

Chapter 11

Depreciation, Provisions and Reserves

Learning Objectives:

After studying this unit, you will be able to understand that:

- What is depreciation and its causes.
- What is the need for providing depreciation?
- What are the factors determining the amount of depreciation?
- Methods of Accounting for Depreciation, their merits, demerits and differences between them.
- Calculation of depreciation using different methods.
- Accounting for the changes in the method of depreciation.
- Meaning of Provision and Importance of Provision
- Various types of Provisions created in the business.
- The meaning of Reserves and the types of reserves.
- What is the difference between Provisions and Reserves.

Meaning of Depreciation

Various types of fixed assets such as buildings, plant and machinery, motor vehicles, furniture, office equipment etc. are purchased for the operation of business activities. The constant decrease in the of fixed assets due to its continuous usage over the time and development of new technologies is known as depreciation.

The word 'Depreciation' has been derived from the Latin language word depletion, which means the decrease in the value of an asset. According to the Matching concept of accounting the expenses of a particular period should be deducted from the income of that particular period to determine the true profit and loss of an accounting period. The benefits from fixed assets in business can be generated over many years. Therefore, according to the Going Concern Concept of Accounting, the cost of fixed asset on the basis of its useful life should be deducted every year from its income in the form of depreciation.

In the language of accounting, the process of allocating the value of fixed asset in its useful life span is known as depreciation.

Definitions

1. According to R. N. Carter, —Depreciation is the gradual and permanent decrease in the value of an asset from any cause.
2. According to RG Williams, —Depreciation may be defined as a gradual deterioration in value of assets due to use.

3. According to Spicer and Peglar, —Depreciation is the measure of exhaustion of the effective life of an asset from any cause during a given period.
4. According to The Institute of Chartered Accountants of England and Wales, —Depreciation represents that part of the cost of a fixed asset to its owner which is not recoverable when the asset is finally out of use by him. Provision against this loss of capital is an integral cost of conducting the business during the effective commercial life of the asset and is not dependent on the amount of profit earned.

Features of Depreciation –

1. Depreciation is only related to a depreciable asset.
2. The meaning of depreciation is permanent reduction in the value of fixed asset. (Other than land and items of archeological importance)
3. The depreciation is charged on book value of the asset, not on the replacement cost.
4. Depreciation is not the process of valuation of asset, but it is an allocation of the cost of an asset over its useful life.
5. Repairs and maintenance of assets is not considered as depreciation.
6. Depreciation is a normal process which occurs gradually and constantly.
7. A decrease in the market value of fixed asset is not depreciation.
8. A reduction in a book value of an asset can be caused due to its use, obsolescence, termination of legal rights etc.
9. The depreciation is charged only on tangible fixed asset. The term is not used for wasting assets like oil wells, mines and intangible assets such as patent, trademarks, goodwill, preliminary expenses etc.

Causes of Depreciation

The causes of depreciation are as follows:

1. **By Constant Use:** Wear and tear arises due to the constant use of fixed assets which results in reduction of the value of fixed assets.
2. **By Passage of Time:** Some assets have a limited span of life. If they are not being put to any use nonetheless natural forces like weather, wind, rains, sunlight etc., may decrease the value of such assets.
3. **By Obsolescence:** The use of an old asset has to be stopped due to new inventions, technological improvements or changes in fashion. Hence, the value of such obsolete assets get reduced.
4. **By Depletion:** Assets like mines, oil wells etc. have limited reserves and due to the exhaustion of natural resources, value of such assets gets decreased.

5. **By Accident:** Value of an asset reduces due to its accident such as Car accident.
6. **By Expiration of Legal Rights:** There are certain assets (eg. Patents, Lease etc.) have a definite span of life, the value of such asset is reduced to zero.

Need for providing Depreciation

The need for providing depreciation arises due to any one or more of the following reasons :

1. **Calculation of correct profit or loss:** To determine the true profit or loss of any business, all the costs of that particular period are deducted from the income of that particular period. The fixed assets are also used to earn income, therefore, the depreciation of these assets should be deducted from income also. By doing so, the income statement will present true financial performance.
2. **To show correct financial position:** If the depreciation is not charged on fixed assets then these assets will be shown at higher value than its actual value in the balance sheet. The a result balance sheet will be unable to present true and fair view of financial position of the business.
3. **To accumulate funds for replacement of assets:** A portion of profit is accumulated in the form of depreciation each year .Therefore, the amount is used in future for the purpose of replacement of asset.
4. **To determine the true cost of production:** For determining the cost of production it is necessary to add depreciation as an item of cost of production along with material, labour, overheads. If the depreciation on fixed asset is not added, the cost records would not present the true and fair view of the cost of production.
5. **Not paying over income tax:** If depreciation is not deducted from income then profit will be shown at higher value, hence more tax has to be paid on income.
6. **To comply with legal requirements:** According to section 123 of Companies Act, 2013 relating to section 205(1) of Companies Act , 1956, it is compulsory for every company to charge depreciation on fixed assets before it declares dividend.

Factors determining the amount of depreciation

It is quite impossible to determine the exact value of the amount of depreciation. Therefore, keeping in mind the following factors, the appropriate amount of depreciation can be estimated:

1. Total cost of Fixed Assets

The total cost of fixed asset includes its purchasing cost and the expenses incurred for bringing and installation such as freight, wages etc.

2. Estimated useful life of Asset

Useful life of an asset is a duration in which it can be used to earn profit in business. It can be in days, months or years. The provision for depreciation reduces with a long life span of an asset while short life span of an asset increases provision for depreciation. For example, machinery can be used for 30 years but due to new inventions it can only be used for 20 years. So, its estimated life will be considered 20 years only.

3. Estimated Scrap Value

The value expected to be realized on expiry of useful life of assets or on obsolete or on its sale is termed as scrap value. It is calculated by deducting total amount of depreciation from total cost of an asset.

4. Capital expenditure

If any capital expenditure has been incurred to increase the efficiency of fixed asset, then its amount will be added in the total cost of an asset to determine depreciation.

5. Chances of obsolescence

An asset becomes obsolete shortly due to new inventions. If the chances of new inventions in an asset are high, then an asset will be considered as more depreciable and have to be written off in the shortest period.

Depreciation and Obsolescence

Generally, depreciation and obsolescence are considered similar but there is a slight difference between them. We have already studied earlier that decrease in the value of the asset due to its continuous use is termed as depreciation. While we experience in daily life, sometimes new inventions prove old machines totally worthless. There are also some external factors that completely eliminate an asset of a good condition from its use. Therefore, loss occurs from replacing an old machine with a new machine into business is known as loss due to obsolescence. For e.g.: Emergence of coloured TV in market made Black & White TV obsolete.

Obsolescence occurs mainly due to the following reasons:

1. Invention of new technologies.
2. Improvements in production methods.
3. Legal or any other restrictions
4. Change of any product in the market etc.

Classification of Assets from depreciation point of View:

From the point of view of depreciation, we classify the assets into two main categories:

- Depreciable Assets
- Non-Depreciable Assets

1. Depreciable Assets:

We have already studied earlier in this chapter that the depreciation is charged only on depreciable assets. Depreciable assets are those-

- Which will be used for more than one accounting period.
- Which have a limited useful life span.

- Which used for production or for the distribution of goods and services, for administrative purpose, for rental purpose and not for the purpose of sales by a business enterprises.

If any of the above three conditions is not fulfilled, the asset will not be considered as depreciable.

Depreciable assets are further classified into two categories:

- Tangible Fixed Assets
- Intangible Fixed Assets

(A) Tangible Fixed Assets- Those assets which can be seen and touched or possess physical existence are known as tangible fixed assets, such as land ,buildings, furniture, machinery, vehicle etc.

Land- Due to its unlimited life span, no depreciation can be charged on it.

Building, Machinery, furniture & vehicle: These assets comply with all the three conditions of depreciable assets. Their cost is allocated in their life span in the form of depreciation.

Wasting Assets: Those assets which are constantly exploited and ends up gradually, are termed as wasting assets like oil wells, mines etc. The decrease in the value of these assets is called depletion.

(B) Intangible Fixed Assets- Those assets which do not possess physical existence and cannot be seen and touched are known as intangible fixed assets such as trade mark, goodwill, patent and copyright etc.

Intangible assets having a limited term: The cost of these assets can be allocated over their useful life, such as patents and copyright.

Intangible assets not having a limited term: There is an unlimited life span of intangible assets like trade marks, goodwill etc. Hence their cost cannot be divided in the period of profit obtained from these assets. But according to the concept of conservatism, their cost is voluntarily divided into certain years in the form of amortization.

Methods of Accounting for Depreciation

Mainly, there are two following two methods of accounting for depreciation -

1. By Charging Depreciation amount to Fixed Assets account.
2. By Creating Provision for depreciation account.

1. By Charging Depreciation amount to Fixed Assets Account:

In this method, we credit the amount of depreciation directly from related asset account. In this, the respective asset account is shown at book value (original cost - depreciation till that period).

The following entries are made in this method:

1	For accounting on the purchase of assets	Assets A/c To Cash /Bank A/c (Being the assets purchased.)	Dr.
2	For the accounting of depreciation amount	Depreciation A/c To Assets A/c (Being depreciation written off.)	Dr.
3	To close the depreciation account at the end of the accounting period	Profit and Loss A/c To Depreciation A/c (Being the transfer of Depreciation Account to P.&L. Account.)	Dr.
4	For accounting on the sale of an asset	Cash /Bank A/c To Assets A/c (Being the assets sold.)	Dr.
5	For accounting of Profit / loss on sale of assets (i) In case of Profit	Assets A/c To Profit and Loss A/c (Being the transfer of profit on sale.)	Dr.
	(ii) In case of loss	Profit and Loss A/c To Assets A/c (Being the transfer of loss on sale.)	Dr.

2. Provision for Depreciation

Under this method, the provision for depreciation is credited to the amount of depreciation. Thus, the asset account is shown at original cost and the provision for depreciation account is shown on liability side in balance sheet with the accumulated total depreciation written off to date.

The following entries are made in this method:

A	For the accounting of provision for depreciation at the end of the year	Profit and Loss A/c To Provision for Depreciation A/c (Being provision made for annual depreciation.)	Dr.
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B	Alternative entry	<p>Alternatively, the following two entries can be made:</p> <p>1. Depreciation A/c Dr. To Provision for Depreciation A/c (Being annual depreciation provided.)</p> <p>2. Profit & Loss A/c Dr. To Depreciation A/c (Being depreciation charged to P.&L. A/c.)</p>
For Sale of an Asset		
A	Accounting for depreciation for the current period till the date of sale (This entry will only be made when sale of an asset will occur before completion of its useful life)	<p>Depreciation A/c Dr. To Assets A/c (Being depreciation written off upto the date of sale.)</p>
B	Accounting for transfer of provision for depreciation account to asset account. (For transfer of accumulated depreciation on assets disposed off from provision for depreciation account to assets account.)	<p>Provision for Depreciation A/c Dr. To Assets A/c (Being provision for depreciation on assets transferred to concern assets account.)</p>
C	Accounting for Sale of an Asset	<p>Cash/Bank A/c Dr. To Asset A/c (Being Sale of an Asset.)</p>
D	For accounting of Profit/ loss on sale of an asset (i) In Case of Profit	<p>Asset A/c Dr. To Profit and Loss A/c (Being profit on sale of asset transferred to P.&L. Account.)</p>
	(ii) In Case of loss	<p>Profit & loss A/c Dr. To Asset a/c (Being loss on sale of asset transferred to P.&L. account.)</p>

Methods of Allocating Depreciation

There are different methods which are suitable for calculating the depreciation on various assets. The following are the major methods out of them:

1. Fixed Instalment Method
2. Diminishing Balance Method
3. Annuity Method
4. Insurance Policy Method

5. Depreciation Fund Method
6. Depletion Method
7. Revaluation Method
8. Production / Service hour rate Method
9. Replacement Method
10. The sum of year digit Method

Note- The course of Secondary Education Board, Rajasthan includes only the first three methods of depreciation accounting. Therefore, all three methods have been explained in detail in this chapter.

Fixed Instalment Method

Under this method, an equal amount is charged every year as depreciation. The amount of depreciation remains equal from year to year under this method; therefore, the method is also known as Staright Line Method or Equal Instalment Method. In this method, the amount of depreciation is calculated by deducting the scrap value from the original cost of the asset and the remaining balance is divided by the number of years of its estimated life.

Under this method, the amount of depreciation is calculated by using the following formula;

$$\text{Depreciation} = \frac{\text{Original Cost of an Asset} - \text{Residual value of an Asset}}{\text{Estimated Life of an Asset}}$$

$$\text{Rate of Depreciation} = \frac{\text{Amount of Depreciation}}{\text{Original Cost}} \times 100$$

Merits of Fixed Instalment Method

1. It is very easy to calculate the depreciation by this method. Hence it is a popular method.
2. Under this method, at the end of the life of an asset, the book value of the asset can be reduced to scrap value or zero which is not possible under some other methods.
3. Under this method, the amount of depreciation is equal for every year, thereby affecting the Profit & Loss account in the same manner every year.
4. Being easy to understand, it is suitable for small business units.

Demerits of Fixed Instalment Method

1. As the asset grows older, the repairs and maintenance expenses on it increases, but under this method the same amount of depreciation is charged every year. Therefore, in the beginning years, the burden of

depreciation and repairs will be comparatively less and more in later years.

2. If business has purchased many machines at different times and they have different life span the then, calculation of Depreciation becomes a difficult task.
3. Determining the residual value at the time of establishment of asset is a difficult task.
4. The amount of depreciation is not invested outside the business under this method while it is made under some methods. Therefore it results in loss of interest.
5. The value of the asset even comes to zero, while the asset is being used in business. Therefore, accurate production cost cannot be determined.

Suitability

This method is suitable for those assets where repairs and maintenance costs are less as well as the likelihood of getting obsolete is also less. This method is suitable for furniture, copyright, patent, trade mark, lease etc.

Illustration 1

Mauli had purchased a machinery costing ₹ 7,60,000 on 01.04.2015 and spent ₹ 40,000 on its installation. Estimated life of machinery is three years and after three years salvage value would be ₹ 2,00,000. On completion of two years this machine had been sold for ₹. 3,00,000. Accounts are closed on 31st March every year. Pass journal entries by calculating depreciation through fixed instalment method if (i) Depreciation is being charged from Asset A/c. (ii) When separate provision for depreciation account is opened.

Solution:

Calculation of amount of depreciation per year:-

$$\begin{aligned}\text{Amount of Depreciation} &= \frac{\text{Original cost of Asset} - \text{Residual Value}}{\text{Estimated life of Asset}} \\ &= \frac{(7,60,000 + 40,000) - 2,00,000}{3} \\ &= \frac{8,00,000 - 2,00,000}{3} \\ &= ₹ 2,00,000 \text{ per year}\end{aligned}$$

$$\begin{aligned}\text{The rate of Depreciation} &= \frac{\text{The Annual Amount of Depreciation} \times 100}{\text{Total Original Cost}} \\ &= \frac{2,00,000}{8,00,000} \times 100 = 25\%\end{aligned}$$

0) When depreciation is charged from Asset A/c

Journal of Mauli

Date	Particulars	L.F.	Amount	
			₹ Dr.	₹ Cr.
1.4.2010	Machinery A/c Dr. To Bank A/c (Being Machinery purchased .)		7,60,000	7,60,000
1.4.2010	Machinery A/c Dr. To Bank A/c (Being payment of installation expenses .)		40,000	40,000
31.3.2011	Depreciation A/c Dr. To Machinery A/c (Being annual depreciation charged .)		2,00,000	2,00,000
31.3.2011	P. & L. A/c Dr. To Depreciation A/c (Being depreciation transferred to P&L account .)		2,00,000	2,00,000
31.03.2012	Depreciation A/c Dr. To Machinery A/c (Being annual depreciation Charged .)		2,00,000	2,00,000
31.03.2012	P. & L. A/c Dr. To Depreciation A/c (Being depreciation transferred to P&L account .)		2,00,000	2,00,000
31.03.2012	Bank A/c Dr. To Machinery A/c (Being amount received from sale of old machinery .)		3,00,000	3,00,000
31.03.2012	P. & L. A/c Dr. To Machinery A/c (Being loss on sale of machinery transferred to P. & L. Account.)		1,00,000	1,00,000

(ii) When provision for depreciation A/c is maintained

Journal of Mauli

Date	Particulars	L.F.	Amount	
			₹ Dr.	₹ Cr.
1.4.2010	Machinery A/c Dr. To Bank A/c (Being Machinery purchased .)		7,60,000	7,60,000
1.4.2010	Machinery A/c Dr. To Bank A/c (Being payment of installation exp.)		40,000	40,000
31.3.2011	P. & L. A/c Dr. To Provision for Depreciation A/c (Being provision made for annual depreciation .)		2,00,000	2,00,000
31.3.2012	P. & L. A/c Dr. To Provision for Depreciation A/c (Being provision made for annual depreciation .)		2,00,000	2,00,000
31.3.2012	Bank A/c Dr. To Machinery A/c (Being amount received from sale of old machinery .)		3,00,000	3,00,000
31.3.2012	Provision for Depreciation A/c Dr. To Machinery A/c (Being provision for depreciation a/c transferred to machinery account)		4,00,000	4,00,000
31.3.2012	P. & L. A/c Dr. To Machinery A/c (Being loss on sale of machinery transferred to P. & L. Account)		1,00,000	1,00,000

Illustration 2:

On 1st January 2013, Anshuman Ltd. purchased a machine costing ₹ 2, 00,000. On April 1, 2016 the machine was sold for ₹ 80,000. Prepare Machine and Depreciation Accounts by calculating depreciation @ 10% p.a. by straight line method on original cost. Each year accounts are closed on 31st December.

Machine Account

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Jan. 1	To Bank a/c	2,00,000	2013 Dec.31	By Depreciation a/c	20,000
		2,00,000	Dec.31	By Bal. c/d	1,80,000
					2,00,000
2014 Jan. 1	To Bal. b/d	1,80,000	2014 Dec.31	By Depreciation a/c	20,000
		1,80,000	Dec.31	By Bal. c/d	<u>1,60,000</u>
					180,000
2015 Jan. 1	To Bal. b/d	1,60,000	2015 Dec.31	By Depreciation a/c	20,000
		1,60,000	Dec.31	By Bal. c/d	1,40,000
					1,60,000
2016 Jan 1	To Bal. b/d	1,40,000	2016 Ap-1	By Bank a/c	80,000
		1,40,000	Ap-1	By Depreciation a/c	5,000
			Ap-1	(for 3 months)	
				By P. & L. a/c	55,000
				(Bal. figure)	
		1,40,000			1,40,000

Depreciation Account

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
2013 Dec. 31	To Machine a/c	20,000	2013 Dec.31	By P.&L. a/c	20,000
2014 Dec. 31	To Machine a/c	20,000	2014 Dec. 31	By P.&L. a/c	20,000
2015 Dec. 31	To Machine a/c	20,000	2015 Dec. 31	By P.&L. a/c	20,000
2016 Ap.1	To Machine a/c	5,000	2016 Apr. 01	By P.&L. a/c	5,000

Illustration3:

On January 1, 2014 Hunny Pvt. Ltd. purchased a machine for ₹ 6, 00,000. On July 1, 2016 a part of the machine purchased on Jan. 1, 2014 for ₹ 40,000 was sold for the ₹ 22,500 and a new machine at a cost of ₹79,000 was purchased on the same day. The company has adopted the method of providing 10% p.a. depreciation on the original cost of the machinery. Closing the books on 31st December, prepare ledger accounts.

If (i)—Provision for Depreciation account is not maintained.

(ii)—Provision for Depreciation account is maintained.

Solution:-

1) When provision for depreciation account is not maintained

Machine Account

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2014 Jan 1	To Bank A/c	6,00,000	2014 Dec. 31	By Depreciation a/c (600,000x10%)	60,000
			Dec. 31	By Bal. c/d	5,40,000
		6,00,000			6,00,000
2015 Jan 1	To Bal. b/d	5,40,000	2015, Dec. 31	By Depreciation a/c	60,000
			Dec. 31	By Bal. c/d	4,80,000
		5,40,000			5,40,000
2016 Jan 1	To Bal. b/d	4,80,000	2016 July 1	By Bank a/c	22,500
			July 01	By P.&L.A/c(Loss on sale)	7,500
	To Bank A/c	79,000	July 01	By Dep. A/c (40,000,x10%x6/12)	2,000
July 01			Dec. 31	By Dep. A/c (560,000x10%) (79,000,x10%x6/12)	59,950
			Dec. 31	By Bal. c/d	4,67,050
		5,59,000			5,59,000

Depreciation Account

2014 Dec. 31	To Machine A/c	60,000	2010 Dec. 31	By P.&L. A/c	60,000
Dec.31, 2015	To Machine A/c	60,000	2011 Dec. 31	By P.&L. A/c	60,000
July 1, 2012	To Machine A/c	2,000	2012 Dec. 31	By P.&L. A/c	61,950
Dec.31	To Machine A/c	59,950			
		61,950			61,950

Working Note:-**1 Loss on Sale of Machine**

Jan. 1, 2014	Cost of Machine	40,000
Dec. 31, 2014	Less: Dep. for the year@10%	<u>4000</u>
		36,000
Dec. 31, 2015	Less: Dep. for the year@ 10%	<u>4,000</u>
		32,000
July 01, 2016	Less Dep. for 6 months @10%	<u>2,000</u>
	W.D.V. on 1.7.2016	30,000
July, 01, 2016	Less: Sale Proceed.	<u>22,500</u>
	Loss on Sale of Machine	<u>7,500</u>

i) When Provision for depreciation account is maintained

Machine Account

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2014 Jan. 1	To Bank A/c	6,00,000	Dec.31.2014	By Bal. c/d	6,00,000
		6,00,000			6,00,000
2015 Jan. 1	To Bal b/d	6,00,000	2015Dec.31	By Bal. c/d	6,00,000
		6,00,000			6,00,000
Jan.1.2016	To Bal b/d	6,00,000	July.1.2016	By Bank A/c	22,500
July.1	To Bank A/c	79,000	july 1	By Prov. for Dep.	10,000
			July 1	By P&La/c Loss on sale	7,500
			Dec 31	By Bal. c/d	6,39,000
		6,79,000			6,79,000

Provision for Depreciation Account

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2014 Dec. 31	To Bal. c/d.	60,000	2014 Dec. 31	By P&L A/c	60,000
		60,000			60,000
2015 Dec.31	To Bal. c/d	1,20,000	2015 Jan, 1	By Bal. b/d.	60,000
		1,20,000	Dec.31	By P&L A/c	60,000
					120,000
2016 July01	To Machine A/c	10,000	2016, Jan 1	By Bal. b/d.	120,000
Dec. 31	To Bal. c/d	1,71,950	July 01	By P&L A/c	2000
		1,81,950	Dec.31	By P&L A/c	59950
					181950

Diminishing Balance Method

Under this method, depreciation is calculated on original cost of an asset in the first year or on book value at the fixed rate of depreciation. In this, the amount of depreciation goes on decreasing in subsequent years. This method is suitable for those assets where the expenditure on repairs increases when an asset becomes old. So, in the early years, depreciation is more than repair expenses and in later years, depreciation becomes lower than repair expenses which affect the profit and loss account in same manner. Due to the charging of depreciation on the written down value of an asset, it is considered as diminishing balance method. Under this method, the value of an asset never becomes zero. In this, amount of depreciation goes on decreasing every year, that is why it is also known as Diminishing Balance Method.

Merits:-

1. Since in initial years, the amount of depreciation is more than the amount of repairs and vice versa in later years, it affects the profit & loss account in same the manner every year.
2. It is easy to calculate the depreciation in comparison to some other methods.
3. This method has also been recognized by the Income Tax Act.
4. The value of an asset never becomes zero by applying this method.

Demerits:-

1. It is difficult to calculate the rate of depreciation.
2. An Asset is used equally every year, but the effect of depreciation on the profit loss account differs year to year.
3. It does not provide for the purchase of a new asset on the expiry of the useful life of an old asset.
4. It causes loss of interest because the amount of depreciation is not invested somewhere else.
5. The value of the asset exists in books even after it becomes useless.

Suitability:-

This method is more useful for those assets whose life span is longer and the repairs expenses increase when an asset becomes older. This method is suitable for building, Plant & Machinery etc.

Difference between Fixed Instalment method and Diminishing Balance Method

S.No.	Basis of difference	Fixed Instalment Method	Diminishing Balance Method
1	The amount of depreciation	The amount of depreciation remains the same every year.	The amount of depreciation decreases annually.
2	Basis of calculation of depreciation	The depreciation is calculated on the original cost of the asset.	The value of the depreciation is calculated at the written down value of the asset.
3	Zero level	If there is no provision for residual value, then the book value can be reduced to zero.	In this, the book value of the asset never becomes zero.
4	Effect on Profit & Loss Account	The cumulative effect of the depreciation and repairs expenses is lighter in the initial years and more on later years.	The cumulative effect of depreciation and repair expenses is almost same in all the years.
5	Rate of depreciation	The rate of depreciation is kept lower than Diminishing balance method	The rate of depreciation is kept higher than Fixed Instalment method

Illustration 4:

Anubhooti Ltd. Purchased a Plant on April 1, 2013 for ₹ 50,000 and spent ₹ 10,000 on its installation. The depreciation is written off at the rate of 10% p.a. by diminishing balance method. The accounts are closed on 31st March every year. Prepare the Plant account for the first four years.

Solution :-

Dr.			Plant Account			Cr.	
Date	Particulars	Amount ₹	Date	Particulars	Amount ₹		
2013 Apr. 1	To Bank A/c (50,000+10,000)	60,000	2014 Mar. 31	By Dep. A/c	6,000		
			Mar. 31	By Bal. c/d	54,000		
		60,000			60,000		
2014 Apr. 1	To Bal. b/d	54,000	2015 Mar. 31	By Dep. A/c	5,400		
			Mar. 31	By Bal. c/d	48,600		
		54,000			54,000		
2015 Apr. 1	To Bal. b/d	48,600	2016 Mar. 31	By Dep. A/c	4,860		
			Mar. 31	By Bal. c/d	43,740		
		48,600			48,600		
2016 Apr. 1	Bal. b/d	43,740	2017 Mar. 31	By Dep. A/c	4,374		
			Mar. 31	By Bal. c/d	39,366		
		43,740			43,740		

Illustration 5:-

A machine was purchased by Manan Ltd. On 1 April, 2012 for ₹ 2, 00,000 including a boiler worth ₹ 20,000. Depreciation was charged @ 10% p.a. on diminishing balance method. During the 5th year Boiler became useless due to damages and it was sold for ₹ 4,000. Prepare Machine account for the first five years.

(Solution) :-

Machine Account

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Apr. 1	To Bank a/c (1) To Bank a/c (2) (Boiler)	1,80,000 20,000	2013 Mar. 31	By Dep. a/c (1) 18000 (2) 2000 By Bal. c/d (1) 162,000 (2) 18,000	20,000 1,80,000
		2,00,000			200,000
2013 Apr. 1	To Bal. b/d (1) 162000 (2) 18,000	1,80,000	2014 Mar. 31	By Dep. a/c (1) 16200 (2) 1800 By Bal. c/d (1) 145800 (2) 16200	18,000 1,62,000
		1,80,000			1,80,000
2012 Apr. 1	To bal. b/d (1) 145800 (2) 16200	1,62,000	2015 Mar. 31	By Dep. a/c (1) 14580 (2) 1620 By Bal. c/d (1) 131220 (2) 14580	16,200 1,45,800
		1,62,000			1,62,000
2014 Apr. 1	To bal. b/d (1) 131220 (2) 14580	1,45,800	2016 Mar. 31	By Dep. a/c (1) 13122 (2) 1458 By Bal. c/d (1) 118098 (2) 13122	14,580 1,31,220
		1,45,800			1,45,800
2015 Apr. 1	To Bal. b/d (1) 118098 (2) 13120	1,31,220	2016 Apr. 1	By Bank a/c By P&L a/c ₹(13122-4000)	4,000 9,122
			2017 Mar. 31	By Dep. a/c (10% on 118098) By Bal. c/d.	11,810 1,06,288
		1,31,220			1,31,220

(Illustration) 6 :-

Aastha Ltd. purchased a machine on 1st Jan. 2014 for ₹ 1,20,000. On 1st April, 2015 purchased an additional machine costing ₹ 72,000. On 1st Sep. 2016, the machine purchased on 1st January, 2014 was sold for ₹ 63,000 and on the same date a new machine was purchased for ₹ 1,12,500. Depreciation is provided at 10% per annum on the diminishing balance method every year. Accounts are closed each year on 31st December. Show the machine account for the three years.

(Solution) :**Machine Account**

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
2014 Jan. 1	To Bank a/c (1)	1,20,000	2014 Dec. 31	By Depreciation a/c	12000
			Dec. 31	By Bal. c/d	108000
		120,000			120,000
2015, Jan. 1	To Bal. b/d	108000	2015 Dec. 31	By Dep. a/c	
Apr. 1	To Bank. a/c (2)	72000	Dec. 31	(1) 10800	
				(2) <u>5400</u> (for 9 months)	16200
				By Bal. c/d	
				(1) 97200	
				(2) <u>66600</u>	163800
		180,000			180,000
2016 Jan. 1	To Bal. b/d		2016 Sep. 1	By Bank a/c	63000
	(1) 97200			By Dep. a/c	6480
	(2) 66600	163800	Sep. 1	(10% on 97200 for 8 month)	
				By P.&L. a/c (Loss on sale of Plant (90720-63000))	27720
Sep. 1	To Bank a/c (3)	112500	Dec. 31	By Dep. a/c	
				(1) 6660	
				(2) <u>3750</u> (10% on 112500 for 4 months)	10410
			Dec. 31	By Bal. c/d	
				(1) 59940	
				(2) 108750	168690
		276300			276300
2017 Jan. 1	To Bal. b/d	168690			

Assets Disposal Account

When an Asset Account is opened for different units of the same Asset, then a sale of one unit out of them can be disposed off alternatively by opening Asset Disposal Account. This account will be prepared only when the asset is sold.

The entries for the sale of asset account are made as follows -

(A) When Provision for depreciation account is not opened.

(B) When Provision for depreciation account is opened.

(A) When Provision for Depreciation Account is not opened.

1. On the transfer of book value of the assets sold

Assets Disposal A/c Dr.

To Assets A/c

(Being assets transferred at its book value.)

2. On the sale of asset

Cash/ Bank A/c Dr.

To Assets Disposal A/c

(Being assets sold for cash.)

3. Profit on sale of an asset

Assets Disposal A/c Dr.

To P.&L. A/c

(Being profit on sale of asset).

4. Loss on sale of an asset

P.&L. A/c Dr.

To Assets Disposal A/c

(Being loss on sale of asset.)

(B) When Provision for Depreciation Account is opened

1. On the transfer of book value of the asset sold

Assets Disposal A/c Dr.

To Assets A/c

(Being asset transferred on its book value.)

2. On transfer of the provision for depreciation of related asset to the sale of asset account

Provision for Depreciation A/c Dr.

To Assets Disposal A/c

(Being balance of provision for depreciation related to asset sold, transferred.)

3. On sale of an asset

Cash/Bank A/c

To Assets Disposal A/c Dr.

(Being sale proceed credited to asset disposal account.)

4. Profit on sale of an asset

Assets Disposal A/c Dr.

To P.&L. A/c

(Being profit on sale of asset.)

5. Loss of sale of property

P.&L. A/c Dr.

To Assets Disposal A/c

(Being loss on sale of asset.)

Change in the Method of Depreciation

According to the Accounting Standard 6 (Revised), the method of charging depreciation selected at the time of purchase of Asset, is applied during its whole life span. But if any Law or Accounting Standard require an application of any other suitable method then it will be applied from the date of purchase of an asset. The amount of depreciation calculated from both the methods will be different. Therefore, the difference in amounts has to be adjusted in the year of conversion.

To change the method, calculation will be done using the following steps:

1. Calculate the amount of Depreciation on existing Asset by using prescribed method from the date of purchase to the end of previous year.
2. Now, calculate the amount of depreciation on existing asset by using New Method from the date of purchase to the end of previous year.
3. Calculate the difference in amount of depreciation calculated by both the methods.
4. Adjust the amount of surplus / deficit of the depreciation from Asset Accounts or provision for depreciation Account or Profit & Loss Account.
5. Calculate Depreciation by new method from the current year.

Note: - This calculation for depreciation will only be done for existing Assets, i.e. it will not be calculated for the assets which were sold earlier before the change of method of depreciation.

Conversion of Fixed instalment method to Diminishing Balance method

Illustration 7:

Gupta Ltd. purchased a motor car for ₹ 4, 00,000 on April 01, 2013. Co. was charging depreciation at 10% p.a. at fixed instalment method. In year 2016, Co. decided to change the method from fixed instalment to diminishing balance method we.f. April 1, 2013. Now the rate of depreciation is to be 10% p.a. You are required to prepare the motor car account for 4 years.

Solution:-

Motor Car Account

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013, Ap.1	To Bank a/c	400,000	2014 Mar. 31	By Depreciation a/c	40,000
				By Bal. c/d	360,000
		400,000			400,000
2014 Apr.1	To Bal. b/d	360,000	2015 Mar. 31	By Dep. a/c	40,000
				By Bal. c/d	320,000
		360,000			360,000
2015 Apr.1	To Bal. b/d	3,20,000	2016 Mar.31	By Dep. a/c	40,000
				By Bal. c/d	280,000
		320,000			320,000
2016 Apr. 1	To Bal. b/d	280000	2017 Mar. 31	By Dep. a/c	29160
	To P&L a/c (Surplus Dep.)	11600	Mar. 31	By Bal. c/d	262440
		291600			291600

Working Notes:

(1) Calculation of the Amount of extra Depreciation -

Year	Fixed Installment Method (Present Method)		Diminishing Balance Method (Converted Method)	
	Book Value ₹	Depreciation @ 10% per year	Book Value ₹.	Depreciation @ 10% per year
March 31, 2014	4,00,000	40,000	4,00,000	40,000
31 March 2015	3,60,000	40,000	3,60,000	36,000
March 31, 2016	3,20,000	40,000	3,24,000	32,400
		1,20,000		1,08,400

Difference = 1,20,000 - 1,08,400 = 11,600

- (2) Depreciation on 31st March 2017 (By Diminishing Balance Method) Depreciation @ 10% on 2,91,600 = 29,160

Conversion of Diminishing Balance method to Fixed instalment method

Illustration 8:

Manish limited purchased a machine on 1st April, 2012 for ₹ 5,00,000. The Co-depreciates the machine by charging @ 12% p.a. by diminishing balance method. On April 01, 2015, Co. decided to change the method 10% p.a. by straight line method with retrospective effect from 1st April, 2012. Calculate the adjusted amounts to be adjusted in year 2015 in machinery account and show the machine account for the year 2015-16

Solution:-

- (1) Calculation of the depreciation by Diminishing Balance Method until 1 April 2015

Original Cost of machine on 01-04-2012	5,00,000
Less: Depreciation @12% for 2012-13	60,000
W.D.V. on 01-04-2013	4,40,000
Less: Depreciation @ 12% for 2013-14	52,800
W.D.V. on 01-04-2014	3,87,200
Less: Depreciation @12% for 2014-15	46,464
W.D.V. on 01-04-2015	3,40,736

Total Depreciation by Diminishing balance method upto 01-04-2015.

$$= (60,000 + 52,800 + 46,464) = ₹. 1,59,264$$

- (2) Calculation of the depreciation by the Fixed instalment method Depreciation on ₹. 5,00,000 @10% p.a. for 3 years upto 1 April, 2015

$$= 50,000 \times 3 = ₹. 1,50,000$$

- (3) The difference between the amounts charged to the Profit and Loss Account

- Depreciation by Diminishing Balance Method 1,59,264
- Depreciation by Fixed instalment Method 1,50,000
- Excess Depreciation Charged to be adjusted 9,264

- (4) Depreciation by Fixed instalment method for 2015-16

$$\text{On Rs. 5,00,000 @10\%} = \text{Rs. 50,000}$$

Dr.		Machine Account		Cr	
2015 April. 1	To Balance b/d	3,40,736	2016 Mar.31	By Dep.A/c	50,000
	To P.&L. A/c	9,264	Mar. 31	By Bal. c/d	3,00,000
		350,000			350,000
2016 Apr.1	To Bal. b/d	3,00,000			

The first two methods viz; fixed instalment method and the diminishing balance method do not consider the interest on the capital invested in an asset. But if the amount invested in asset is invested outside the business then the interest might have been earned from it. In other words, when the amount is invested in asset then there is a loss of interest. Therefore, in the annuity method, along with the cost value of an asset, interest is also written off at a fixed rate.

1. Under this method, interest on the invested purchase cost of asset is considered.
2. Every year the interest is charged on the opening balance of an asset and it decreases annually.
3. A fixed amount is written off in the form of depreciation and the amount of depreciation is calculated with the help of an annuity table.

4. Despite of a certain amount of depreciation per year, the net effect on profit and loss account increases as the interest rate decreases every year.

Under this method, interest is considered on the amount of capital invested in the form of an asset.

It is difficult to calculate depreciation whenever any new asset is purchased.

The Annuity method is more suitable for Asset taken on lease, as the lump sum amount is given in advance.

1. On charging interest on the opening balance of an asset

(Being interest charged on opening balance.)

(Being depreciation charged.)

(Balance of interest account closed by P. & L. A/c.)

4. On closure of Depreciation Account

P. & L. A/c Dr.

To Depreciation A/c

(Balance of depreciation account closed by P. & L. A/c.)

Illustration 9:

A firm purchased a lease for 5 years on April 1, 2010 at a cost of ₹ 5,00,00. It is proposed to depreciate the lease by the annuity method charging interest @ 5% p.a. Annuity table shows that to depreciate ₹. 1 by annuity method over 5 years charging interest at the 5% p.a., one must write off a sum of ₹ 0.230975. Show the lease Account for five years and also the relevant entries in the Profit and Loss Account.

Solution:

Lease Account

Dr.

Cr.

Date	Particular	Amount (₹)	Date	Particular	Amount (₹)
Ap.1, 2010	To Bank a/c	50000	Mar.31,2011	By Dep. a/c	11548.80
Mar.31, 2011	To Interest a/c	2500	Mar.31,2011	By Bal. c/d	40951.20
		52500			52500
Ap.1, 2011	To Bal. b/d	40951.20	Mar.31, 2012	By Dep. a/c	11548.80
Mar.31,2012	To Interest a/c	2047.60	Mar.31, 2012	By Bal. c/d	31450.00
		42998.80			42998.80
Ap.1, 2012	To Bal b/d	31450.00	Mar.31, 2013	By Dep. a/c	11548.80
Mar.31, 2013	To Interest a/c	1572.05	Mar.31, 2013	By Bal. c/d	21473.70
		33022.50			33022.50
Ap.1, 2013	To Bal b/d	21473.70	Mar. 31, 2014	By Dep. a/c	11548.80
Mar.31, 2014	To Interest a/c	1073.70	Mar. 31, 2014	By Bal. c/d	10998.60
		22547.40			22547.40
Ap.1,2014	To Bal b/d	10998.6	Mar. 31, 2015	By Dep. a/c	11548.80
Mar.31,2015	To Interest a/c	550.2			
		11548.80			11548.8

An Extract of P&L Account

Mar. 31 2011	To Dep.a/c	11548.8	Mar, 31, 2011	By Interest a/c	2500.00
Mar.31, 2012	To Dep.a/c	11548.8	Mar. 31, 2012	By Interest a/c	2047.60
Mar.31, 2013	To Dep.a/c	11548.8	Mar. 31, 2013	By Interest a/c	1572.50
Mar.31, 2014	To Dep.a/c	11548.8	Mar. 31, 2014	By Interest a/c	1073.70
Mar.31, 2015	To Dep.a/c	11548.8	Mar.31, 2015	By Interest a/c	550.20

$$\begin{aligned}\text{Depreciation} &= \text{Cost} \times \text{Annual Value} \\ &= 5000 \times 0.230975 = 11548.75\end{aligned}$$

Provision and Reserve-

It is very difficult to predict accurately the events to be occurred in future. But in order to face future uncertainties and risks and to strengthen the financial position of the business, it is necessary that every business should keep a certain part of its profit aside to meet its uncertain obligations.

Such an arrangement from current income can be made in two forms-

1. Provisions
2. Reserves

Provision

Some expenses and losses are of such nature that their amounts are not fixed, but it is necessary to provide for them as the provision in order to calculate the correct profit or loss for the current accounting year. In this way, Provision or Reserves refers to the arrangements made for future known losses and liabilities, whose amounts are not fixed with sufficient accuracy. In other words, Provision refers to that amount:

1. Kept for depreciation, renewal or devaluation of an asset; or
2. Kept to meet any known liability, whose amount cannot be estimated with adequate accuracy.

Features of Provisions

1. Provisions are provided to meet the known liabilities.
2. The occurrence of liability is certain, but it can not be estimated with adequate accuracy. Example: Some amounts from debtors are predetermined to become bad debts, but it is not certain that how much amount will be in loss.
3. The year in which provision is created, the profits of that year are reduced by creating provision, but when there is such a loss in the future, then loss does not have any effect on the profit of that year because the loss of that year is fulfilled by the provision created.

Importance of Provision-

The Importance of Creating Provisions is as follows:

I. To Calculate the correct Net profit of business:

In order to calculate correct net profit of any year, it is necessary that all expenses of that year, whether paid or outstanding should be debited to profit & loss account and those expenses which cannot be estimated accurately, provision should be created for them; which means profit or loss can not be calculated accurately without provisions.

II. For making arrangements for future liabilities:

According to Convention of Conservatism, arrangements regarding future losses and liabilities should be made in advance. Therefore, provisions are made to meet for such losses e.g., provision for repairs, provision for taxes etc.

III. To know the true financial position of the business:

The Balance Sheet of any accounting year will represent actual financial position only when appropriate provisions are made for expenses and losses.

IV. For equitable distribution of expenses and losses:

If any asset is used for many years, then expenses incurred on it should be distributed in its useful life equally. For Example, if any machinery will be used for 15 years and during these 15 years ₹ 15,000 are expected on its repair and maintenance, then ₹ 1,000 shall be debited to profit and loss account every year and provision for repairs account shall be created. The actual expenses in every year shall be recovered from the above created provision. This will have similar effect on profit and loss account of actual expenses, which are less in earlier years and more in later years.

The following Provisions are generally created in order to fulfill various objectives:

- 1- Provision for Bad and Doubtful Debts
- 2- Provision for Discount on Debtors
- 3- Provision for Depreciation
- 4- Provision for Taxation
- 5- Provision for Repairs and Renewals
- 6- Provision for Fluctuation in the value of Investment

The first three provisions have already been explained in the present and other chapters, the remaining three provisions are being explained here:

1. Provision for Taxation:

Every business has to pay income tax as per the provisions of the Income Tax Act on the profit earned by it. The amount of correct income tax on the profits of the current year is calculated when the income tax will be determined by income tax department in next year on the basis of income statement. Therefore, Provision is created by estimating the liability of current year's tax whose accounting is done in this way-

1. On making provision for taxes-

P.&L. A/c Dr.
 To Provision for the Income Tax A/c
(For Income tax provision made for the year.)

2. In the next year, on payment of taxes

Provision for Income Tax A/c Dr.
 To Bank A/c
(For Income tax paid for the previous year.)

2. Provision for Repairs and Renewals-

In order to have similar effect of repairs and renewals on profit and loss account in life span of an asset, provision for repairs and renewals is created for it. Every year a certain amount from profit & loss account is kept aside for the purpose of repairs and maintenance and actual expenses are transferred to this provision

On creating Provision for repairs and maintenance-
 Profit and Loss A/c Dr.
 To Provision for Repairs and Maintenance A/c
 (Being provision made for repairs and maintenance.)

2. On actual repairs and maintenance expenses
Repairs and Maintenance A/c Dr.
To Bank/ Cash A/c
(Being amount paid for the repairs and maintenance.)

3. On transfer of repairs and maintenance expenses to the provision account-
Provision for Repairs and Maintenance A/c Dr.
To Repairs and Maintenance A/c
(Being amount of repairs and maintenance transferred.)

A yearly sum of ₹ 3,000 is set aside to cover repairs and renewals. The actual expenses for repairs and renewals in the first four years are ₹ 1,100, ₹ 1,300, ₹ 3, 200 and ₹ 1,500. Show Repairs and Renewals Provision Account.

Repairs and Renewals for Provision Account

Dr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
Year I	To Repairs a/c	1100	Year I	By P&L a/c	3000
	To Bal. c/d	1900			
		3000			3000
Year II	To Repairs a/c	1300	Year II	By Bal. b/d	1900
	To Bal. c/d	3600		By P&L a/c	3000
		4900			4900
Year III	To Repairs a/c	3200	Year III	By Bal. b/d	3600
	To Bal. c/d	3400		By P&L a/c	3000
		6600			6600
Year IV	To Repairs a/c	1500	Year IV	By Bal. b/d	3400
	To Bal. c/d	4900		By P&L a/c	3000
		6400			6400

Note- If future expenses are not required for repairs and renewals, the remaining balance of the said account ₹ 4,900 will be re-transferred to profit and loss account or to the general reserve account.

3. Provision for fluctuations in the value of Investments

Many times, funds are invested in various securities outside the business. This provision is created for the future loss due to the high fluctuations in the value of these investments. The loss incurred in selling these investments is transferred to this provision account.

Accounting in this regard is done as follows:

1. On making the provision for fluctuations in the value of investments
P. & L. A/c Dr. To Provision for fluctuation in the value of Investment a/c
(Being amount provided for fluctuation in value of Investments.)
2. For loss on selling of an investment

Cash/Bank A/c	Dr.
Loss on sale of Investment A/c	Dr.
To Investment A/c	
(Investment sold on loss.)	
3. For transferring losses on investments

Provision for fluctuation in the value of Investment A/c	Dr.
To Loss on Investment A/c	
(Loss on Investment transferred)	

Importance of Reserves

The major reasons and objectives for making Reserve in the business are as follows:

1. To meet unforeseen future liabilities and losses.
2. To strengthen financial position of business.
3. To increase the working capital of the business.
4. To maintain uniform rate of dividend for every year.
5. For the future development and expansion of plans of the business.

Reserves

Reserves refer to the amount generated from current year's profit and kept reserved for future unforeseen losses and liabilities. The Reserve is kept to strengthen the financial position of the business and to increase the working capital.

According to William Pickles, Reserve means the amount set aside out of profit and other surpluses, which are not earmarked in any way to meet any particular liability known to exist on the date of Balance Sheet. The amount of Reserve is deducted from the divisible profits of the year, so it is shown in the Profit & Loss Appropriation account. Main examples of Reserves are General Reserve, Capital Reserve, Dividend equalization Reserve; etc.

Features of Reserves

1. Reserves are created for unforeseen losses and liabilities.

2. It is optional to create reserves, not mandatory.
3. They are created to strengthen the financial position of the business.
4. They are made from the net profit of the current year. Therefore, the reserves are also called undistributed profit and retained earnings.
5. The Reserve is a financial management of business from the internal sources.
6. It is a part of owner's equity; hence, it is shown in the liability side of the balance sheet.

Importance of Reserves

The major reasons and objectives for making Reserve in the business are as follows:

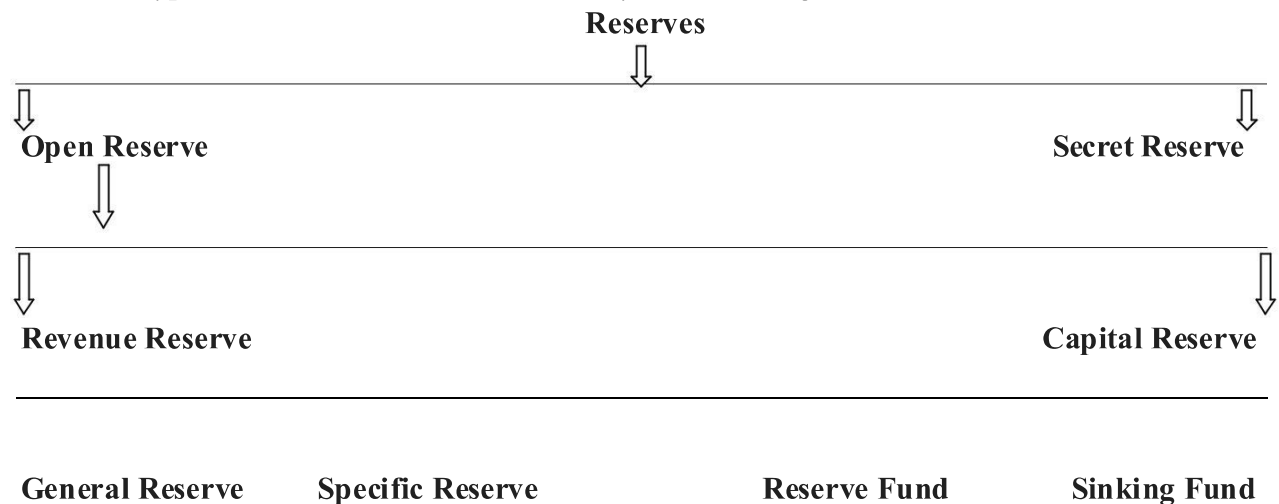
1. To meet unforeseen future liabilities and losses.
2. To strengthen financial position of business.
3. To increase the working capital of the business.
4. To maintain uniform rate of dividend for every year.
5. For the future development and expansion of plans of the business.

Difference Between Reserves and Provisions

Sr. No.	Basis of difference	Provisions	Reserves
1.	Objective	Provision is made to meet the unidentified amount of provision, depreciation and known liabilities.	Reserves are created to strengthen the financial position of the institutions and to meet the unforeseen losses.
2.	Compulsion	Creation of Provisions is compulsory, whether business earns profit or not.	It is not legally mandatory to create reserves; it depends on the availability of profits and intention of owners.
3.	Accounting	Provisions are created through profit and loss accounts.	Reserves are created through Profit & Losses Appropriation Account.
4.	Investments	Generally the amount of provision is not invested outside the business.	The amount of the reserves can be invested outside the business.
5.	Distribution as Dividend	Provisions cannot be distributed in the form of dividends.	The reserves can be distributed in the form of dividends.
6.	Presentation in Balance Sheet	Provisions can be shown either by deducting amount from an asset or on liability side in the balance sheet.	Reserves are always shown on liability side in the balance sheet.

Types of Reserves

Different types of Reserve can be understood by the following chart-



1. Open reserve

The Reserve, which is clearly shown under the different headings on the liability side of the Balance Sheet is known as Open reserve. These are of two types: -

- (A) Revenue reserve
- (B) Capital reserve

A) Revenue Reserve-

Such Reserves, which are created by accumulating undistributed profits or revenue receipts, are called Revenue Reserves. According to Kohler, —It is that portion, or any detail thereof, of the net worth or total equity of an enterprise representing retained earnings available for withdrawal by proprietors. It is not legally mandatory to make General Reserve, rather, it is voluntary, and therefore, Reserve is made only in the year when the profits are high. The owner of the business has the right over the reserves.

(i) General Reserves

Generally, Businessmen do not distribute whole profits of their business in the form of dividends, but keep a portion of those profits safe for future contingencies. Therefore, this part of the undistributed profit that can be used to meet any unidentified and uncertain losses and liabilities is called general Reserve. General Reserve is also called as Voluntary Reserve, Free Reserve, or Contingency Reserve.

General Reserves are made for the following objectives:

1. To strengthen the financial position of the business.
2. To safeguard business from the unknown future losses.
3. To maintain stability in the rate of dividend every year.
4. For the expansion of business.
5. To increase working capital of business.

(ii) Specific Reserves

When the Reserve is created for the specific purpose, then it is called Specific Reserve. After fulfilling that specific purpose, remaining reserve can be utilized for the distribution of dividend. Examples of Specific Reserve are Workmen's Compensation Reserve, Dividend Equalisation Reserve, Debenture Redemption Reserve, Building Construction Reserve, Asset replacement Reserve etc.

Accounting for Reserves can be understood in this way:

Reserve for Replacement of Assets

This Reserve is created so that funds can be arranged for the replacement of assets after a certain period of time. In order to make this Reserve, a certain amount is transferred from the Profit Loss Appropriation Account to this Reserve Account. The amount of this reserve can only be used in business but if the amount of this Reserve is used outside the business then it is called the Reserve fund.

The following entries are made in relation to asset replacement: -

1. To transfer funds in the Asset Replacement Reserve Account every year-

P. & L. Appropriation A/c Dr.

To Assets Replacement Reserve A/c

(Being amount transferred out of divisible profits.)

2. Asset Replacement Reserve account is transferred to General Reserve after purchasing new asset from available cash in the business. The journal entry in this regard is as follows:

Assets Replacement Reserve A/c Dr.

To General Reserve A/c

(Being Assets Replacement Reserve Account transferred to General Reserve Account.)

3. Entry for purchase of new Asset-

Assets A/c Dr.

To Bank A/c

(Being new assets purchased.)

Illustration 11 :

It is estimated by a Company that it will require a sum of ₹ 15, 00, 000 after four years to replace its existing plant. It created a reserve for it and appropriated ₹ 3, 75, 000 to this reserve at the end of each year. New plant was purchased for ₹ 15, 00, 000 after four years. Prepare necessary journal entries and the ledger accounts.

Solution :**Journal Entries**

Date	Particulars	L.F.	Dr. Amount ₹	Cr. Amount ₹
1 st year 31 st Dec.	Profit and Loss Appropriation a/c Dr. To Plant Replacement Reserve a/c (Being amount transferred out of divisible profits.)		3,75,000	3,75,000
2 nd year 31 st Dec.	Profit and Loss Appropriation a/c Dr. To Plant Replacement Reserve a/c (Being amount transferred out of divisible profits.)		3,75,000	3,75,000
3 rd year 31 st Dec.	Profit and Loss Appropriation a/c Dr. To Plant Replacement Reserve a/c (Being amount transferred out of divisible profits.)		3,75,000	3,75,000
4 th year 31 st Dec.	Profit and Loss Appropriation a/c Dr. To Plant Replacement Reserve a/c (Being amount transferred out of divisible profits.)		3,75,000	3,75,000
31 st Dec.	New Plant a/c Dr. To Bank a/c (Being new plant purchased.)		15,00,000	15,00,000
31 st Dec.	Plant Replacement Reserve a/c Dr. To General Reserve a/c (Being the balance of Plant Replacement Reserve account transferred to General Reserve account.)		15,00,000	15,00,000

Ledger**Plant Replacement Reserve Account**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
1 st year 31 st Dec.	To Bal. c/d.	375000	1 st year 31 st Dec.	By P & L Appr. A/c	375000
2 nd year 31 st Dec.	To Bal. c/d.	750000	2 nd year Jan.1.	By Bal. b/d	375000
			31 st Dec.	By P & L Appr. A/c	375000
		750000			750000
3 rd year 31 st Dec.	To Bal. c/d.	1125000	3 rd year Jan.1.	By Bal. b/d	750000
			31 st Dec.	By P & L Appr. A/c	375000
		1125000			1125000
4 th year 31 st Dec.	To Gen. Res. A/c	1500000	4 th year Jan.1.	By Bal. b/d	1125000
			31 st Dec.	By P & L Appr. A/c	375000
		1500000			1500000

New Plant Account

4 th year 31 st Dec.	To Bank A/c	1500000			
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- (iii) **Reserve Fund:** - If the amount of General Reserve or Specific Reserve is invested in securities outside the business, then it is called Reserve fund.

For Example: If the amount of ₹ 2, 00,000 is kept out of profits every year in business for purchasing plant in future then it will be called Plant Reserve and if such amount invested outside the business then it will be called Plant Reserve Fund.

- (iv) **Sinking Fund:** - When the amount of Reserve, created from the profits of business for a specific purpose is invested outside the business in such a manner that the necessary amount can be withdrawn for a fulfillment of specific purpose after a certain time, then that fund is called sinking fund. The sinking fund is a form of the Reserve fund.

The sinking fund is of two types- cumulative and non-cumulative, the interest received on the invested funds in the sinking fund is also transferred along with the amount of fund is known as cumulative fund. And if such interest is not re-invested, then it is called non-cumulative fund.

(B) Capital Reserve: -

Capital Reserve refers to the reserve that is created from the capital profits, therefore such profits which cannot be distributed to the shareholders as dividends.

The capital Reserve is created from the following capital profits -

- 1- Profit on Sale of Fixed Assets.
- 2- Profit from Revaluation of assets and liabilities.
- 3- Premium received on issue of shares and debentures. 4- Profit earned on acquisition of an existing business.
- 5- Profit earned before the amalgamation of companies.
- 6- Profit on the forfeiture of shares.
- 7- Profit from redemption of debentures.
- 8- Balance left in Share forfeiture account after re-issue of forfeited shares.
- 9- Capital Redemption Reserve for the redemption of redeemable preference shares.
- 10- Any other such capital profits or receipts which are not usually earned during business.

(C) Secret Reserve: -

Secret Reserve is the Reserve that exists in the business but does not appear in the Balance Sheet. It is created by showing assets at less than its actual value and liabilities and provisions at more than its actual value. In case of Secret Reserve, the actual financial position of the business is presented better than the actual position. This Reserve is also called Internal Reserve or Hidden Reserve.

The secret reserve is created by the following activities:

- 1 Showing assets by lowering or devaluing its value.

- | Showing the liabilities by overpricing or over-valuation.
- | Creating more provisions than required.
- | Considering capital expenditure as revenue expenditure.
- | Not showing prepaid expenses and accrued income etc.

The secret reserves are created for the following purposes:

- | Writing off the contingent losses of business from this reserve.
- | Strengthen the financial position of the business.
- | Decreasing liabilities by showing less profit.
- | Increasing working capital of business etc.

Summary

The constant reduction in value and utility of an asset, which occurs due to its constant use, passage of time or development of new techniques, is known as depreciation. Various methods of calculating depreciation are used for different kinds of assets, in which major methods are Fixed Instalment Method, Diminishing balance Method and Annuity Method.

Under the Fixed instalment method, an equal amount is charged every year in the form of depreciation. In order to calculate the amount of depreciation, the original cost of an asset is reduced by deducting its residual value and the remaining value is divided by the life span of an asset. In Diminishing Balance Method, depreciation is charged on opening balance of an asset at fixed rate. In this, the amount of depreciation gets reduced annually and the value of an asset never becomes zero. In the first two methods, interest on invested capital on asset is not taken into consideration, hence, in Annuity method, interest is also written off at certain rate along with the cost of an asset.

Provisions refer to the amount kept for depreciation on assets, its innovation and reduction in its value or else, arrangement made for probable estimated loss and liability whose value is not ascertained with enough accuracy. Different provisions are made for various purposes such as provision for bad and doubtful debts, provision for taxation, provision for depreciation and provision for repairs and renewals etc.

Reserves refer to the amount taken out of current profits to meet unforeseen losses and liabilities in future. Different types of Reserves in the business such as Revenue Reserve, Capital Reserve, General Reserve, Specific Reserve etc. are made.

Important Words

Depreciation	Revenue Reserve
Obsolescence	Capital Reserve
Depletion	General Reserve
Scrap Value	Specific Reserve

Wasting Assets

Reserve Fund

Provisions

Sinking Fund

Questions for Practice

Objective Questions

1. Depreciation is related to -
(A) Current assets (b) Investments
(C) All fixed assets (d) All tangible fixed assets
2. The amount of depreciation in the fixed instalment method every year -
(A) Remains the same (B) Increases.
(C) Decreases (d) Decreases- Increases
3. Which of the following assets is generally not charged with depreciation?
(A) Land (b) Furniture
(C) Building (d) Machine
4. Which of the following are made for known liabilities?
(A) Provisions (b) Reserve
(C) Capital Reserve (d) Reserve fund
5. Created for unknown liabilities-
(A) Provisions (b) General Reserve
(C) Capital Reserve (d) All of the above

Very Short Answer Type Questions

1. What is depreciation?
2. What does the word obsolescence mean?
3. What do you mean by residual value of an asset?
4. Mention two methods of calculating depreciation.
5. Give two important causes for charging depreciation.
6. What is the meaning of the cost of an asset for the purpose of depreciation?
7. Give journal entry for profit on sale of an asset.
8. Give the formula for calculating depreciation by fixed instalment method.
9. Which method of depreciation gives same depreciation every year?

10. By which method, amount of depreciation never becomes zero?
11. Give any two reasons for the necessity of accounting for depreciation.
12. By which method, depreciation is calculated on the written down value of an asset?
13. In which method, amount of depreciation is more in earlier years and less in later years?
14. What do you mean by Reserve?
15. What is the meaning of Provisions?
16. Give an example of Provisions.
17. Where general reserve is shown in the balance sheet? How do you show General Reserve in the balancesheet.
18. Give journal entry of making reserves.
19. Give major difference between reserve and reserve fund.
20. Give two examples of Specific Reserve.

Short Answer Type Questions

1. What do you mean by depreciation?
2. Give any four reasons for the decrease in the value of a fixed asset.
3. What do you mean by cost of a fixed asset?
4. Explain four factors affecting amount of depreciation.
5. Explain any four merits of the fixed instalment method.
6. Write two features of diminishing balance method. Also give its formula.
7. Write any three differences between Fixed Instalment Method and Diminishing Balance Method.
8. A machinery was purchased in ₹ 3, 60,000 and ₹ 40,000 were spent on its installation, the residual value of this machinery is ₹. 10,000. What will be the amount of depreciation at the rate of 10% by fixed instalment method?
9. Write a brief comment on Fixed Instalment Method of Depreciation?
10. Write the difference between depreciation and obsolescence?
11. Explain the diminishing balance method of depreciation.
12. A machinery was purchased of ₹ 1, 00,000 and depreciation is charged using diminishing balance method at the rate of 10%. Give the amount of depreciation for the next year.
13. Is it necessary to make provision or reserve? Why?
14. Explain the difference between Provision and Reserves.

15. Give any four examples of Provisions.
16. Give the various types of Reserves?
17. Explain ? "Provision for Doubtful Debts".
18. Write the features of Reserves?
19. Write a short note on Capital Reserve.
20. Explain Sinking Fund in brief.

Essay Type Questions

1. What do you mean by depreciation? What are the points to be kept in mind while determining depreciation on an asset?
2. What is depreciation? Why is it charged? Explain the methods of accounting for the depreciation.
3. Define Depreciation. Explain the classification of assets with respect to depreciation.
4. Explaining the meaning of provision and reserve, give the difference between them.
5. What do you mean by Reserve? Describe the different types of Reserve.
6. What do you mean by Provision? Explain the major provisions.

Answer (objective questions)

1. D 2. A 3. A 4. A 5. B

Numerical Questions

1. Hunny Ltd. purchased machinery on 1st January, 2013 for ₹ 55,000 and spent ₹ 3,000 on its cartage and ₹ 2,000 on its installation. Hunny Ltd. writes off depreciation at the rate of 10% p.a. on original cost. The accounts are closed every year on 31st December. Prepare Machine account for first four years.
[Answer: Bal. of Machinery account-year 2013- ₹ 54,000, 2014- ₹ 48,000 2015- ₹ 42,000, 2016- ₹ 36,000]
2. A machine was purchased on 1st April, 2013 for ₹ 41,000. The estimated life was 4 years and scrap value was ₹ 1,000. On 1st Oct. 2014 and 1st April, 2015 another machines were purchased for ₹ 16,800 (scrap value ₹ 800) and ₹ 13,600 (scrap value ₹ 1,600) respectively. The estimated life was 4 years for both the machines. Depreciation is charged by fixed instalment method. Prepare Machine account for first 3 years. The accounts are closed on 31st March of each year.
[Answer: Amount of depreciation 2013-14 ₹ 10,000, 2014-15 ₹ 12,000, 2015-16 ₹ 17,000, Balance at the end ₹ 32,400]
3. A firm purchased a machinery costing ₹ 1,00,000 on 1st January, 2012. Additional machinery was purchased on 1st July, 2013 for ₹ 20,000 and on 1st April, 2016 for ₹ 32,000. A part of the machinery which originally cost ₹ 20,000 in 2012 was sold for ₹ 10,000 on 30th June, 2015.

Show Machinery Account for 5 years if depreciation is provided at 10% p.a. on the straight line method and accounts are closed on 31st December every year.

[Answer: Depreciation- 2012- ₹ 10,000, 2013- ₹ 11,000, 2014- ₹ 12,000, 2015- ₹ 11,000, 2016- ₹ 12,400]

4. Gaurav & Bros. whose books are closed on 31st March purchased a machine for ₹ 1,00,000 on 1st April 2011 and it was decided to charge depreciation @ 10% per annum on diminishing balance method. Prepare Machine account for five years.

[Answer: Balance of Machine Account ₹ 59,049 at the end of fifth year]

5. Aditya Limited purchased machinery for ₹ 80,000 on 1st July, 2013. Depreciation is provided @ 10% p.a. on the Diminishing Balance method. On 1st October, 2015 one fourth of machinery was found useless and disposed of for ₹ 12,000. On the same date a new machinery at a cost of ₹ 30,000 was purchased. Prepare Machinery Account from 2013 to 2016. The accounts are closed on 31st December every year.

[Answer: Balance of Machinery Account in 2013 - ₹ 76,000, 2014 - ₹ 68,400, 2015 - ₹ 75,420, 2016- ₹ 67,878]

6. Aastha Ltd. whose books are closed on 31st March, purchased a machine on 1st April, 2014 for ₹ 50,000. On 1st October in the same year an additional machine was purchased for ₹ 25,000. On 1st October 2015 the plant purchased on 1st April 2014 has become obsolete, was sold off for ₹ 20,000. On 1st October 2016 a fresh machine was purchased for ₹ 60,000 and on the same date the machine purchased on 1st October, 2014 was sold for ₹ 21,000. Depreciation is to be provided at 10% p.a. on the written down value every year. Show Machinery Account for first three years.

[Answer ; Balance of Machinery machinery sold during 2015-16, Account on 31st March 2017 ₹ 57,000, loss on ₹ 22,750, Profit on machinery sold during 2016-17 ₹ 693.75]

7. On 1st July, 2014 Ashu Ltd. purchased a plant for ₹ 6,00,000. On 29th Feb., 2016, a part of the plant purchased on 1st July 2014 for ₹ 80,000 was sold for ₹ 30,000. On the same date a new plant was purchased for ₹ 1,50,000. Depreciation is provided at 20% per annum on the written down value method and the books are closed on 31st Dec. each year. You are required to prepare (i) Plant Account (ii) Provision for Depreciation Account and (iii) Plant Disposal Account

[Answer: Loss on sale of plant ₹ 25,800]

8. The following particulars are available from the books of Anu Ltd.- Provision for repairs and renewals as on 1.4.2014 ₹ 50,000. Actual repair charges incurred during the year 2014-2015 ₹ 30,000, during 2015-16 ₹ 45,000. Anu Ltd. transfers annually a sum of ₹ 40,000 to the Provision for Repair and Renewals Account. Prepare the Provision for Repair and Renewals Account for the year 2014-15 and 2015-16

[Answer: Balance of Provision Account at end of 2014-15 ₹ 60,000 and 2015-16 ₹ 55,000]

9. It is estimated by Anshuman Pvt. Ltd. that it will require a sum of ₹ 6,00,000 after four years to replace its

existing plant. It created a reserve for it and appropriated ₹ 1,50,000 to this reserve at the end of each year. New plant was purchased for ₹ 6,00,000 after four years. Pass necessary journal entries and prepare ledger accounts.

10. On 1st January, 2016, the Provision for Bad Debts stood at ₹ 1,500. On 31st Dec., 2016, the sundry debtors were ₹ 30,500 out of this sum ₹ 500 were bad debts and had to be written off. A Provision for doubtful debts at 5% is to be maintained.

Show Journal entries and prepare P. & L. A/c and the Balance sheet

[Answer – In Bal. Sheet – Sundry Debtors on 31st Dec 2016, ₹ 28,500]

11. On 1st January, 2014 the balance of Provision for Doubtful Debts Account was ₹ 3,000. Bad debts amounted to ₹ 2,000 during the year. Debtors stood at ₹ 1, 30, 000 on 31st Dec., 2014. Make a provision for doubtful debts at the rate of 5% During 2015 bad debts totalled ₹ 2,200. Debtors stood at ₹ 76,000 on 31st Dec., 2015 and you are required to make a provision of 5% on them. During 2016, bad debts amounted to ₹ 3,200 and debtors at the end of the year were ₹ 32,000. You are required to make a provision of 5% for doubtful debts. Prepare Bad Debts Account and Provision for Doubtful Debts Account.

[Answer: Balance of Prov. for Doubtful debts Account Dec.31, 2014 – ₹ 6,500, on Dec.31, 2015 – ₹ 3,800, on Dec.31, 2016 – ₹ 1,600]