Chapter 18: Depreciation Accounting

Introduction

In the world of accounting and finance, **depreciation** plays a critical role in accurately representing the value of fixed assets over time. Unlike daily expenses, fixed assets such as buildings, machinery, and vehicles provide benefits for many years. However, their value does not remain constant. Wear and tear, obsolescence, and usage diminish their worth. Depreciation Accounting ensures that the cost of these assets is systematically allocated over their useful life.

For BTech CSE students studying *Management 1*, understanding depreciation accounting is essential, not only for financial reporting but also for making informed decisions about asset utilization, capital budgeting, and long-term investments in technology and infrastructure.

18.1 Meaning and Need for Depreciation

What is Depreciation?

Depreciation is the systematic allocation of the cost of a tangible fixed asset over its useful life. It represents the reduction in the value of an asset due to usage, passage of time, or obsolescence.

Why is Depreciation Necessary?

- To match **cost with revenue**: Depreciation helps in matching the cost of the asset with the income it generates during its useful life.
- To determine **true profit or loss**: Without accounting for depreciation, profit may be overstated.
- To show the **true financial position**: Assets shown at depreciated value (book value) present a more realistic financial statement.
- To make **provisions for asset replacement**: Depreciation allows firms to accumulate funds to replace old assets.
- To comply with **statutory requirements**: It is mandatory under various accounting standards and legal provisions.

18.2 Causes of Depreciation

1. **Wear and Tear**: Physical deterioration due to usage.
2. **Obsolescence**: Assets becoming outdated due to technological advancements.

3. **Passage of Time**: Even unused assets depreciate due to time.
4. **Depletion**: Natural resources like mines reduce in value as they are extracted.
5. **Accidents/Natural Causes**: Sudden loss of asset value due to unforeseen events.

18.3 Characteristics of Depreciation

- Applies to **tangible fixed assets** only.
- It is a **non-cash expense** (does not involve actual outflow of funds).
- Calculated in a **systematic manner**.
- Charged **annually** to profit and loss account.
- Reduces **book value** of the asset over time.

18.4 Factors Affecting Depreciation

1. **Cost of the Asset**: Includes purchase price + installation + delivery.
2. **Residual/Scrap Value**: Estimated value at the end of useful life.
3. **Useful Life**: Estimated number of years the asset is expected to be in service.
4. **Depreciation Method**: The technique used to allocate cost over years.

18.5 Methods of Depreciation

1. Straight Line Method (SLM)

Also known as the Fixed Installment Method. The same amount is charged each year.

Formula:

$$\text{Depreciation per year} = \frac{\text{Cost of asset} - \text{Residual value}}{\text{Useful life}}$$

- Simple and widely used.
- Suitable for assets with consistent usage.

2. Written Down Value (WDV) Method

Depreciation is charged at a fixed percentage on the book value of the asset.

Formula:

$$\text{Depreciation} = \text{Book value at beginning of year} \times \text{Rate of Depreciation}$$

- Results in higher depreciation in initial years.
- Suitable for assets whose efficiency decreases over time.

3. Sum of Years' Digits Method

Accelerated method of depreciation.

Formula:

$$\text{Depreciation} = \frac{\text{Remaining life of asset}}{\text{Sum of years' digits}} \times (\text{Cost} - \text{Residual Value})$$

4. Units of Production Method

Depreciation depends on actual usage/output of the asset.

Formula:

$$\text{Depreciation per unit} = \frac{\text{Cost} - \text{Residual value}}{\text{Estimated total production}}$$

Then,

$$\text{Annual Depreciation} = \text{Depreciation per unit} \times \text{Actual units produced}$$

18.6 Accounting Treatment of Depreciation

Journal Entries

1. **When Depreciation is Charged Directly**:

```
Depreciation A/c      Dr.
To Asset A/c
```

2. **When Depreciation is Charged through Provision**:

```
Depreciation A/c      Dr.
To Provision for Depreciation A/c
```

At the end of the year:

```
Profit & Loss A/c     Dr.
To Depreciation A/c
```

18.7 Impact of Depreciation on Financial Statements

1. Income Statement (Profit and Loss Account)

- Depreciation is treated as an **expense**.
- Reduces **net profit**.

2. Balance Sheet

- Shown as a **reduction in the value of the asset**.
- If provision is used, shown as a **deduction from gross asset**.

18.8 Provisions vs Reserves

Basis	Provision	Reserve
Purpose	Made to meet a specific liability	Made to strengthen financial position
Compulsory	Yes, in case of depreciation	Not always mandatory
Accounting Treatment	Treated as an expense	Appropriation of profit
Affect on Profit	Reduces net profit	Profit remains unaffected

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18.9 Change in Method of Depreciation

Sometimes businesses change the method due to:

- Change in usage pattern
- Regulatory requirements
- Change in estimated useful life or residual value

Accounting Standard (AS-10 / Ind AS 16):

Change in method is treated as a **change in accounting estimate**. The effect is applied **prospectively**, not retrospectively.

18.10 Depreciation under Companies Act, 2013 (India)

- **Schedule II** of the Act specifies **useful lives of assets** for calculation of depreciation.
- Companies can use different useful life if justified.

- **Component Accounting** is mandated for significant parts of the asset with different useful lives.

18.11 Depreciation in Income Tax

- Income Tax Act allows depreciation as a deduction.
- **Block of Assets** method is used.
- Rates are prescribed under **Income Tax Rules**.
- Depreciation under tax law may differ from financial accounting.

Conclusion

Depreciation is not merely a financial adjustment—it's a reflection of the economic reality that assets lose value over time. Accurate depreciation accounting ensures proper matching of revenues and expenses, helps maintain capital, and presents a true and fair view of financial statements. Whether you're managing servers in a data center or budgeting for hardware upgrades, a sound understanding of depreciation ensures smarter financial planning and resource management.
