

Dr.SNS RAJALAKSHMI COLLEGE OF ARTS AND SCIENCE
(Autonomous)

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Coimbatore- 49

DEPARTMENT OF COMMERCE WITH INFORMATION
TECHNOLOGY

21UCR402 – FUNCTIONAL ACCOUNTING
Unit-1: Straight-line Method of Calculating Depreciation

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Key points:

- ✓ Depreciation amount remains **constant** each year.
- ✓ Easy to calculate and understand.
- ✓ Suitable for assets that give **equal benefit every year**, like furniture, buildings, and computers.

Formula:

$$\text{Annual Depreciation} = \frac{\text{Cost of Asset} - \text{Residual Value}}{\text{Useful Life}}$$

A machine is purchased for ₹1,00,000. Its residual value (value at end of life) is ₹10,000. Its useful life is 5 years.

Step 1:

$$\text{Annual Depreciation} = \frac{1,00,000 - 10,000}{5} = \frac{90,000}{5} = ₹18,000$$

$$\text{Annual Depreciation} = \frac{1,00,000 - 10,000}{5} = \frac{90,000}{5} = ₹18,000$$

Step 2:

Depreciation each year Every year,

depreciation charged = ₹18,000

Step 3: Value of asset after depreciation

End of Year 1: ₹1,00,000 – ₹18,000 = ₹82,000

End of Year 2: ₹82,000 – ₹18,000 = ₹64,000

End of Year 3: ₹64,000 – ₹18,000 = ₹46,000

End of Year 4: ₹46,000 – ₹18,000 = ₹28,000

End of Year 5: ₹28,000 – ₹18,000 = ₹10,000 (Residual value)

Step 3: Value of asset after depreciation

End of Year 1: ₹1,00,000 – ₹18,000 = ₹82,000

End of Year 2: ₹82,000 – ₹18,000 = ₹64,000

End of Year 3: ₹64,000 – ₹18,000 = ₹46,000

End of Year 4: ₹46,000 – ₹18,000 = ₹28,000

End of Year 5: ₹28,000 – ₹18,000 = ₹10,000 (Residual value)

Asset Depreciation Over Time



Initial Value

₹1,00,000



**Annual
Depreciation**

₹18,000 per year



**Value
Reduction**

Asset value
decreases annually



Residual Value

₹10,000 after 5 years

Riya Enterprises purchased a photocopy machine on 1st April 2022 for ₹1,20,000.

The estimated useful life of the machine is 6 years, and the residual value at the end of its life is expected to be ₹12,000.

The company follows the Straight Line Method (SLM) for calculating depreciation.

Tasks:

1. Calculate the annual depreciation amount.
2. Find the value of the machine at the end of 2 years.
3. State one reason why a company may prefer the Straight Line Method.

Solution

1. Annual Depreciation Amount

Formula:

$$\text{Annual Depreciation} = \frac{\text{Cost} - \text{Residual Value}}{\text{Useful Life}}$$

Substitute values:

$$\begin{aligned} &= \frac{1,20,000 - 12,000}{6} \\ &= \frac{1,08,000}{6} = ₹18,000 \text{ per year} \end{aligned}$$

Annual Depreciation = ₹18,000

2. Value of Machine at the End of 2 Years

$$\text{After 1 year} = 1,20,000 - 18,000 = ₹1,02,000$$

$$\text{After 2 years} = 1,02,000 - 18,000 = ₹84,000$$

Value after 2 years = ₹84,000

3. Reason for Preferring SLM:

Simple and easy to calculate

or

Depreciation remains constant every year

or

Suitable for assets giving equal benefit each year



1. Method with equal yearly depreciation — **SLM**
2. Value left at the end of useful life — **Residual**
3. Depreciation remains _____ under SLM —
Constant

THANK YOU