VIDYA BHAWAN BALIKA VIDYA PITH

शक्तिउत्थानआश्रमलखीसरायबिहार

Class 11 commerce   Sub. ACT Date 20.02.2021

Teacher name – Ajay Kumar Sharma

Depreciation, Provisions and Reserves

Question 1:

Explain the concept of depreciation. What is the need for charging depreciation and what are the causes of depreciation?

ANSWER:

Every business acquires fixed assets for its use in the business over a period of time. As the benefits of these assets can be availed over a long period of time (due to their regular use), there exists continuous wear and tear and consequently fall in their value. This fall in the value of fixed assets (due to regular use or expiry of time) is termed as depreciation.

A machinery that costs Rs 1,00,000 and its useful life of 10 years, its depreciation will be calculated as:

$$\text{Annual Depreciation (p.a.)} = \frac{\text{Cost of Asset}}{\text{Expected or Estimated Life of Asset}}$$

$$\text{or, Annual Depreciation (p.a.)} = \frac{100000}{10} = \text{Rs } 10000$$

1. **To ascertain true net profit or net loss−** Correct profit or loss can be ascertained when all the expenses and losses incurred for earning revenues are charged to profit and loss account. Assets are used for earning revenues and its cost is charged in form of depreciation from profit and loss account.

2. **To show true and fair view of financial statements−** If depreciation is **not** charged, assets are shown at higher value than their actual value in the balance sheet; consequently, the balance sheet does **not** reflect true and fair view of financial statements.

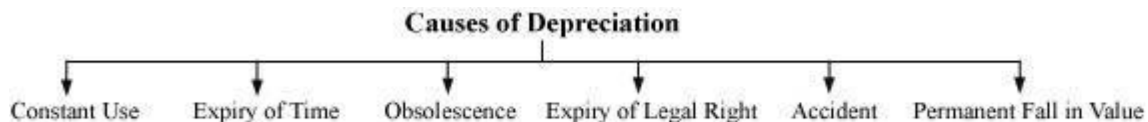
3. **For ascertaining the accurate cost of production−** Depreciation on plant and machinery and other assets, which are engaged in production, is included in the cost of production. If depreciation is **not** included, cost of production is underestimated, which will lead to low sale price and thus leads to low profit.

4. **Distribution of dividend out of profit−** If depreciation is **not** charged, which leads to overestimating of profit and consequently more profit is distributed as dividend, out of capital instead of the profit. This leads to the flight of scarce capital out of the business.

5. **To provide funds for replacement of assets−** Unlike other expenses, depreciation is **not** a cash expense. So, the amount of depreciation charged will be retained in the business and will be used for replacement of fixed assets after its useful life.

6. **Consideration of tax−** If depreciation is charged, then profit and loss account will disclose lesser profit as to when the depreciation is **not** charged. This depicts reduced profit and thus the business will be liable for lesser tax amount.

Below are given the causes for depreciation.



1. **Constant use−** Due to constant use of the fixed assets there exists normal wear and tear that leads to fall in the value of fixed assets.

2. **Expiry of time−** With the passage of time, whether assets are used or **not**, its effective life decreases. The natural forces like rain, weather, etc. lead to deterioration of the fixed assets.

3. **Obsolescence−** Due to the fast technological innovations and inventions today's assets may be outdated by tomorrow's sophisticated assets. This leads to the obsolescence of fixed assets.

4. **Expiry of legal rights−** If an asset is acquired for a specific period of time, then, whether the asset is put to use or **not**, its value becomes zero at the end of its useful life. For example, if a land is acquired for Rs 1,00,000 for 25 years on lease, then each year its value depreciates by $\frac{1}{25}^{th}$ of its gross value. At the end of the 25th year, the value of the lease will be zero.

5. **Accident−** An asset may lose its value and damage may happen to it due to mishaps such as a fire accident, theft or a natural calamity. The loss due to accident is permanent in nature.

6. **Permanent fall in value−** Generally, we do **not** record fluctuations in the market price of the fixed assets in the books. However, if the fall in market price is permanent, it is accounted, which leads to a fall in the value of fixed assets in the books.

Question 2:

Discuss in detail the straight line method and written down value method of depreciation. Distinguish between the two and also give situations where they are useful.

ANSWER:

Straight Line method

It is a simple method of charging depreciation. Under this method, depreciation is charged on the original cost of an asset, at a fixed rate of percentage. In this method, amount of depreciation remains same from year to year and asset's value becomes zero at the end of its useful life.

Amount of depreciation is calculated as under:

$$\text{Annual Depreciation (p.a.)} = \frac{\text{Original cost} - \text{Estimated scrap value}}{\text{Estimated useful life of an asset}}$$

Advantages of Straight Line Method

1. It is simple to calculate.
2. Asset can be completely written off, i.e., asset can be depreciated until the net scrap value is zero.
3. Same amount of depreciation is charged every year. Therefore, it helps in easy comparison of Profit and Loss Account for different years.
4. It is used for assets that have low repairs and maintenance expenses and are continuously used over a period of time.

Limitations of Straight Line Method

1. Burden of deprecation is more on profit and loss account in the later years, when repair and maintenance costs increase, as asset becomes older.
2. Value of asset becomes zero in the books even if asset is still in usable condition in business.

Uses of Straight Line Method

1. This method is useful where repairs and maintenance expenses on asset are low.
2. It is also useful when an asset is continuously used from one year to another.
3. It is useful when the value of assets, such as patent, copyright, goodwill, etc., becomes zero

Written Down Value Method

This method is applicable where depreciation is charged on the diminishing balance, i.e., book value of the asset. In this method, asset's value goes on diminishing year after year and the amount of depreciation declines.

Rate of depreciation is calculated as follows:

$$R = \left[1 - \sqrt[n]{\frac{s}{c}}\right] \times 100$$

Where,

R represents rate of depreciation

n represents expected useful life of the asset

s represents the scrap value

c represents the cost of the asset

Advantages of Written Down Value Method

1. It is based on the logical assumption that asset is used more in the earlier years, so more cost is charged in form of depreciation.
2. It is suitable for the assets where repairs are more in the later years, as depreciation is lesser and on a whole the combined burden of depreciation and repairs exerts equal pressure on the net profit over years.
3. This method is accepted by the income tax authorities.
4. As more depreciation is charged in the earlier years, so the loss due to obsolescence of the asset is reduced.

Limitations of Written Down Value Method

1. It is difficult to calculate and is a time consuming process.
2. The value of an asset **cannot** be zero, thus the asset cannot be completely written off.
3. There arises shortage of funds for replacement of new asset. This happens due to the fact that the amount of depreciation is retained and used in the business. Consequently, at the end of the useful life of an old asset, business finds it difficult to arrange funds for its replacement.

Uses of Written Down Value Method

1. It is useful when assets have long life.
2. It is useful for those assets that require more repair and maintenance costs in the later years.
3. It provides easy calculation to provide depreciation of additional asset purchased during a year.

Difference between Straight Line Method and Written Down Value Method

Basis of Difference	Straight Line Method	Written Down Method
Basis for calculation	Depreciation is calculated on the original cost of an asset.	Depreciation is calculated on the reducing balance, i.e., the book value of an asset.
Amount of depreciation	Equal amount is charged each year over the effective life of the asset.	Diminishing amount of depreciation (on the written down value of asset) is charged each year over the effective life of the asset.
Book value of asset	Book value of the asset becomes zero at the end of its effective life.	Book value of the asset can never be zero.

Suitability	It is suitable for the assets like, patents, copyrights, land and buildings, etc., which have lesser possibility of obsolescence and lesser repair charges.	It is suitable for assets that needs more repairs and maintenance costs in the later years like, plant and machinery, car, etc.
Effect of depreciation and repair on profit and loss account	Unequal effect over the life of the asset, as depreciation remains same over the years but repair cost increases in the later years.	Equal effect over the life of the asset, as depreciation is high and repairs are less in the initial years but in the latter years the repair cost increases and depreciation cost decreases.
Recognition under Income Tax Act	It is **not** recognised under the Income Tax Act.	It is recognised under the Income Tax Act.