt[4]{6}$ .

**Q.3)** How much will ₹ 20,000 amount to in 2 years at CI if the rates for successive years are 8% and 10% p.a. respectively ?

**Q.4)** The difference between CI and SI for 2 years on the same sum at 5% p.a. is ₹ 240 . find the sum.

**Q.5)** Evaluate using algebraic formula.

i) $(104)^2$

ii) $(9.7)^2$

**Q.6)** Expand the following :

i) $(2a + 3b)^3$

ii) $(5a - 3b)^3$

**Q.7)** If $x - \frac{3}{x} = 4$ , find $x^3 - \frac{27}{x^3}$ .

**Q.8)** Without calculating the cubes, find the value of :

i) $(-35)^3 + (18)^3 + (17)^3$ ,

ii) $(25)^3 + (-17)^3 + (-8)^3$

**Q.9)** Factorize.

i) $25(a+b)^2 - 36(a-b)^2$ ,

ii) $(y^2 + 3)^2 - 16y^2$ .

**Q.10) i)** if a-b = 7, ab = 30, find $a^3 - b^3$ .

ii) if a-b =9 , ab =10 find $a^3 - b^3$ .

**<u>Note: Solve this worksheet in old register</u>.**