* V = Vo sin (ω t + Φ) where ‘ω’ is the angular frequency and ‘Φ’ is the initial phase.
* Current in capacitive circuits leads by π/2 OR voltage lags by π/2.
* The average of sinusoidal functions over time is zero. Therefore, the quantity of importance is Root Mean Square of a function of such kind; the value of which is the amplitude of the function divided by the square root of 2.
* The Root Mean Square value of voltage and current naturally comes when Power derivations are done.
* The capacitive reactance is equal to ‘1/ωC’ where C is the capacitance of the capacitor in Farad. Naturally, this reactance decreases with an increase in frequency.
* If V = Vo sin (ω t + Φ), then, current can be represented by I = Vo/XC sin (ω t + Φ + π/2). XC is the capacitive reactance. This equation clearly illustrates the current leads by T/4.
* The net power consumed by a purely capacitive circuit is zero. For half the cycle energy is stored in the electric field inside the capacitor, and for the remaining half, this energy is released by the capacitor.