

5.2 VALUATION METHODS

Methods for calculating depreciation

1. Straight line Method
2. Constant percentage method
3. Sinking Fund Method
4. Quantity Survey Method

1. Straight Line Method

In this method, it is assumed that the property loses its value by the same amount every year. A fixed amount of the original cost is deducted every year, so that at the end of the utility period, only the scrap value is left.

Annual Depreciation, $D = (\text{original cost of the asset} - \text{Scrap Value}) / \text{life in years}$

For example, a vehicle that depreciates over 5 years, is purchased at a cost of US\$17,000, and will have a salvage value of US\$2000, will depreciate at US\$3,000 per year:

$(\$17,000 - \$2,000) / 5 \text{ years} = \$3,000$ annual straight-line depreciation expense.

In other words, it is the depreciable cost of the asset divided by the number of years of its useful life.

2. Constant Percentage Method or Declining balance Method

In this method, it is assumed that the property will lose its value by a constant percentage of its value at the beginning of every year.

Annual Depreciation, $D = 1 - (\text{scrap value} / \text{original value})^{1/\text{life in year}}$

3. Quantity Survey Method

In this method, the property is studied in detail and loss in value due to life, wear and tear, decay, and obsolescence etc, worked out. Each and every step is based on some logical grounds without any fixed percentage of the cost of the

property. Only experimental valuer can work out the amount of depreciation and present value of a property by this method.

5.2.1 NECESSITY

1 Buying or Selling Property

When it is required to buy or sell a property, its valuation is required.

2 Taxation

To assess the tax of a property, its valuation is required. Taxes may be municipal tax, wealth tax, Property tax etc, and all the taxes are fixed on the valuation of the property

3 Rent Function

In order to determine the rent of a property, valuation is required. Rent is usually fixed on the certain percentage of the amount of valuation which is 6% to 10% of valuation.

4 Security of loans or Mortgage

When loans are taken against the security of the property, its valuation is required.

5 Compulsory acquisition

Whenever a property is acquired by law; compensation is paid to the owner. To determine the amount of compensation, valuation of the property is required.

Valuation of a property is also required for Insurance, Betterment charges, speculation etc.

CAPITALIZED VALUE

The capitalized value of a property is the amount of money whose annual interest at the highest prevailing rate of interest will be equal to the net income from the property. To determine the capitalized value of a property, it is required to know the net income from the property and the highest prevailing rate of interest.

Therefore, Capitalized Value = Net income x year's purchase

1. A property fetches a net income of Rs.900.00 deducting all outgoings. Workout the capitalized value of the property if the rate of interest is 6% per annum.

$$\text{Year's purchase} = 100/6 = 16.67$$

$$\text{Capitalized value of the property} = \text{net income} \times \text{Y.P}$$

$$= 900 \times 16.67$$

$$= \text{Rs.15003.00}$$