

Unit 10

DEPRECIATION ACCOUNTING



Contents

- 10.1 Introduction
- 10.2 Depreciation – Meaning and definition
- 10.3 Objectives of providing depreciation
- 10.4 Causes of depreciation
- 10.5 Characteristics of depreciation
- 10.6 Factors determining the amount of depreciation
- 10.7 Methods of providing depreciation
- 10.8 Methods of recording depreciation
- 10.9 Calculation of profit or loss on sale of asset



Points to recall

The following points are to be recalled before learning the depreciation accounting:

- The going concern concept
- The matching concept
- Meaning of fixed assets
- Tangible assets and intangible assets



Learning Objectives

To enable the students to

- Understand the meaning and causes of depreciation
- Understand the various methods of providing depreciation
- Apply the different methods of depreciation and prepare asset account

Key terms to know

- Depreciation
- Provision for depreciation
- Scrap value/residual value
- Book value
- Straight line method
- Diminishing balance method

10.1 Introduction



Student activity

Think: Mr. Nihal bought a car for ₹ 4, 00,000. After four years he wanted to sell it for more than ₹ 4, 00,000. Is it possible? Why do you think that it is possible/it is not possible?

Business enterprises use certain fixed assets for the conduct of business operations. Such assets are building, plant and machinery, motor vehicles, furniture, office equipment, etc. These assets have a long span of life. After some years, the assets will lose their usefulness for the business operations. Purchase of such fixed assets or construction of these is a capital expenditure. Hence the amount cannot be transferred to profit and loss account of the year of purchase. But every year, a part of the capital expenditure attributable to the use during the year is charged to profit and loss account and is reduced from the cost of the asset. The portion of cost of asset attributable to the use and expiry of time is to be measured and accounted which is called depreciation. Depreciation is treated as a charge against profit and is debited to profit and loss account.

10.2 Depreciation - Meaning and definition

The process of allocation of the relevant cost of a fixed asset over its useful life is known as depreciation. It is an allocation of cost against the benefit derived from a fixed asset during an accounting period.

According to **Spicer and Pegler**, “Depreciation is the measure of exhaustion of the effective life of an asset from any cause during a given period”.

According to **R.N. Carter**, “Depreciation is the gradual and permanent decrease in the value of an asset from any cause”.

10.2.1 Useful life of the asset

Useful life is (a) the period over which an asset is expected to be available for use by an enterprise; or (b) the number of production or similar units expected to be obtained from the asset by an enterprise.



According to Indian Accounting Standards, (AS 10) depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. The depreciable amount of an asset is the cost of an asset or other amount substituted for cost, less its residual value.

10.2.2 Depreciable assets

Fixed assets which are meant for use in the business for more than one accounting period, the cost of which can be written off over their useful life are known as depreciable assets. Buildings, machinery, vehicles, furniture, computers and equipment are examples of depreciable fixed assets. These assets have limited useful life. They are meant for use in the business for production or supply of goods or for administrative purposes. These are not meant for resale.

10.3 Objectives of providing depreciation

Following are the objectives of providing depreciation:

(i) To find out the true profit or loss

According to matching principle, the expenses incurred during a period must be matched with revenue earned during that period. Hence, when an asset is used for generating income for a



business, the cost of the asset attributable to the use, i.e., the reduction in the book value of the asset proportionate to the benefit derived from it, should be charged against the revenue. This is to be done to find out the true cost of production and profit or loss of the business for every accounting period.

(ii) To present the true and fair view of financial position

When the depreciation is charged on fixed assets, the book value of fixed assets are reduced to that extent and the remaining value is shown in the balance sheet. The balance represents the value of benefit that is yet to be derived from them. The written down value is the true value of fixed assets which represent cost not yet written off. The balance sheet must represent a true and fair view of financial status. Hence, fixed assets must be shown at their at written down value.

(iii) To facilitate replacement of fixed assets

When the depreciation is debited to profit and loss account, an equal amount is either retained in the business or invested outside the business. When the useful life of an asset comes to an end, a new asset can be purchased by using the resources available in the business.

(iv) To avail tax benefits

As per the Indian Income Tax Act, while computing tax on business income, depreciation is deductible from income. Hence, depreciation is computed and charged to profit and loss account to reduce tax liability.

(v) To comply with legal requirements

Depreciation is provided on fixed assets to comply with the provisions of law apart from Income Tax Act. For example, Section 123(1) of the Indian Companies Act, 2013, requires every company to provide depreciation on fixed assets before declaring dividend to its shareholders.

10.4 Causes of depreciation

There are different reasons causing the reduction in the book value of the fixed assets. Such causes are as follows:

(i) Wear and tear

The normal use of a tangible asset results in physical deterioration which is called wear and tear. When there is wear and tear, the value of the asset decreases proportionately.

(ii) Efflux of time

Certain assets whether used or not become potentially less useful with the passage of time.

(iii) Obsolescence

It is a reduction in the value of assets as a result of the availability of updated alternative assets. This happens due to new inventions and innovations. Though the original asset is in a usable condition, it is not preferred by the users and it loses its value. For example, preference of latest computers by the users.

(iv) Inadequacy for the purpose

Sometimes, the use of assets may be stopped due to their inadequacy for the purpose. These may become inadequate due to expansion in the capacity of a firm.

(v) Lack of maintenance

A good maintenance will naturally increase the life of the asset. When there is no proper maintenance, there is a possibility of more depreciation.

(vi) Abnormal factors

Decline in the usefulness of fixed asset may be caused by abnormal factors like damage due to fire accidents, natural calamities, etc. These may even lead to the state of an asset being discarded.

10.5 Characteristics of depreciation

Following are the characteristics of depreciation:

- i. Depreciation is the process of allocation of cost of depreciable asset (capital expenditure) to revenue expenditure or to profit and loss account over the useful life of the asset.
- ii. It is the process of allocation of cost and not the process of valuation.
- iii. It is a decrease in the book value of the asset and not the market value of the asset.
- iv. It is a gradual and continuous decrease in the book value of asset over its useful life.
- v. It is calculated only for tangible depreciable fixed assets. Depreciation is not provided on intangible and wasting assets.



Allocation of acquisition cost of natural resources such as mineral deposits, oil well, coal, timber is called depletion. Allocation of acquisition cost of intangible fixed assets such as goodwill, patents, copyrights, trademarks, and intellectual property rights is called amortization.

10.6 Factors determining the amount of depreciation

There are different factors that determine the amount of depreciation to be provided on a fixed asset. They are as follows:

(i) Actual cost of the asset

Actual cost means the amount incurred in acquiring or constructing the asset. It is the acquisition or construction cost or historical cost. It includes all the expenses incurred on the asset to bring the asset to present condition and location, that is, all incidental expenses incurred till it is put into use. Purchase price of the asset, freight, loading charges, unloading charges, erection cost, setting up cost and expenses of trial run are included in the cost of the asset. If the asset is a second-hand one, the initial repair to make the asset useable is also to be taken as part of actual cost of the asset.

(ii) Estimated useful life of the asset

The period for which an asset can be used in the enterprise is known as estimated useful life of an asset. It can be calculated in terms of period for which the asset is expected to be used by the entity or units of output to be obtained by the use of the asset. etc. In the case of intellectual properties like patents and copyrights, their legal life is taken as their estimated useful life. The Indian Companies Act, 2013 has prescribed useful lives of fixed assets for the purpose of computation of depreciation. For example, the useful lives prescribed in Part C of Section 123 for general plant and machinery and general furniture and fittings are 15 years and 10 years respectively.

(iii) Scrap value of an asset

The amount which is expected to be realised at the end of the estimated useful life of an asset is known as scrap value of the asset. It is also known as residual value. In determining the scrap value, costs to be incurred for removal and sale of the asset should be deducted from the estimated gross realisable value.

(iv) Other factors

Besides the above mentioned factors, legal provisions, technological factors, etc., also determine the amount of depreciation.

10.7 Methods of providing depreciation

There are various methods used for providing depreciation on fixed assets. The management of a business enterprise has to select the most appropriate method based on the consideration of various factors such as nature of the asset, use of the asset and circumstances that prevail in the business. The following are the different methods of providing depreciation:

- i) Straight line method or Fixed instalment method or Original cost method
- ii) Written down value method or Diminishing balance method
- iii) Sum of years of digits method
- iv) Machine hour rate method
- v) Depletion method
- vi) Annuity method
- vii) Revaluation method
- viii) Sinking fund method
- ix) Insurance policy method

10.7.1 Straight line method/ Fixed instalment method / Original cost method

Under this method, a fixed percentage on the original cost of the asset is charged every year by way of depreciation. Hence it is called original cost method. As the amount of depreciation remains equal in all years over the useful life of an asset it is also called as fixed instalment method. When the amount of depreciation charged over its life is plotted on a graph and the points are joined together, the graph will show a horizontal straight line. Hence, it is called straight line method.

This method is suitable for those assets the useful life of which can be estimated accurately and which do not require much expense on repairs and renewals.

Under this method, the following formulae are used for calculating the amount of depreciation and the rate of depreciation respectively:

$$\text{Amount of depreciation per year} = \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}}$$

$$\text{Rate of depreciation} = \frac{\text{Amount of depreciation per year}}{\text{Original cost}} \times 100$$

Tutorial note

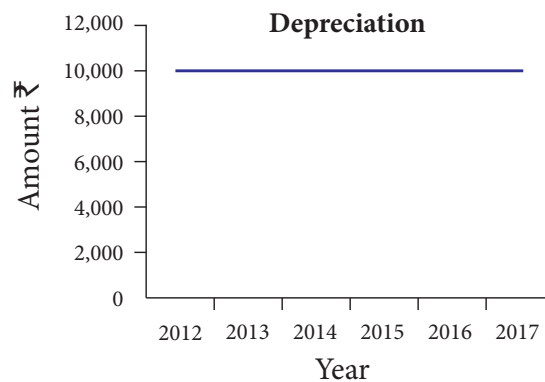
- a) In the year of purchase, if the period of use is less than a year, the amount of depreciation will be charged proportionately for the period for which the asset has been used in the business.
- b) If depreciation is deducted from the cost of the asset at the end of useful life of the asset the amount left in the asset account will be equal to the scrap value if there is any scrap value or it will be zero if there is no scrap value.

Example

On 1.1.2012, a firm purchased a machine at a cost of ₹ 1,10,000. Its life was estimated to be 10 years with a scrap value of ₹ 10,000. The amount of depreciation to be charged at the end of each year is:

$$\begin{aligned}\text{Amount of depreciation per year} &= \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}} \\ &= \frac{1,10,000 - 10,000}{10} = \frac{1,00,000}{10} = ₹ 10,000 \text{ per year}\end{aligned}$$

When it is plotted on a graph for 5 years, it appears as follows:



Merits

Following are the merits of straight line method of depreciation:

(a) Simple and easy to understand

Computation of depreciation under this method is very simple and is easy to understand.

(b) Equality of depreciation burden

Under this method, equal amount of depreciation is debited to the profit and loss account each year. Hence, the burden of depreciation on the profit of each year is equal.

(c) Assets can be completely written off

Under this method, the book value of an asset can be reduced to zero if there is no scrap value or to the scrap value at the end of its useful life. Thus the asset account can be completely written off.

(d) Suitable for the assets having fixed working life

This method is appropriate for the fixed assets having certain fixed period of working life. In such cases, the estimation of useful life is easy and in turn it helps in easy determination of rate of depreciation.

Limitations

Following are the limitations of straight line method of depreciation:

(a) Ignores the actual use of the asset

Under this method, a fixed amount of depreciation is provided on each asset by applying the predetermined rate of depreciation on its original cost. But, the actual use of the asset is not considered in computation of depreciation.

(b) Ignores the interest factor

This method does not take into account the loss of interest on the amount invested in the asset. That is, the amount would have earned interest, had it been invested outside the business is not considered.

(c) Total charge on the assets will be more when the asset becomes older

With the passage of time, the cost of maintenance of an asset goes up. Hence, the amount of depreciation and cost of maintenance put together is less in the initial period and goes up year after year. But, this method does not consider this.

(d) Difficulty in the determination of scrap value

It may be quite difficult to assess the true scrap value of the asset after a long period say 10 or 15 years after the date of its installation.

Suitability

Straight line method of depreciation is suitable in case of fixed assets in respect of which useful life can be determined and maintenance and repair cost is the same throughout the life of the asset.

Illustration 1

On 1.1.2017 a firm purchased a machine at a cost of ₹ 1,00,000. Its life was estimated to be 10 years with a scrap value of ₹ 10,000. Compute the amount of depreciation to be charged at the end of each year.

Solution

$$\begin{aligned}\text{Amount of depreciation per year} &= \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}} \\ &= \frac{1,00,000 - 10,000}{10} = \frac{90,000}{10} = ₹ 9,000 \text{ per year}\end{aligned}$$

Illustration 2

From the following information, calculate the amount of depreciation and rate of depreciation under straight line method.

Purchase price of machine ₹ 80,000

Expenses to be capitalised ₹ 20,000

Estimated residual value ₹ 35,000

Expected useful life 5 years

Solution

$$\begin{aligned}\text{Amount of depreciation per year} &= \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}} \\ &= \frac{1,00,000 - 35,000}{5} = \frac{65,000}{5} = ₹ 13,000 \text{ per year}\end{aligned}$$

$$\begin{aligned}\text{Rate of depreciation} &= \frac{\text{Amount of depreciation per year}}{\text{Original cost}} \times 100 \\ &= \frac{13,000}{1,00,000} \times 100 = 13\%\end{aligned}$$

Note:

$$\begin{aligned}\text{Original cost} &= \text{Purchase price} + \text{Expenses to be capitalised} \\ &= 80,000 + 20,000 = ₹ 1,00,000\end{aligned}$$

Illustration 3

Find out the rate of depreciation under straight line method from the following details:

$$\begin{aligned}\text{Original cost of the asset} &= ₹ 10,000 \\ \text{Estimated life of the asset} &= 10 \text{ years} \\ \text{Estimated scrap value at the end} &= ₹ 2,000\end{aligned}$$

Solution

$$\begin{aligned}\text{Amount of depreciation per year} &= \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}} \\ &= \frac{10,000 - 2,000}{10} = \frac{8,000}{10} = ₹ 800 \text{ per year}\end{aligned}$$

$$\begin{aligned}\text{Rate of depreciation} &= \frac{\text{Amount of depreciation per year}}{\text{Original cost}} \times 100 \\ &= \frac{800}{10,000} \times 100 = 8\%\end{aligned}$$

10.7.2 Written down value / Diminishing balance method

Under this method, depreciation is charged at a fixed percentage on the written down value of the asset every year. Hence, it is called written down value method. Written down value is the book value of the asset, i.e., original cost of the asset minus depreciation upto the previous accounting period. As the amount of depreciation goes on decreasing year after year, it is called diminishing balance method or reducing installment method.



The following formula is used to compute the rate of depreciation under written down value method:

$$\left[1 - \sqrt[n]{\frac{\text{Scrap value}}{\text{Original cost}}} \right] \times 100$$

Example: Original cost ₹ 1,00,000; Scrap value ₹ 1,000; Useful life 5 years

$$\begin{aligned}\left[1 - \sqrt[5]{\frac{1,000}{1,00,000}} \right] \times 100 &= [1 - (0.01)^{1/5}] \times 100 \\ &= (1 - 0.3981) \times 100 \\ &= 0.6019 \times 100 = 60.19\%\end{aligned}$$

Rate of depreciation = 60.19%

If the scrap value is 10,000; rate of depreciation is 36.90%

If there is no scrap value, rate of depreciation will be 100%. Hence, to calculate depreciation the scrap value is taken as 1.

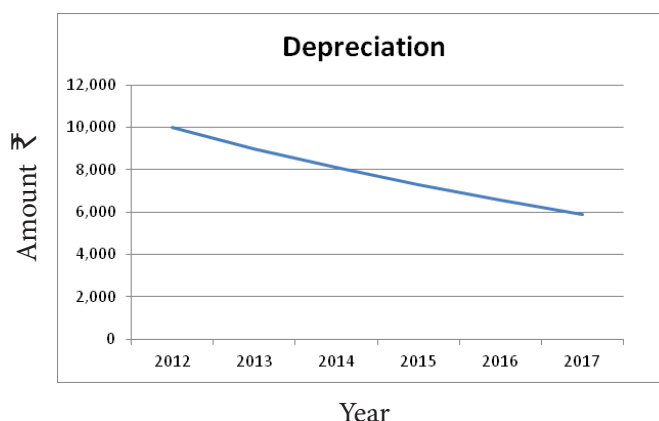
If the scrap value is less, rate of depreciation will be high.

Example

On 1.1.2012, a firm purchased a machine at a cost of ₹ 1,00,000. Depreciation charged at 10% p.a. on written down value method for the five years is as follows:

Cost of the asset on 1.1.2012	₹ 1,00,000
Less: Depreciation for 2012 at 10% on 1,00,000	₹ 10,000
Written down value on 1.1.2013	₹ 90,000
Less: Depreciation for 2013 at 10% on 90,000	₹ 9,000
Written down value on 1.1.2014	₹ 81,000
Less: Depreciation for 2014 at 10% on 81,000	₹ 8,100
Written down value on 1.1.2015	₹ 72,900
Less: Depreciation for 2015 at 10% on 72,900	₹ 7,290
Written down value on 1.1.2016	₹ 65,610
Less: Depreciation for 2016 at 10% on 65,610	₹ 6,561
Written down value on 1.1.2017	₹ 59,049
Less: Depreciation for 2017 at 10% on 59,049	₹ 5,905

When depreciation is plotted on a graph for 5 years, it appears as follows:



Merits

Following are the merits of written down value method.

(a) Equal charge against income

In the initial years depreciation is high and repair charges are low. When the asset becomes older, the amount of depreciation charged is less but repair charges are high. Hence, the total burden on profit in respect of depreciation and repairs put together remains almost similar year after year.

(b) Logical method

In the earlier years, when the asset is more productive, high depreciation is charged. In the later years when the asset becomes less productive, the depreciation charge is less.

Limitations

Following are the limitations of written down value method.

(a) Assets cannot be completely written off

Under this method, the value of an asset even if it becomes obsolete and useless, cannot be reduced to zero and some balance would continue in the asset account.

(b) Ignores the interest factor

This method does not take into account the loss of interest on the amount invested in the asset. The amount would have earned interest, had it been invested outside the business is not considered.

(c) Difficulty in determining the rate of depreciation

Under this method, the rate of providing depreciation cannot be easily determined. The rate is generally kept higher because it takes very long time to write off an asset down to its scrap value.

(d) Ignores the actual use of the asset

Under this method, a fixed rate of depreciation is provided on the written down value of the asset by applying the predetermined rate of depreciation on its original cost. But, the actual use of the asset is not considered in the computation of depreciation.

Suitability

This method is suitable in case of assets having a comparatively long life and which require considerable repairs in the later years when they become older. Examples are building and plant and machinery.

Illustration 4

A firm purchased a plant on 1.1.2018 for ₹ 9,000 and spent ₹ 1,000 as erection charges. Calculate the amount of depreciation for the year 2018 @ 15% per annum under the written down value method. Accounts are closed on 31st March every year.

Solution

Original cost = 9,000 + 1,000 = 10,000
Rate of depreciation = 15%
Date of purchase = 1.1.2018
Number of months used = 1.1.2018 to 31.03.2018 = 3 months
Amount of depreciation = 15% on 10,000 for 3 months
= $10,000 \times 15\% \times \frac{3}{12} = ₹ 375$



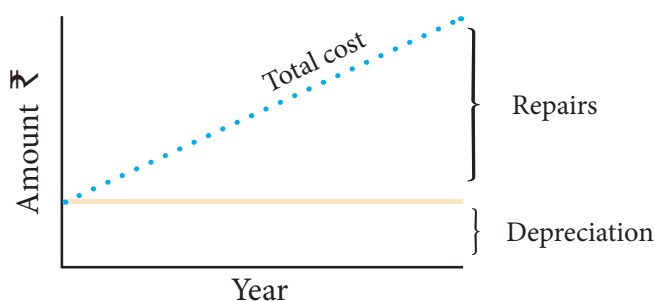
In Microsoft Excel, there are inbuilt finance functions available for calculating depreciation. For example: SLM for calculating depreciation under Straight Line Method (SLM) and DB for Diminishing Balance method (DB).

10.7.2.1 Differences between straight line method and written down value method

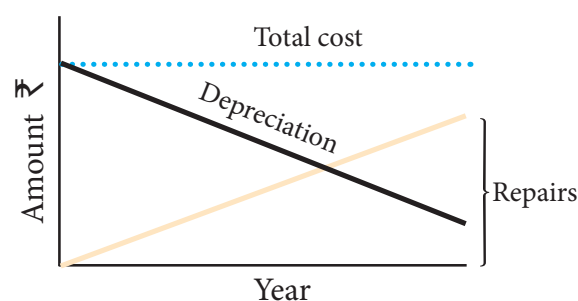
Following are the differences between straight line method and written down value method

Point of difference	Straight line method	Written down value method
1. Basis of calculation	Depreciation is calculated on the original cost of the asset for all the years.	Depreciation is calculated on the written down value of the asset year after year.
2. Amount of depreciation	The amount of depreciation is the same for all the years.	The amount of depreciation goes on decreasing year after year.
3. Book value of the asset at the end of its life	The book value of the asset becomes zero when there is no scrap value or is equal to its scrap value at the end of its life.	The book value of the asset never becomes zero.

4. Computation of rate of depreciation	It is easy to calculate the rate of depreciation.	It is very difficult to calculate the rate of depreciation.
5. Order of calculation of depreciation amount	Amount of depreciation is calculated first, followed by the rate of depreciation.	Rate of depreciation is calculated first, followed by the amount of depreciation.
6. Total charge	As the cost of repair goes on increasing with the passage of time, the total charge, i.e., the total of depreciation amount and repair amount keeps on increasing from year to year.	As the cost of repair increases and depreciation decreases with the passage of time, total of depreciation amount and repair amount charged to profit and loss account remains almost the same from year to year.
7. Suitability	It is suitable for assets for which the repair charges are less and the possibility of obsolescence is less and expiration of cost of asset depends upon time period involved.	It is suitable for assets which are affected by technological changes and assets which require more repairs with the passage of time.



Straight line method



Written down value method

10.7.3 Sum of years of digits method

This method is similar to the diminishing balance method. The amount of depreciation goes on decreasing year after year in proportion to the unexpired life of the asset. This method is suitable for those assets having more probability of obsolescence and increased repair charges as the assets grow older. Under this method, amount of depreciation per year is calculated by multiplying the cost of the asset and the number of remaining years of life and dividing it by the sum of the digits of all years of life of the asset. The following formula is used to compute the amount of depreciation under this method:

$$\text{Amount of depreciation} = \frac{\left[\begin{array}{c} \text{Total number of years of remaining} \\ \text{life of the asset} \\ \text{(including the current year)} \end{array} \right] \left[\begin{array}{c} \text{Original cost - Scrap value} \end{array} \right]}{\text{Sum of all the digits of all years from 1 to the life of the asset in years}}$$



Student activity

Think: Why does a business use different rates of depreciation for different types of assets?

10.7.4 Machine hour rate method

Under this method, depreciation per machine hour is calculated. The cost of the machinery after deducting the residual value, if any, is divided by the estimated working hours of the machine to find the depreciation per hour. The actual depreciation for any given period depends upon the working hours during that year. The special feature of this method is that depreciation is found directly in proportion to the actual use of the asset. Under this method life of the asset is estimated in hours and not in years. The following formula is used to determine the rate of depreciation:

$$\text{Rate of depreciation per machine hour} = \frac{\text{Original cost} - \text{Estimated scrap value}}{\text{Life of the asset in hours}}$$

Amount of depreciation = Number of machine hours used \times Rate of depreciation per hour

10.7.5 Depletion method

Depletion means exhaustion of natural resources. That is, depletion means quantitative reduction in the content of assets. This is applicable to those assets that get exhausted due to extraction and exploitation. Examples: mines, oil fields, etc. Under this method, depreciation rate is calculated on the basis of the estimated quantities of the output during the whole life of the asset.

$$\text{Rate of depreciation per unit} = \frac{\text{Original cost}}{\text{Life of the asset in quantities of output}}$$

Amount of depreciation = Units of output during the year \times Rate of depreciation per unit

Note: Even though it is not depreciated, it is used to write off the cost of the asset as per matching principle.

10.7.6 Annuity method

Under this method, not only the original cost of the asset but also the amount of interest on the investment is taken into account while computing depreciation. The idea of considering interest is that if the investment is made in any other asset instead of the relevant fixed asset, it would have earned a certain rate of interest. To calculate the amount of depreciation, annuity factor is used. Annuity factor can be found out from the annuity table or by using formula.

Amount of depreciation is computed as follows:

Amount of depreciation = Annuity factor \times Original cost of the asset



The following formula is used to compute annuity factor:

$$\text{Annuity factor} = \frac{i(1+i)^n}{(1+i)^n - 1}$$

where, i = interest rate;

n = estimated life of the asset in number of years

10.7.7 Revaluation method

Under this method, the amount of annual depreciation is calculated by comparing the value of the assets at the end of the year and their value at the beginning of the year. The value of the asset at the end of the year is determined with the consultation of relevant experts. The excess of opening value over the closing value of the asset is the amount of depreciation for that year. This method is used for live stock, loose tools, etc.

10.7.8 Sinking fund method

This method is adopted especially when it is desired not merely to write off an asset but also to provide enough funds to replace an asset at the end of its working life. Under this method, the amount charged as depreciation is transferred to depreciation fund and invested outside the business. The investment is made in safe securities which offer a certain rate of interest. Interest is received annually and reinvested every year along with the amount of annual depreciation. On the expiry of the life of the asset, the investments are sold and the sale proceeds are used for replacement of the asset. This method of depreciation is suitable for assets of higher value. This method is also known as depreciation fund method. Thus, this method not only takes into account depreciation but also makes provision for the replacement of the asset.

10.7.9 Insurance policy method

Under this method, an insurance policy is taken for an amount equal to the cost of replacement of the asset. The amount of depreciation is paid by way of insurance premium every year to the insurance company. On maturity of the policy, the policy amount is received from the insurance company and it is used for the purchase of new asset.



The process of allocating the cost of an intangible asset over a period of time is called amortisation.

10.8 Methods of recording depreciation

There are two methods followed to record depreciation.

- (i) Charging depreciation to asset account
- (ii) Charging depreciation to provision for depreciation account.

10.8.1 Charging depreciation to asset account

Under this method at the end of every accounting period, the amount of depreciation charged is debited to depreciation account and the amount of depreciation is credited to asset account. Hence the asset appears in the balance sheet at its depreciated value. Depreciation being revenue charge is transferred to profit and loss account.

The following journal entries are to be passed in the books for depreciation and related transactions:

- (a) For purchase of asset

Asset A/c	Dr.	xxx	
To Bank A/c			xxx

- (b) For providing depreciation at the end of the accounting year

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

- (c) For closing the depreciation account

Profit and loss A/c	Dr.	xxx	
To Depreciation A/c			xxx

- (d) For sale of asset

Bank A/c	Dr.	xxx	
Profit and loss* A/c	Dr.	xxx	
To Asset A/c			xxx

*Note: Profit and loss A/c will be credited if there is profit on sale.



Creating provision for depreciation account

In this method, a provision for depreciation account is created. The amount of depreciation charged every year is transferred to provision for depreciation account and not to asset account. Hence, asset account appears in the balance sheet at its original cost. Amount in the provision for depreciation account is shown on the liabilities side of the balance sheet under the head current liabilities and provisions. Depreciation for every year being nominal item is closed by debiting to profit and loss account of the respective year.

Example: Original cost of plant and machinery ₹ 10,000 Depreciation ₹ 1,000

Method 1: When provision for depreciation account is not created

Balance sheet (extract)			
Liabilities	₹	Assets	₹
		Plant and machinery	10,000
		Less: Depreciation	1,000
			9,000

Method 2: When provision for depreciation account is created

Balance sheet (extract)			
Liabilities	₹	Assets	₹
Provision for depreciation	1,000	Plant and machinery	10,000



The following journal entries are made under provision for depreciation account method:

a) For purchase of asset

Asset A/c	Dr.	xxx	
To Bank A/c			xxx

b) For providing depreciation at the end of the accounting year

Depreciation A/c	Dr.	xxx	
To Provision for depreciation A/c			xxx

c) For closing the depreciation account

Profit and loss A/c	Dr.	xxx	
To Depreciation A/c			xxx

On sale of asset

d) For transferring accumulated depreciation on asset sold to asset account

Provision for depreciation A/c	Dr.	xxx	
To Asset A/c			xxx

***Note:** After making this entry, the asset account gets reduced by the amount of accumulated depreciation upto the date of sale. In other words the asset appears at book value.

e) For sale of asset

Bank A/c	Dr.	xxx	
Profit and loss A/c	Dr.	xxx	
To Asset A/c			xxx

* Note: Profit and loss A/c will be credited if there is profit on sale.

Tutorial note

Transactions relating to sale of asset may also be transferred to a temporary account called asset disposal account and completed. Each time an asset is sold, a separate asset disposal account is opened and the balance in the asset account is transferred to asset disposal account. All transactions relating to sale are entered in the asset disposal account. The asset disposal account is closed immediately after the sale.

Illustration 5

Calculate the amount of depreciation and depreciation rate from the following by using 'straight line method'. Also give journal entries for the first two years. The books are closed on 31st December every year.

January 1, 2016 Payment to vendor for purchase of machinery	₹ 1,40,000
January 1, 2016 Transportation cost	₹ 1,000
January 1, 2016 Installation cost	₹ 9,000
Estimated scrap value at the end of the life	₹ 45,000
Estimated life	7 years

Solution

$$\begin{aligned}\text{Amount of depreciation per year} &= \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}} \\ &= \frac{1,50,000 - 45,000}{7} = \frac{1,05,000}{7} = ₹ 15,000 \text{ per year}\end{aligned}$$

$$\begin{aligned}\text{Rate of depreciation per year} &= \frac{\text{Amount of depreciation}}{\text{Original cost}} \times 100 \\ &= \frac{15,000}{1,50,000} \times 100 = 10\%\end{aligned}$$

Note:

$$\begin{aligned}\text{Cost of the asset} &= \text{Purchase price} + \text{Transportation cost} + \text{Installation cost} \\ &= 1,40,000 + 1,000 + 9,000 = ₹ 1,50,000\end{aligned}$$

Journal entries

Date	Particulars	Debit ₹	Credit ₹
2016 January 1	Machinery A/c Dr. To Bank A/c (Machinery bought)	1,40,000	1,40,000
January 1	Machinery A/c Dr. To Bank A/c (Transportation and installation cost incurred on purchase of machinery)	10,000	10,000
December 31	Depreciation A/c Dr. To Machinery A/c (Depreciation provided)	15,000	15,000
December 31	Profit and Loss A/c Dr. To Depreciation A/c (Depreciation transferred to profit and loss account)	15,000	15,000

Date	Particulars	Debit ₹	Credit ₹
2017 December 31	Depreciation A/c Dr. To Machinery A/c (Depreciation provided)	15,000	15,000
December 31	Profit and Loss A/c Dr. To Depreciation A/c (Depreciation transferred to profit and loss account)	15,000	15,000

Illustration 6

Ramu Brothers purchased a machine on 1st July 2016 at a cost of ₹ 14,000 and spent ₹ 1,000 on its installation. The firm writes off depreciation at 10% of original cost every year. The books are closed on 31st December every year. Give journal entries and prepare machinery account and depreciation account for 2 years.

Solution

Note: Cost of the asset = Purchase price + Installation cost
 $= 14,000 + 1,000 = ₹ 15,000$

Journal entries

Date	Particulars	Debit ₹	Credit ₹
2016 July 1	Machinery A/c Dr. To Bank A/c (Machinery bought)	14,000	14,000
July 1	Machinery A/c Dr. To Bank A/c (Installation expenses on machinery incurred)	1,000	1,000
December 31	Depreciation A/c Dr. To Machinery A/c ($15,000 \times 10/100 \times 6/12$) (Depreciation provided)	750	750
December 31	Profit and Loss A/c Dr. To Depreciation A/c (Depreciation transferred to profit and loss account)	750	750
2017 December 31	Depreciation A/c ($15,000 \times 10/100$) Dr. To Machinery A/c (Depreciation provided)	1,500	1,500
December 31	Profit and Loss A/c Dr. To Depreciation A/c (Depreciation transferred to profit and loss account)	1,500	1,500

Ledgers

Dr.			Machinery Account			Cr.		
Date	Particulars	₹	Date	Particulars	₹			
2016 July 1	To Cash A/c	15,000	2016 Dec 31	By Depreciation A/c	750			
				By Balance c/d	14,250			
		15,000						15,000
2017 Jan 1	To Balance b/d	14,250	2017 Dec 31	By Depreciation A/c	1,500			
				By Balance c/d	12,750			
		14,250						14,250
2018 Jan1	To Balance b/d	12,750						

Dr.			Depreciation Account			Cr.		
Date	Particulars	₹	Date	Particulars	₹			
2016 Dec 31	To Machinery A/c	750	2016 Dec 31	By Profit and Loss A/c	750			
		750						750
2017 Dec 31	To Machinery A/c	1,500	2017 Dec 31	By Profit and Loss A/c	1,500			
		1,500						1,500

Illustration 7

Anand bought a machinery for ₹ 1,00,000 on 1-1-2015. On 1-6-2016, he bought another machine for ₹ 50,000. On 1-10-2017, he purchased another machine for ₹ 20,000. Provide depreciation at 10% p.a. on straight line method. Prepare machinery account for the years 2015 to 2017 by using accounts by assuming accounts are closed on 31st December every year.

Solution

Dr.			Machinery Account			Cr.		
Date	Particulars	₹	Date	Particulars	₹			
2015 Jan 1	To Bank A/c	1,00,000	2015 Dec 31	By Depreciation A/c	10,000			
				By Balance c/d	90,000			
		1,00,000						1,00,000
2016 Jan 1	To Balance b/d	90,000	2016 Dec 31	By Depreciation A/c	12,500			
June 1	To Bank A/c	50,000		By Balance c/d	1,27,500			
		1,40,000						1,40,000
2017 Jan 1	To Balance b/d	1,27,500	2017 Dec 31	By Depreciation A/c	15,500			
Oct 1	To Bank A/c	20,000		By Balance c/d	1,32,000			
		1,47,500						1,47,500
2018 Jan1	To Balance b/d	1,32,000						

Note:

Depreciation for 2015:	$1,00,000 \times 10\%$	= 10,000	
2016:	$1,00,000 \times 10\%$	= 10,000	
(+)	$50,000 \times 10\% \times 6/12$	= <u>2,500</u>	12,500
2017:	$1,00,000 \times 10\%$	= 10,000	
(+)	$50,000 \times 10\%$	= 5,000	
(+)	$20,000 \times 10\% \times 3/12$	= <u>500</u>	15,500

10.9 Calculation of profit or loss on sale of asset

Sometimes, a business may sell an asset. In that case, the profit or loss on sale is to be calculated and accounted in the books. To find the profit or loss on sale of asset, the book value of the asset on the date of sale and the sale price are to be compared. Book value of the asset on the date of sale is calculated by subtracting the total depreciation provided on the asset from the date of its purchase or construction to the date of sale from the original cost of the asset. If the sale price is more than the book value of the asset, the difference is profit. On the other hand, if the book value of the asset is more than the sale price, the difference is loss.

Book value = Cost of the asset – Total depreciation provided upto the date of sale

Profit on sale = Sale price – Book value (Sale Price > Book Value)

Loss on sale = Book Value – Sale price (Sale Price < Book Value)

Illustration 8

Joy and Co. purchased machinery on 1st April 2016 for ₹ 75,000. On 31st March 2018, it sold the machinery for ₹ 62,000. Depreciation is to be provided every year at 10% per annum on the fixed instalment method. Accounts are closed on 31st March every year. Find out the profit or loss on sale of machinery.

Solution

Calculation of profit or loss on sale of machinery

Particulars	₹
Cost price	75,000
Less: Depreciation for 2016-17 (75,000 x 10%)	7,500
	67,500
Less: Depreciation for 2017-18 (75,000 x 10%)	7,500
Book value on the date of sale	60,000
Less: Selling price	62,000
Profit on sale	- 2,000

The selling price is more than the book value on the date of sale of machinery. Hence, the difference ₹ 2,000 is profit on sale of machinery.



Student activity

Think: Will the method of depreciation affect the profit or loss made on the sale of an asset?

Illustration 9

On 1st April 2015, Kumar purchased a machine for ₹ 80,000 and spent ₹ 20,000 on its installation. The residual value at the end of its expected useful life of 8 years is estimated at ₹ 4,000. On 30th September 2017, the machine is sold for ₹ 50,000. Depreciation is to be provided according to straight line method. Prepare Machinery Account. Accounts are closed on 31st December every year.

Solution

$$\text{Amount of depreciation} = \frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated life of the asset in years}}$$

$$\begin{aligned} &= \frac{1,00,000 - 4,000}{8} \\ &= ₹ 12,000 \text{ per year} \end{aligned}$$

$$\text{Rate of depreciation per year} = \frac{\text{Amount of depreciation per year}}{\text{Original cost}} \times 100$$

$$= \frac{12,000}{1,00,000} \times 100 = 12\%$$

Note:

$$\begin{aligned} \text{Cost of the asset} &= \text{Purchase price} + \text{Installation cost} \\ &= 80,000 + 20,000 = ₹ 1,00,000 \end{aligned}$$

Ledger accounts

Dr.			Machinery Account			Cr.		
Date	Particulars	₹	Date	Particulars	₹			
2015			2015					
April 1	To Bank A/c	80,000	Dec 31	By Depreciation A/c	9,000			
April 1	To Bank A/c	20,000		(1,00,000 × 12/100 × 9/12)				
			Dec 31	By Balance c/d	91,000			
		1,00,000			1,00,000			
2016			2016					
Jan 1	To Balance b/d	91,000	Dec 31	By Depreciation A/c	12,000			
				(1,00,000 × 12/100)				
			Dec 31	By Balance c/d	79,000			
		91,000			91,000			
2017			2017					
Jan 1	To Balance b/d	79,000	Sep 30	By Depreciation A/c	9,000			
				(1,00,000 × 12/100 × 9/12)				
			Sep 30	By Bank A/c	50,000			
			Sep 30	By Profit and Loss A/c	20,000			
				(Loss on sale)				
		79,000			79,000			

Illustration 10

M/s Ramco textile mills purchased machinery on 1st April 2014 for ₹ 2,00,000 on credit from M/s. Nila & Co. and spent ₹ 10,000 on its installation. Depreciation is provided at 10% per annum on the written down value method. Prepare machinery account and depreciation account for the first three years. Books are closed on 31st March every year.

Solution

Ledger accounts

Dr.			Machinery Account			Cr.	
Date	Particulars	₹	Date	Particulars	₹		
2014			2015				
April 1	To Nila & Co. A/c	2.00,000	March 31	By Depreciation A/c (2,10,000 × 10%)	21,000		
April 1	To Bank A/c	10,000	March 31	By Balance c/d	1,89,000		
		2,10,000			2,10,000		
2015			2016				
April 1	To Balance b/d	1,89,000	March 31	By Depreciation A/c (1,89,000 × 10%)	18,900		
		1,89,000	March 31	By Balance c/d	1,70,100		
2016					1,89,000		
April 1	To Balance b/d	1,70,100	2017				
		1,70,100	March 31	By Depreciation A/c (1,70,100 × 10%)	17,010		
2017			March 31	By Balance c/d	1,53,090		
April 1	To Balance b/d	1,53,090			1,70,100		

Dr.			Depreciation Account			Cr.	
Date	Particulars	₹	Date	Particulars	₹		
2015			2015				
March 31	To Machinery A/c	21,000	March 31	By Profit & Loss A/c	21,000		
		21,000			21,000		
2016			2016				
March 31	To Machinery A/c	18,900	March 31	By Profit & Loss A/c	18,900		
		18,900			18,900		
2017			2017				
March 31	To Machinery A/c	17,010	March 31	By Profit & Loss A/c	17,010		
		17,010			17,010		

Illustration 11

A Ltd., purchased a machine on 1st January 2014 for ₹ 60,000. On 1st July 2014, it purchased another machine for ₹ 50,000. On 1st July 2015, the company sold the machine purchased on 1st January 2014 for ₹ 40,000. It was decided that the machine be depreciated at 10% per annum on diminishing balance method. Show the machinery account for the years 2014 to 2016. The accounts are closed on December 31st, every year.

Solution

Ledger accounts

Dr.			Machinery Account			Cr.		
Date	Particulars	₹	Date	Particulars	₹			
2014			2014					
Jan 1	To Bank A/c	60,000	Dec 31	By Depreciation* A/c	8,500			
July 1	To Bank A/c	50,000	Dec 31	By Balance c/d	1,01,500			
		1,10,000			1,10,000			
2015			2015					
Jan 1	To Balance b/d	1,01,500	July 1	By Depreciation A/c	2,700			
			July 1	By Bank A/c	40,000			
			July 1	By Profit and Loss A/c	11,300			
			Dec 31	By Depreciation A/c*	4,750			
			Dec 31	By Balance c/d	42,750			
		1,01,500			1,01,500			
2016			2016					
Jan 1	To Balance b/d	42,750	Dec 31	By Depreciation A/c (42,750 × 10%)	4,275			
			Dec 31	By Balance c/d	38,475			
		42,750			42,750			
2017								
Jan 1	To Balance b/d	38,475						

* Note:

1. Computation of depreciation for the year 2014

Asset purchased on 1.1.14:	60,000 × 10%	= 6,000
Asset purchased on 1.7.14:	50,000 × 10% × 6/12	= <u>2,500</u> ₹ 8,500

2. Computation of depreciation on the asset sold on 1.7.2015

Original cost on 1.1.2014	= 60,000
Less: Depreciation for 2014 (60,000 × 10%)	= <u>6,000</u>
Written down value on 1.1.2015	54,000
Less: Depreciation for 2015 upto 1.7.2015 (54,000 × 10% × 6/12)	= <u>2,700</u>
Book value	51,300
Sale price	<u>40,000</u>
Loss on sale of asset	<u>11,300</u>

3. Depreciation for 2015 for the asset purchased on 1.7.2014

Original cost on 1.7.2014	= 50,000
Less: Depreciation for 2014 (50,000 × 10% × 6/12)	= <u>2,500</u>
Written down value on 1.1.2015	47,500
Less: Depreciation for 2015 (47,500 × 10%)	= <u>4,750</u>



Points to remember

- The process of allocation of the relevant cost of a fixed asset over its useful life is known as depreciation.
- Cost of an asset is not merely the purchase price but also the expenses incurred on the asset till it is put into use including cost of trial run.
- Cost of a second-hand asset includes the initial repairs charges also.
- Under the straight line method, the book value of the asset at the end of its useful life is reduced to zero or its scrap value.
- The book value of the asset on any date is calculated by subtracting the depreciation provided to date from its original cost.
- The excess of sale proceeds of an asset over its book value represents profit on sale.
- The excess of book value of an asset over its sale price represents loss on sale.

Self-examination questions

I Multiple choice questions

Choose the correct answer

1. Under straight line method, the amount of depreciation is
(a) Increasing every year (b) Decreasing every year
(c) Constant for all the years (d) Fluctuating every year
2. If the total charge of depreciation and maintenance cost are considered, the method that provides a uniform charge is
(a) Straight line method (b) Diminishing balance method
(c) Annuity method (d) Insurance policy method
3. Under the written down value method of depreciation, the amount of depreciation is
(a) Uniform in all the years (b) Decreasing every year
(c) Increasing every year (d) None of the above
4. Depreciation is caused by
(a) Lapse of time (b) Usage
(c) Obsolescence (d) a, b and c
5. For which of the following assets, the depletion method is adopted for writing off cost of the asset?
(a) Plant and machinery (b) Mines and quarries
(c) Buildings (d) Trademark
6. A depreciable asset may suffer obsolescence due to____
(a) Passage of time (b) Wear and tear
(c) Technological changes (d) None of the above.
7. Which method shall be efficient, if repairs and maintenance cost of an asset increases as it grows older.
(a) Straight line method (b) Reducing balance method
(c) Sinking fund method (d) Annuity method





8. Residual value of an asset means the amount that it can fetch on sale at the ____ of its useful life.
(a) Beginning (b) End (c) Middle (d) None
9. Depreciation is to be calculated from the date when
(a) Asset is put to use (b) Purchase order is made
(c) Asset is received at business premises (d) Invoice of assets is received
10. If the rate of depreciation is same, then the amount of depreciation under straight line method vis-à-vis written down value method will be
(a) Equal in all years
(b) Equal in the first year but higher in subsequent years
(c) Equal in the first year but lower in subsequent years
(d) Lower in the first year but equal in subsequent years.

Answer

1 (c)	2 (b)	3 (b)	4 (d)	5 (b)	6 (c)	7 (b)	8 (b)	9 (a)	10 (b)
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------

II Very short answer questions

1. What is meant by depreciation?
2. List out the various methods of depreciation.
3. Give the formula to find out the amount and rate of depreciation under straight line method of depreciation.
4. What is annuity method?
5. What is sinking fund method?

III Short answer questions

1. What are the objectives of providing depreciation?
2. What are the causes for depreciation?
3. State the advantages and limitations of straight line method of depreciation.
4. State the advantages and limitations of written down value method of depreciation.
5. Distinguish between straight line method and written down value method of providing depreciation.

IV Exercises

Straight line method

1. A firm purchased a plant for ₹ 40,000. Erection charges amounted to ₹ 2,000. Effective life of the plant is 5 years. Calculate the amount of depreciation per year under straight line method.
(Answer: ₹ 8,400)
2. A company purchased a building for ₹ 50,000. The useful life of the building is 10 years and the residual value is ₹ 5,000. Find out the amount and rate of depreciation under straight line method.
(Answer: Amount of depreciation: ₹ 4,500; Rate of depreciation 9%)



3. Furniture was purchased for ₹ 1,00,000 on 1.7.2016. It is expected to last for 5 years. Estimated scrap at the end of five years is ₹ 10,000. Find out the rate of depreciation under straight line method.

(Answer: Amount of depreciation ₹ 18,000; Rate of depreciation 18%)

4. Calculate the rate of depreciation under straight line method from the following information:
Purchased a second hand machinery on 1.1.2018 for ₹ 38,000
On 1.1.2018 spent ₹12,000 on its repairs
Expected useful life of machine is 4 years
Estimated residual value ₹6,000

(Answer: Amount of depreciation ₹ 11,000; Rate of depreciation 22%)

5. Machinery was purchased on 1st January 2015 for ₹ 4,00,000. ₹ 15,000 was spent on its erection and ₹ 10,000 on its freight charges. Depreciation is charged at 10% per annum on straight line method. The books are closed on 31st March each year. Calculate the amount of depreciation on machinery for the first two years.

(Answer: Amount of depreciation on 31.03.2015: ₹ 10,625; on 31.03.2016: ₹ 42,500)

6. An asset is purchased on 1.1.2016 for ₹50,000. Depreciation is to be provided annually according to straight line method. The useful life of the asset is 10 years and its residual value is ₹ 10,000. Accounts are closed on 31st December every year. You are required to find out the rate of depreciation and give journal entries for first two years.

(Answer: Amount of depreciation ₹ 4,000, Rate of depreciation 8%)

7. From the following particulars, give journal entries for 2 years and prepare machinery account under straight line method of providing depreciation:

Machinery was purchased on 1.1.2016

Price of the machine ₹ 36,000

Freight charges ₹ 2,500

Installation charges ₹ 1,500

Life of the machine 5 years

(Answer: Amount of depreciation: ₹ 8,000; Balance in machinery A/c: ₹ 24,000)

8. A manufacturing company purchased on 1 April, 2010, a plant and machinery for ₹4,50,000 and spent ₹ 50,000 on its installation. After having used it for three years, it was sold for ₹ 3,85,000. Depreciation is to be provided every year at the rate of 15% per annum on the fixed instalment method. Accounts are closed on 31st March every year. Calculate profit or loss on sale of machinery.

(Answer: Profit on sale ₹ 1,10,000)

9. On 1st April 2008, Sudha and Company purchased machinery for ₹ 64,000. To instal the machinery expenses incurred was ₹ 28,000. Depreciate machinery 10% p.a. under straight line method. On 30th June, 2010 the worn out machinery was sold for ₹ 52,000. The books are closed on 31st December every year. Show machinery account.

(Answer: Loss on sale ₹ 19,300)





10. Ragul purchased machinery on April 1, 2014 for ₹ 2,00,000. On 1st October 2015, a new machine costing ₹ 1,20,000 was purchased. On 30th September 2016, the machinery purchased on April 1, 2014 was sold for ₹ 1,20,000. Books of accounts are closed on 31st March and depreciation is to be provided at 10% p.a. on straight line method. Prepare machinery account and depreciation account for the years 2014-15 to 2016-17.

(Answer: Amount of depreciation: 2014-15: ₹ 20,000; 2015-16: ₹ 26,000; 2016-17: ₹ 22,000; Loss on sale of 1st machine: ₹ 30,000; Balance in machinery a/c: ₹ 1,02,000).

Written down value method

11. An asset is purchased for ₹ 50,000. The rate of depreciation is 15% p.a. Calculate the annual depreciation for the first two years under diminishing balance method.

(Answer: Amount of depreciation I year ₹ 7,500; II year ₹ 6,375)

12. A boiler was purchased on 1st January 2015 from abroad for ₹10,000. Shipping and forwarding charges amounted to ₹2,000. Import duty ₹ 7,000 and expenses of installation amounted to ₹ 1,000. Calculate depreciation for the first 3 years @10% p.a. on diminishing balance method assuming that the accounts are closed 31st December each year.

(Answer: Amount of depreciation: 2015: ₹ 2,000; 2016: ₹ 1,800; 2017: ₹ 1,620)

13. A furniture costing ₹ 5,000 was purchased on 1.1.2016, the installation charges being ₹1,000. The furniture is to be depreciated @10% p.a. on the diminishing balance method. Pass journal entries for the first two years.

(Answer: Amount of depreciation I year ₹ 600; II year ₹ 540)

14. A firm acquired a machine on 1st April 2015 at a cost of ₹ 50,000. Its life is 6 years. The firm writes off depreciation @ 30% p.a. on the diminishing balance method. The firm closes its books on 31st December every year. Show the machinery account and depreciation account for three years starting from 1st April 2015.

(Answer: Amount of depreciation: 2015: ₹ 11,250; 2016: ₹ 11,625; 2017: ₹ 8,138; Balance in machinery a/c on 31-12-17 ₹ 18,987)

15. On 1st October 2014, a truck was purchased for ₹ 8,00,000 by Laxmi Transports Ltd. Depreciation was provided @ 15% p.a. under diminishing balance method. On 31st March 2017, the above truck was sold for ₹5,00,000. Accounts are closed on 31st March every year. Find out the profit or loss made on the sale of the truck.

(Answer: Amount of depreciation: 2014-15: ₹ 60,000; 2015-16: ₹ 1,11,000; 2017: ₹ 94,350; Loss on sale ₹ 34,650)

16. Raj & Co purchased a machine on 1st January 2014 for ₹ 90,000. On 1st July 2014, they purchased another machine for ₹ 60,000. On 1st January 2015, they sold the machine purchased on 1st January 2014 for ₹ 40,000. It was decided that the machine be depreciated at 10% per annum on diminishing balance method. Accounts are closed on 31st December every year. Show the machinery account for the years 2014 and 2015.

(Answer: Amount of depreciation: 2014: ₹12,000; 2015: ₹ 5,700; Loss on sale ₹ 41,000; Balance in machine a/c on 31.12.14 ₹1,38,000; on 31.12.15 ₹ 51,300).





CASE STUDY

Lucky & Co's income statement shows a loss of ₹ 3,000. The owner thinks that there is no need to provide for depreciation as the company has made a loss. He also suggests his accountant to change the method of depreciation for the next year so as to avoid the loss. But, the accountant is hesitant to make the necessary changes suggested by his owner.

Now, discuss on the following points:

- Do you agree on the point that there is no need to charge depreciation when the company has made a loss?
- Why does the accountant hesitate to make the changes suggested by his owner?
- What are the accounting principles not followed if the accountant agrees to his owner's suggestion?
- Do you think charging depreciation could be the only reason for the company's loss?

To explore further

Is it possible to exchange the old fixed asset with a new one? In such a case, what do you think will be the adjustment in terms of payment and accounting treatment?

Reference

1. M C Shukla, T S Grewal and S C Gupta, Advanced Accounts, 19th ed., 2017, S.Chand Publishing, New Delhi.
2. R L Gupta and V K Gupta, Financial Accounting, 11th ed., 2014, Sultan Chand and Sons, New Delhi.
3. S P Jain and K L Narang, Advanced Accountancy Vol – I, 2016, Kalyani Publishers, New Delhi.
4. Dalston L Cecil and Jenitra L Merwin, Financial Accounting, 3rd ed., 2017, Learntech Press, Trichy.
5. Fundamentals of Accounting, 2017, The Institute of Chartered Accountants of India, New Delhi.