Answer on Question #59868 – Math – Financial Math

Question

Mr Sehwag invests Rs 2000 every year with a company, which pays interest at 10% p.a.
He allows his deposit to accumulate at C.I. Find the amount to the credit of the person
at the end of 5th year.
Question :
1) What is the Time Value of Money concept.
2) What do you mean by present value of money?
3) What is the Future Value of money.
4) What the amount to be credited at the end of 5th year.

Solution

1) The time value of money is the idea that money available at the present time is worth more than the same amount in the future due to its potential earning capacity.

2) Present value is the amount of money today that is equivalent to a single payment or a stream of payments earned in the future, invested at a certain interest rate.

3) Future value is the value of an asset at a specific date.

4) $A = P\frac{(1+r)[(1+r)^n-1]}{r} = 2000\frac{1.1[1.1^5-1]}{0.1} = 13431.22$