

5.3 DEPRECIATION

Depreciation is the gradual exhaustion of the usefulness of a property. This may be defined as the decrease or loss in the value of a property due to structural deterioration, life wear and tear, decay and obsolescence.

Depreciation Method of Valuation

According to this method of Valuation, the building should be divided into four parts:

1. Walls
2. Roofs
3. Floors
4. Doors and Windows

And the cost of each part should first be worked out on the present day rates by detailed measurements.

The present value of land and water supply, electric and sanitary fittings etc should be added to the valuation of the building to arrive at total valuation of the property.

5.3.1 ESCALATION

Escalation is the provision in the cost estimate for increases in the cost of equipment, material, labor, etc., due to continuing price changes over the time. Escalation is used to estimate the future cost of a project or to bring historical costs to the present.

5.3.2 VALUATION OF LAND AND BUILDINGS

Valuation of a building depends on the type of the building, its structure and durability, on the situation, size, shape, frontage, width of roadways, the quality of materials used in the construction and present day prices of materials. Valuation also depends on the height of the building, height of the plinth, thickness of the wall, nature of the floor, roof, doors, window etc.

The valuation of a building is determined on working out its cost of construction at present day rate and allowing a suitable depreciation.

1. An old building has been purchased by a person at a cost of Rs.30,000/- excluding the cost of the land. Calculate the amount of annual sinking fund at 4% interest assuming the future life of the building as 20 years and scarp value of the building as 10% of the cost of purchase.

Solution:

The total amount of sinking fund to be accumulated at the end of 20

$$\text{years } S = 30000 \times (90/100) = \text{Rs.}27000.00$$

$$\text{Annual installments of sinking fund } I = Si/(1+i)^n - 1$$

$$= 27000 \times 0.04 / (1+0.04)^{20} - 1 = \text{Rs.}907.20$$

$$\text{Annual installments for sinking fund requires for 20 years} = \text{Rs.}907.20$$

2. The estimated value of a building is Rs.5,00,000. The carpet area of the building is 70 sq.m. If the plinth area is 20% more than this, what is the plinth rate of the building?

$$\text{Value of building} = \text{Rs.}5,00,000$$

$$\text{Carpet area} = 70 \text{ m}^2$$

$$\text{Plinth area} = 20 \% \text{ more} = 1.20 \times 70 = 84 \text{ m}^2$$

$$\text{Plinth area rate of the building} = \text{Value of the building} / \text{Plinth area}$$

$$= 5,00,000 / 84 = \text{Rs.}5952.38 \text{ m}^2$$