

# SCRIPT

## Academic Script

### 1. Introduction

Let us begin the topic with meaning of Depreciation:

**Depreciation is loss of value of depreciable asset over a period of time because of various factors such as passing of time, use, wear and tear, change in technology, accident etc.**

It is a measure of wearing out, consumption or other loss in the value of an asset. Due to Depreciation, total cost of an asset is spread over its useful life. From the meaning of depreciation an obvious question may arise in your mind is, what is Depreciable Asset?

**As per Accounting Standard -6 “Depreciation Accounting”, depreciable assets are the assets which:-**

- (a) Are expected to be used by the entity for more than one accounting period.**
- (b) Are having limited useful life**
- (c) Are held for use in production of goods and services directly or indirectly and is not held for the purpose of sale in ordinary course of business.**

Now let us discuss the Causes of depreciation:

Value of a depreciable asset decreases due to:

- (a) Wearing and Tearing out of an asset**
- (b) Limited useful life**
- (c) Change in technology or Obsolescence**
- (d) Unlikely events**

Let us discuss these causes in detail.

#### **(a) Wearing and Tearing out of an asset**

With the use of assets for various operations, it may so happen that their quality shall deteriorate or the asset shall no longer function with some efficiency. This results into reduction of the value of assets.

#### **(b) Limited useful life**

Certain assets may be tangible or intangible, have a limited useful time or life span during which they can serve purpose to entity. With the passage of time, the value of such assets tends to decrease as their usefulness decreases.

### **(c) Change in technology or Obsolescence**

With advancement, research and development taking place, better quality, improved and efficient machines, are innovated. This in turn leads to reduction in value of older versions of such machinery. The loss arising due to any technology becoming outdated because of introduction of newer models is called as obsolescence. e.g. we have witnessed the changes in software, hardware, mobile phones etc.

### **(D) Unlikely events**

Because of unlikely events like accidents, man-made or natural disasters, etc. there are chances that the machine degrades, damaged or destructed. This may lead to reduction in the prices of the assets.

## **2. Objectives of providing depreciation**

Now let us see the Objectives of providing depreciation:

**The Objectives of providing depreciation are:**

- (a) Matching cost with revenue
- (b) Presentation of true and fair view
- (c) Funds for immediate replacement of asset
- (d) Restriction on payment of dividend
- (e) Reduces the tax liability
- (f) Legal obligation

Let us discuss the objectives in detail.

### **(a) Matching cost with revenue**

This principle states that the revenue generated in an accounting period is set off against the cost of goods and services which have been consumed for generating that revenue. For ascertaining true income (profit) of an accounting period, all expenses including depreciation incurred for earning revenue must be considered for proper cost valuation and determination of income. Depreciation needs to be charged to profit and loss a/c as loss in value of fixed assets against its use is also an expense like other expenses.

### **(b) Presentation of true and fair view**

Net profits of depicted in P & L A/c and value of assets as shown in the balancesheet would be overstated if depreciation was not provided. Thus, to get a clear view of financial position of business, depreciation needs to be provided.

**(c) Funds for immediate replacement of asset**

Depreciation in spite of being charged as an expense neither leads to inflow or outflow of cash, thus we can say that depreciation charged to P & L A/c is retained in business every year in the form of a secret reserve. Thus, whenever business entity plans to replace the asset, there shall be adequate funds in the depreciation a/c available for the purpose of replacement.

**(d) Restriction on payment of dividend**

Companies are not allowed to distribute dividends from net profit, if depreciation is not charged. This is because not providing depreciation overstates the profit which authorizes the company to pay more dividend.

**(e) Reduces the tax liability**

Depreciation is an allowable expense charged on the income of an enterprise 'charging depreciation' leads to lesser profits that in turn reduces tax liability.

**(f) Legal obligation**

There are tax regulations and companies act which make charging of depreciation compulsory.

**3. Factors considered for calculating depreciation**

Let see which Factors are considered for calculating depreciation?

**The amount of depreciation is calculated keeping in mind**

- (a) Cost of the asset**
- (b) Estimated useful life of the asset**
- (c) Estimated residual value or scrap value of depreciable assets.**

Thus, we can say above three factors affect the amount of depreciation to be provided.

**(i) Cost of asset:**

It is the total cost spent on the acquisition, installation, commissioning, additions and improvements of the asset. Thus it includes the historical cost and incidental expenses incurred for bringing the asset to its present condition and location.

**(ii) Estimated useful life:**

It is the period over which the asset is expected to be used by the enterprise, or in certain cases it can also be measured in terms of number of production of similar units expected to be obtained from use of the asset.

**(iii) Estimated residual value:**

It is an estimated value of depreciable asset shall derive at the end of its useful life.

**4. Methods of recording depreciation in books of account**

We have clarified the concept of depreciation, now let us see its Accounting treatment:

**There are two methods of recording depreciation in the books of accounts**

**(a) By charging Depreciation to Asset Account**

**(b) By Creating Provision for Depreciation Account**

**(a) Charging Depreciation to Asset Account**

In this method, depreciation is charged to respective assets account and transferred to profit and loss a/c. Journal entries passed are:

- (i) When depreciation is provided on asset at end of each year.  
Depreciation A/c Dr. To Asset A/c
- (ii) When Depreciation is transferred to Profit and Loss A/c. Profit and Loss A/c Dr. To Depreciation A/c
- (iii) When the Asset is sold, two entries are passed, one for selling price and the other for gain or loss on sale
- (iv) For Sale proceeds are received. Cash / Bank A/c Dr. To Asset A/c
- (v) For Gain on Sale. Asset A/c Dr. To Profit and Loss A/c OR For Loss on Sale P & L A/c, To Asset A/c

**It should be noted that do not forget to charge depreciation till date of sales, when asset is sold in the middle of accounting period.**

### **(b) Creating Provision for depreciation Account**

In this method depreciation is charged to a separate account called 'Provision for Depreciation A/c' or 'Accumulated Depreciation A/c' as depreciation is not charged to asset a/c the asset is shown at original cost in the balancesheet. The separate a/c created i.e. "Provision for depreciation A/c" or "Accumulated Depreciation A/c" is shown on the liabilities side of balance sheet. The accounting treatment of depreciation will be:

- (i) When Depreciation is charged at end of year.

Depreciation A/c Dr.

To Provision for Depreciation A/c

OR

To Accumulated Depreciation A/c

- (ii) When Depreciation is transferred to P&L A/c

Profit & Loss A/c... Dr.

To Depreciation A/c

- (iii) On Sale of Asset, three entries are required to be passed, one for accumulated depreciation on asset sold, second for selling price and third for gain or loss on sale.

- (a) Transfer of accumulated depreciation on asset sold to asset a/c

Provision for depreciation A/c Dr.

To Asset A/c

- (b) When sale proceed is received

Bank A/c...Dr.

To Asset A/c

- (b) For Gain on Sale

Asset A/c Dr.

To Profit and Loss A/c

OR

For loss on sale

P & L A/c Dr

To Asset A/c

## 5. Various methods for calculating Depreciation

The various methods of providing depreciation are:

- (a) Straight line Method
- (b) Diminishing Balance Method
- (c) Sum of 'Years Digit Method
- (d) Annuity Method
- (e) Double Declining Balance
- (f) Sinking Fund Method etc.

However, only first two methods are common which are discussed in detail.

### **Straight Line Method:**

It is the simplest method of charging depreciation. Here, the amount of depreciation remains the same every year over the expected useful life of the asset. This method is also called "Original Cost Method" because a fixed percentage of the original cost of asset is charged as depreciation during the estimated useful life of the asset.

In this method, the basic assumption is that the asset is being used by the enterprise equally during the expected useful life.

The formula used to calculate annual amount of depreciation is:

$$\text{Annual Depreciation} = \frac{\text{Acquisition Cost i. e. } C(-) \text{ Scrap Value i. e. } S \text{ (estimated)}}{\text{Estimated useful life of the asset (No. of years i. e. } N)}$$

It is suitable for assets, which have

- (i) Equal utility in terms of productivity during its life span like Trademarks, Copyrights
- (ii) Maintenance and repair cost of the asset remains same during the useful life like Furniture

Let us understand the Straight Line method by an example.

M/s PVC Enterprise Purchased Machinery on 1<sup>st</sup> April 2013 for Rs.150000 and spent Rs.10000 on its erection. The depreciation is to be charged @10% p.a. on Original Cost Method. Machinery account and depreciation for two years will appear as:

Books of M/s PVC Enterprise

## Machinery A/c

Dr.

Cr.

Date	Particulars	JF	Rs.	Date	Particulars	JF	Rs.
2013 April 1	To Bank A/c (Purchase)		150000	2014 March 31	By Depreciation A/c (On Rs. 160000 @10% for full year)		16000
	To Bank A/c (erection)		10000				
			160000	2014 March 31	By Balance C/d		144000
2014 April 1	To Balance b/d		144000				160000
			144000	2015 March 31	By Depreciation A/c (On Rs. 160000 @10% for full year)		16000
			128000		By Balance C/d		128000
2015 Jan 1	To Balance b/d						144000

## Depreciation A/c

Dr.

Cr.

Date	Particulars	JF	Rs.	Date	Particulars	JF	Rs.
2014 March 31	To Machinery A/c		16000	2014 March 31	By Profit & Loss A/c		16000
			16000				16000
2015 March 31	To Machinery A/c		16000	2015 March 31	By Profit & Loss A/c		16000
			16000				16000

## Diminishing OR Reducing OR Written Down Value method

Under this method, depreciation is charged at fixed percentage on the book value of the asset every year. It is charged on reducing balance that is on cost of asset- Depreciation value of asset every year. However, the rate of depreciation remains fixed, the amount of depreciation declines as the book value of asset reduces every year.

Rate of depreciation under this method can be calculated as:

$$r = 1 - \sqrt[n]{\frac{S}{C}} \times 100$$

r = Rate of Depreciation

n= No of years of life span of asset

c = cost of asset

s= salvage value

It is suitable for assets :

- (i) Whose cost of maintenance and repairs is increasing with passing years  
(e.g.Machine)
- (ii) Additions and Repair to asset are higher in the later years (e.g. Buildings)

### Example of WDV Method

Keyur Brothers purchased a Machine on 1<sup>st</sup>April, 2012 for Rs.400000. it purchased additional machinery for Rs.200000 on 30<sup>th</sup>September, 2014. Depreciation is to be charged @10% per annum on Written Down Value Method. The depreciation account for three years will be prepared as:

Books of Keyur Brothers

Machinery account

Dr.							Cr.
Date	Particulars	JF	Rs.	Date	Particulars	JF	Rs.
2012 April 1	To Bank A/c (Purchase)		400000	2013 March 31	By Depreciation A/c (On Rs. 400000 @10% for full year)		40000
				March 31	By Balance C/d		360000
			400000				400000
2013 April 1	To Balance b/d		360000	2014 March 31	By Depreciation A/c (On Rs. 360000 @10% for full year)		36000
				March 31	By Balance C/d		324000
			360000				360000
2014 April 1	To Balance b/d		324000	2015 March 31	By Depreciation A/c (On Rs. 324000 @10% for full year and on Rs.200000 @10% for 6 months)		42400



September 30	To Bank A/c (Purchase)		200000	March 31	By Balance C/d		481600
			524000				524000

A question may arise in your mind whether Change in Method of providing depreciation is allowed or not?

## 6. Changes in depreciation method

**Changes in depreciation method can be justified only if the change is done to comply with certain conditions like:**

**(a) Compliance of statute**

**(b) Compliance of Accounting standard**

**(c) Better or appropriate presentation of financial statement**

In case of change in the method

- (i) Depreciation should be recomputed with the help of new method from the date of use or acquisition or installation till the date of change in method
- (ii) The difference between the total depreciation under the new method and old method may be surplus or deficiency.
- (iii) If the difference is surplus i.e. [more depreciation has been provided under old method than required under new method, the amount should be credited to P & L A/c under the head "Depreciation written back"
- (iv) If the difference result is deficiency, the resultant amount should be charged to P & L A/c

Let us conclude the session with remark that we have studied the concept of depreciation and various methods for recording and providing depreciation